TRADITIONAL OJIBWAY RESOURCES IN THE WESTERN GREAT LAKES

Final Report
May 1, 2001

BUREAU OF APPLIED RESEARCH IN ANTHROPOLOGY
The University of Arizona in Tucson

TRADITONAL OJIBWAY RESOURCES IN THE WESTERN GREAT LAKES
AN ETHNOGRAPHIC INVENTORY IN THE STATES OF MICHIGAN, MINNESOTA, AND WISCONSIN

Final Report
May 1, 2001

Prepared For

Michael J. Evans
National Park Service
Midwest Region

Prepared by

M. Nieves Zedeño
Richard W. Stoffle
Fabio Pittaluga
Genevieve Dewey-Hefley
R. Christopher Basaldú
María Porter

Bureau of Applied Research in Anthropology
The University of Arizona in Tucson

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CHAPTER ONE

STUDY OVERVIEW

This is an applied ethnographic study of natural and cultural resources of contemporary significance for American Ojibway[1] tribes and Canadian Ojibway First Nations that are or were once present within or in the immediate vicinity of four National Park Service (NPS) units in the Midwest Region: Sleeping Bear Dunes National Lakeshore (SLBE), Michigan; Pictured Rocks National Lakeshore (PIRO), Michigan; Apostle Islands National Lakeshore (APIS), Wisconsin; and Voyageurs National Park (VOYA), Minnesota (Figure 1.1). The main objective of this study, according to the Scope of Work (SOW) of 1996, is to develop a documented basis of knowledge regarding historic and current use of resources by culturally affiliated Native American tribes that should help park managers anticipate Native American resource use issues that may confront them in the future and thus be better prepared to deal with them in an informed and culturally sensitive manner. The study also was to provide recommendations regarding preservation, monitoring, mitigation, interpretation, and use access issues. Research should also improve cross-cultural understanding and appreciation of Native American resources in the parks. Ultimately, this and other similar studies funded by NPS should contribute to fulfilling long-term ecosystem stewardship goals that the NPS currently upholds.

The present research is designed to provide a historical and ethnographic overview and assessment of Native American—Southwestern Ojibway, in particular—land and resource use as it pertains to the region where the parks are located, and to each park unit. This study also provides an inventory of ethnographic resources known to have been significant for culturally affiliated Southwestern Ojibway tribes at different points in time[2]. The term *ethnographic resource* is used here to convey the broadest possible range of natural and cultural materials, features, and places that are linked by a subject community to the traditional practices, values, beliefs, history, and/or ethnic identity of that community (NPS 1987). Ethnographic resource is a term that both describes a perspective on, provides a and a methodology for, the study of material, cultural, and spiritual linkages between people and the natural environment (Schrag-James and Zedeno 1998: 2).

Until recently, cultural resources were legally and intellectually defined as material culture—artifacts, features, archaeological sites, crafts—and state and federal laws and agency regulations were thus geared toward the preservation and management of these materials. Increasingly, however, interactions between agencies and Native American groups have greatly expanded our knowledge of what constitutes culturally significant resources: these are not limited to material culture, but encompass a far broader set of natural and cultural materials, features, and places (Stoffle et al. 1994: 9). This expansion, in turn, has encouraged systematic ethnographic consultation with tribal governments regarding plants, animals, minerals, landforms, sites, features, artifacts, and other resources. And, ultimately, it has stimulated the creation of, or amendment to, laws and regulations that aim to protect these critical components of Native American heritage (e.g., Executive Order 13007).

Figure 1.1 Study Area

Systematic ethnographic research on Native American resources not only complements archaeological, historical, and folklorist studies on material culture, but brings in another dimension to conceptualiz

This research has been conducted in accordance with the Native American Religious Freedom act of 1978; the Archaeological Resource Protection Act of 1979 as amended; the National Historic Preservation act of 1966 as amended (Section 110 in particular); the Native American Graves Protection and Repatriation Act of 1990; Executive Orders 13007, 13083, and 13084; Bulletin 38; and the NPS *Cultural Resources Management Guidelines* (NPS-28, 1987, as updated; see http://www.nps.gov/planning/mngmtplc/crmer.html). .

Project History

To a great extent, the structure and content of this report resulted from the sequence in which research tasks were outlined in the original SOW and in the sequence of contract modifications that followed. In 1996 the NPS Midwest Regional Office contracted the University of Arizona ethnographic team (UofA team) to:

> conduct literature reviews of historic and contemporary resource use in the northern portions of Minnesota, Wisconsin, and Michigan, including tracts that were ceded through treaties between American Indian tribes and the United States, and with an emphasis on ceded tracts where several park units are now located,
>
> identify and contact Ojibway communities with historic and contemporary ties to park units, and
>
> conduct on-site elder interviews from up to 10 tribes and for three parks.

The research results presented in Chapters Four, Five, and Six specifically address these tasks.Three modifications followed the first SOW:

> a background literature review of American Indian historic and contemporary use of SLBE lands and resources was added to the contract in 1996,
>
> a background literature review of American Indian historic and contemporary use of PIRO and APIS lands and resources was added to the contract in 1997, and
>
> a cultural affiliation statement for PIRO was added in 1998.[3]

The research results presented in Chapters Seven-Eleven specifically respond to these modifications.

Structure of the Research

Research outlined in 1996 and subsequent years was carried out in three phases: Phase I consisted of archival research and write-up of an overview and assessment of historic and ethnographic resource use by Ojibway people in regional and park-specific perspective. Phase II involved contacting tribal governments to secure their participation in the study. Phase III entailed field consultation with official tribal representatives about park-specific resources.

Phase I – Overview (1996-1998)

The purpose of this overview *was not* to produce an exhaustive summary of the vast historical and ethnographic literature on the research topic, but to build a contextual framework from which to understand contemporary tribal concerns regarding the preservation, management, and interpretation of NPS resources that are culturally significant for the Ojibway. As requested in the 1996 SOW the overview entailed research of published and unpublished sources, and thus it includes:

a regional history of land and resource use practices,

a description of the ecology and geography of parks under study and the history of Ojibway affiliation to park lands, and

a detailed list of resources traditionally used by this ethnic group, including plants, animals, minerals, and land forms.

Research tasks associated to Phase I involved UofA-based library and archival research, visits to the parks' libraries, and visits to local document repositories, including county and state historical societies, museums, tribal centers, the Midwest Archaeological Center in Lincoln, and the Michigan State Historic Preservation Office. Sources were scrutinized for information on resource uses through time; however, the degree of geographical, tribal, and cultural specificity of the resulting data varies widely from source to source and from one time period to the next.

Phase II – Tribal Meetings and Contemporary Resource Needs Assessment (1997)

During Phase II of this study, two UofA anthropologists traveled to Michigan, Minnesota, and Wisconsin to meet with tribal government officials. The objective of Phase II was to assess contemporary concerns and resource needs of Ojibway tribes and to elicit their agreement to participate in Phase III of this study. Phase II involved:

contacting government officials of potentially culturally affiliated Ojibway tribes;

meeting with tribal officials to introduce the study and obtain their agreement to participate in field visits and interviews; and

conducting preliminary interviews with cultural resource managers and tribal elders to elicit information regarding contemporary resource needs and concerns.

Tribal visits effectively initiated the government-to-government consultation process and helped secure tribal participation in Phase III of this study.

Phase III – Site Visits and Interviews (1998)

Phase III of this study entailed site visits and interviews with representatives of culturally affiliated Ojibway tribes. The main objectives of this phase were to elicit information on the cultural significance of specific places and their connection to resources existing in the parks under study, and to record contemporary concerns and recommendations for preservation, interpretation, and management of those resources. Phase III was carried out in accordance with government-to-government consultation stipulations, as required by law. Ultimately, the goal was to facilitate the establishment of productive and enduring partnerships between the parks and the culturally affiliated tribes that participated in the study. Research tasks associated with Phase III entailed:

developing field interview instruments that both met NPS need for specific information on ethnographic resources in each park unit and responded to contemporary tribal concerns recorded during Phase II;

meeting with park officials to select sites to be visited, preview the questions to be asked in the interviews, and coordinate field logistics; and

conducting field visits and interviews.

It is important to mention here that NPS officials from the four parks under study had the opportunity to review and comment on the research methods followed by the UofA team and particularly on the interview instruments, before the actual site visits with tribal representatives took place.

The research methods and conceptual framework guiding all phases of this study are explained in Chapters Two and Three, respectively. The relationships between research phases and their significance for understanding contemporary Native American concerns for and recommendations about ethnographic resources found in the parks under study are discussed in Chapter Six.

Work Products

This project received funding from NPS in several stages, from 1996 to 1998. Funds were first provided to conduct a regional overview and assessment of Ojibway land and resources and to establish first contacts with tribal officials. Subsequently, park-specific research tasks, including archival and field research, were added to the original project scope of work. Not all park-specific research received the same funding or was added to the study at the same time; thus, the level of research effort and time frame for this research varies from park to park.

The UofA team has completed the following work products:

Documents research and write-up of a regional overview of the history of Ojibway land and resource use. Research results are summarized in Chapter Four.

Documents research and set-up of an ACCESS electronic database containing a comprehensive inventory of ethnographic resources. This inventory lists resources along with their traditional uses, and crosschecks resource presence/absence at each park. Relevant appendices illustrate the database structure.

A survey of the traditional contexts of Ojibway use of ethnographic resources—plants, animals, minerals, and landscape features—complements the electronic database. This survey is found in Chapter Five.

Documents research and write-up of Ojibway land and resource use history in and around four parks: SLBE, PIRO, and VOYA. Research results are summarized in Chapters Seven through Ten.

Field interviews, data analysis, and write-up of field research. Research results are summarized in chapters Seven through Twelve and presented in relevant appendices.

Expansion of the ACCESS electronic database to include data collected in the field.

It is important to point out that the site visits and field interviews conducted at SLBE were not included in the SOW or funded separately. The UofA, in consultation with the NPS project manager agreed to conduct these interviews to obtain as balanced and complete a picture of historic and contemporary resource use issues as possible for the four parks.

Report Review Process

In June 1999 the UofA issued a Preliminary Draft Report for technical review by NPS officials. That report, entitled, *Traditional Ojibway Resources in the Western Great Lakes: An Ethnographic Inventory in the States of Michigan, Minnesota, and Wisconsin* was revised according to specific comments received from NPS in the Fall of 1999. The Draft Report issued in June 2000 is the product of that revision process. This Final Report was revised according to the formal review comments on the Draft Report.

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[1] Although there are many ways to spell the name of this ethnic group, we have followed the spelling NPS used in the project Scope of Work (SOW).

[2] It is important to mention here that, although this study focuses on Southwestern Ojibway land and resource use in the Western Great Lakes region as a whole and in each park unit, park-specific history of land and resource use by other culturally affiliated tribes is discussed whenever relevant and as specified in the scope of work.

[3] The contract modification also included research tasks for St. Croix River National Scenic Riverway. Such research was conducted and reported separately and thus it is not addressed further in this report.

CHAPTER TWO

RESEARCH METHODS

It is the UofA team's experience that, in research aimed at implementing government-to-government consultation, Native American tribal officials expect that the studies in which they participate are planned within scholarly standards, render accurately the information they provide (except for sensitive or confidential information), and are fully reported in an accessible format. Thus, research methods used since the onset of this study emphasized systematic data collection and analysis. The present chapter discusses how consultation was implemented in the study and describes how the information on regional and park-specific ethnographic resources was collected. Methods of data analysis and summary are discussed as well.

Phase I - Overview

As explained in Chapter One, the main purpose of writing an overview of historical and ethnographic land and resource use practices among the Ojibway people is to build a knowledge base that will enable park managers to contextualize current American Indian concerns for preservation, interpretation, and management of resources. Hence, the regional overview and assessment emphasizes, first, historical events that explain the processes by which Ojibway people became attached to the lands now managed by NPS. Migration, war, the fur trade, the battle for hunting territories and, finally, the struggle to keep land and identity, illustrate, at one point in time or another, how contemporary culturally significant relationships between Ojibway tribes and public parks in the Western Great Lakes region developed. And, second, the overview stresses the importance of expanding knowledge about the role ethnographic resources play in Ojibway culture and society. Both regional and park-specific overviews further enable a better understanding of why each of the Ojibway tribes chose to participate in this study.

Information Sources

To construct the historical and ethnographic overviews of land and resource use (Chapters Four and Five, respectively), a wide range of documentary sources, covering a period of four centuries of description of, and research on, the Western Great Lakes region and its peoples, were examined. Beginning with the *Jesuit Relations and Allied Documents* (Thwaites, ed. 1959), published and unpublished journals of missionaries, travelers, and scholars (e.g., Radisson 1961 [1661]; Carver (1956 [1766-68); Nicollet (1970 [1836-37]) were searched for information on the history and ethnography of Ojibway land and resource use. Next, classic historical summaries, such as those by Copway (1850), Warren (1984 [1885]), and Blackbird (1887) were searched. Ethnographic monographs and monograph series, including the Annual Reports and Miscellaneous Collections of the *Bureau of American Ethnology*, were combed for information on ethnographic resource use. Last, modern archaeological, historical, ethnographic, and environmental syntheses, including Quimby (1960), Tanner (1986), Hickerson (1962; 1970), Cleland (1992), White (1991), and Heinselman (1996), among many others, as well as journal articles and book chapters, were incorporated into the research.

Archival research encompassed park administrative histories, surveys, resource inventories, and research reports, plant and animal inventories, and site records. Other documents consulted were manu-

script journals and letters, maps, newspaper clips, tribal lawsuit transcripts, unpublished land claims ethnohistories (e.g., Tanner 1974; White nd; White and McClurken 1994) and unpublished dissertations and theses. Archival research was conducted on location, at park headquarters, county and state libraries and museums, county and state historical societies, tribal offices, the Michigan State Historic Preservation Office and State Law Library in Lansing, and the Midwest Archaeological Center in Lincoln, Nebraska.

Ethnographic Resource Inventory

Once the general historical and ethnographic overviews of Ojibway land and resource use were drafted, the UofA team proceeded to design the ethnographic resource inventory. In recent years, team members have designed inventories for national parks and other federal lands, such as the Grand Canyon Corridor (Stoffle et al. 1994), Zion National Park and Pipe Spring National Monument (Stoffle et al. 1998), Petrified Forest National Park, El Morro National Monument, and El Malpais National Monument (Schrag-James and Zedeno 1998), and Yucca Mountain and the Nevada Test Site (Stoffle et al. 1990, 1994a; Zedeno et al. 1998). The Ojibway ethnographic resource inventory, however, is unique in design because it is organized by *activity complex***.**

In contrast to conventional inventories that list resource types in alphabetical order and by use, the activity complex inventory highlights links among two or more resources and resource types within a single activity (e.g., ricing, fishing) as well as multiple uses of a single resource (e.g., berries, mushrooms). In other words, activity complexes carry information on the physical, behavioral, and spiritual links among ethnographic resources, between resources and people, and between people and the land where the resources are found. And, as we explain in the following chapters, piecing together activity complexes is an initial step in elucidating how people construct cultural landscapes through interactions with natural ecosystems.

Currently, the ethnographic resource inventory is in ACCESS electronic format, and contains 11 activity complexes, 488 plants (wild and cultivated), 79 animals, 7 minerals, and 16 landform types. In 1999 the database was expanded to include data on resource use collected during the field interviews. Although detailed use information is not available for every resource, all are known to have been used by Ojibway people at some point in time. Plants, animals, minerals, and landforms are also cross-listed by park, and by habitat type according to the Great Lakes Indian Fish and Wildlife Commission (GLIFWC) publication entitled *Plants Used by the Great Lakes Ojibwa* (1993). Protection status for animals according to the Michigan Natural Resource Commission is also included.

Phase II – Tribal Meetings and Contemporary Natural Resource Needs

The 1996 project scope of work identified 12 Ojibway tribes that could be potentially involved in the study, including:

Bois Forte Band of the Minnesota Chippewa Tribe
Mille Lacs Band of Chippewa Indians
Red Lake Band of the Chippewa Tribe
Grand Portage Band of the Minnesota Chippewa
St. Croix Chippewa Indians of Wisconsin
Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin
Red Cliff Band of Lake Superior Tribe of Chippewa Indians
Grand Traverse Band of Ottawa and Chippewa Indians of Michigan
Bay Mills Indian Community of Chippewa Indians
L'Anse Indian Community, Keweenaw Bay Indian Reservation

Lac Vieux Desert Band of Lake Superior Chippewa
Sault St. Marie Tribe of Chippewa Indians

Each of the 12 potentially involved tribes received a letter formally announcing the study and requesting a meeting between tribal government officials and the UofA team members. After this letter was sent, the UofA team began to contact each tribe by phone and FAX. Face-to-face meetings took place in July 1997. Team members met with representatives of every tribe who could schedule a project visit. Soon after the visits, eight tribes officially expressed an interest in participating in the study:

Minnesota
Bois Forte Band of Minnesota Chippewa Tribe
Mille Lacs Band of Chippewa Indians
Red Lake Band of the Chippewa Tribe

Wisconsin
Lac Courte Oreilles Band of Lake Superior Chippewa Indians of Wisconsin
Red Cliff Band of Lake Superior Chippewa Indians of Wisconsin
Bad River Band of the Lake Superior Tribe of Chippewa Indians

Michigan
Grand Traverse Band of Ottawa and Chippewa Indians of Michigan
Lac Vieux Desert Band of Lake Superior Chippewa

Subsequent team efforts resulted in a positive response from the Sault St. Marie Tribe of Chippewa Indians and the Bay Mills Indian Community of Chippewa Indians, Michigan. During the spring of 1998 the cultural resource manager of the Bois Forte Band of Minnesota Chippewas contacted the UofA team to express the tribe's interest in acting as liaison to involve Canadian First Nations in the study. Upon obtaining approval from NPS, the team contacted the Lac La Croix First Nation from Ontario. With the aid of a tribal representative from the Red Cliff band, two more Ontario tribes were engaged in the study: Couchiching First Nation and Seine River First Nation. Other Ontario tribes in the VOYA area, including: Neguagon First Nation on Lac La Croix, Shoal Lake First Nations on Rainy Lake, Nanicost Group on Rainy Lake (Naicatchewenin of Northwest Bay and Nickekousemenecaning of Red Gut Bay), and Stanjicoming were not contacted for this project.

In addition to securing tribal participation, the UofA team members conducted initial interviews with tribal officials and elders to assess their current resource needs and concerns. The information provided in the interviews helped refine the interview forms used during Phase III of this study. A detailed summary of Phase II is found in *A First Trip Report & Project Update – Ojibway Traditional Resources in the Upper Great Lakes: A Study of Ethnographic Resources in the States of Minnesota, Michigan, and Wisconsin* (Stoffle 1997).

Phase III – Site Visits and Interviews

In the spring of 1998 the UofA team began to plan Phase III of this study. Planning and execution of this phase required the following tasks:

On-Location Meetings with Park Officials

A UofA team member traveled to each of the four park units under study to meet with park officials. These meetings had several purposes: (1) provide a project update by means of a formal Power Point presentation; (2) elicit questions about Ojibway ethnographic resource uses and current concerns; and (3) select sites to be visited in each park, develop a tentative visit schedule, and plan field logistics. A detailed summary of this task is found in *Second Trip Report & Project Update – Ojibway Traditional resources in the Upper Great Lakes: A Study of Ethnographic Resources in the States of Minnesota, Michigan, and Wisconsin* (Stoffle 1998).

Site Visit Schedule and Tribal Sign-up

Once a tentative visit schedule was developed with the input of park officials, the UofA team proceeded to contact potentially involved tribes. A memorandum containing details of the upcoming site visit and interview season and a sign-up sheet were sent to the tribes. Each tribe was asked to select up to three representatives to visit up to two parks, and return the sheet to the UofA. The team followed up with multiple phone calls and faxes until all available park trips (7) were filled.

Field Activities and Methodological Adjustments

Field visits were conducted over a five-week period, from July 14 to August 16, 1998. Each park, with the exception of SLBE, had two separate site visit trips planned. Separate funds were available for an additional week in the field for PIRO archival research. This extra time gave greater scheduling flexibility, and did not take away from the time spent at any other park unit. A total of 133 interviews were conducted at these parks. The interview count by park, instrument, and gender breaks down as follows:

Table 2.1 Number of Interviews per Type and Park

INSTRUMENT	GENDER	SLBE	PIRO	APIS	VOYA	TOTAL
Landscape	Female	0	5	4	7	16
	Male	5	3	1	10	19
Site	Female	0	22	15	11	48
	Male	16	12	6	16	50
Total		21	42	26	39	**133**

The numbers of interviews reflect the level of tribal interest in each park and tribal personnel availability. Originally there were an equal number of men and women signed up to visit SLBE. Due to scheduling conflicts, other representatives replaced them. The interview set from SLBE is the only one with no gender diversity. Table 2.2 lists the participants' names and tribal affiliation, and the park(s) they chose to visit. Mille Lacs Band of Chippewa Indians, and Lac Court Oreilles and Lac Vieux Desert Bands of Lake Superior Chippewa Indians of Wisconsin could not send representatives at this time.

Site Selection Adjustments. Several criteria were used, alone or in combination, in the selection of sites to be visited at each park, including:

Presence of archaeological remains (e.g., Moose River, VOYA)
Known historical significance (e.g., Miners Castle, PIRO)

Outstanding landscape features (e.g., Pyramid Point, SLBE)
Presence of ethnographic resources, such as old growth forests and beaver lodges (e.g. Outer Island, APIS)

Additionally, other criteria such as distance to and from a park's dock or headquarters, accessibility by boat, car, or foot, and safety, were considered for prioritizing sites and organizing site visit schedules. In addition to the sites originally selected by park officials, sites whose significance became evident once in the field were added to the schedule. To maximize data collection, each trip to a park took tribal representatives to a slightly different set of sites. Site access for each trip was rated by degree of difficulty so as to facilitate tribal selection of a specific trip. Table 2.3 lists dates, parks visited, sites visited, and access rating.

Field Logistics. The UofA team arranged lodging for all tribal representatives. Travel within each park was provided by the UofA team vehicles and by the parks' vehicles and boats. A park official guided each group to the selected sites and provided introductory background on each site, aided elders to reach difficult places and answered questions about the park resources.

Data Collection Procedures

The basis for conducting systematic research in a consultation project is to (1) let Indian people evaluate the sites or resources first-hand, (2) furnish as much background information on the site as possible (e.g., maps, archaeological reports, photographs), (3) provide a standardized instrument for data collection that reflects their concerns and areas of knowledge and matches their ability with the English language, (4) give them the opportunity to speak freely by administering open-ended interviews when necessary, and (5) develop a system of data-recording that captures to the greatest extent possible all comments and recommendations. Data collection procedures used by the UofA team follow these basic requirements.

Site Visits. This is the most important data collection procedure followed since, without a first-hand view of the resource under assessment, an Indian person may not be able to fully comment on it. Visiting a site activates memory as the site itself is a mnemonic device, allowing Indian people to recognize familiar landscape features and resources, remember oral history, and relate traditional practices to a particular resource. In this study, some tribal representatives remembered having been at a site as children once they saw it. Others had heard oral histories about a site and could recognize features and resources mentioned in them.

Each tribal representative was taken to a site at a comfortable pace and encouraged to walk around for as much time as he/she considered necessary before giving the interview. Normally, consultants spent a half-day in each site. Questions were answered throughout the visit and multiple photographs were taken at the consultants' request.

Background Information. Tribal representatives were given a general project orientation and handouts, including a review of the interview forms that were to be used in the field. At the beginning of each site visit park officials and ethnographers explained the nature and history of each site, providing maps that were also explained to the consultants. They also had the opportunity to visit the parks' exhibits.

Interview Forms. Two interview forms were employed during the site visits to gain information regarding ethnographic resources used by the Ojibway and to define the scope and boundaries of Ojibway resource use. One form is called the *Landscape Instrument* and the other is a *Site Specific Instrument* on land and resource use.

Table 2.2 List of Participants

NAME OF PARK	PARTICIPANTS' NAMES	TRIBES
Apostle Islands National Lakeshore	Katie Lemieux	Bad River
	Donna Lynk	Bad River
	Sylvia Cloud	Bad River
	Delores Bainbridge	Red Cliff
	Judy Pratt-Shelley	Red Cliff
	Grace Baragon	Red Cliff
	Katherine Balber Morrisseau	Red Cliff
	Keith Charles Basina III	Red Cliff
	Lynne Basina	Red Cliff
	Frank Montano	Red Cliff
	Kenneth Charles Basina Jr.	Red Cliff
Pictured Rocks National Lakeshore	Robert Nygaard	St. Ste. Marie
	Jeff Holt	St. Ste. Marie
	Donna Lynk	Bad River
	Katie Lemieux	Bad River
	Ken Ermatinger	St. Ste. Marie
	Dolores Leveque	St. Ste. Marie
	Dee Dee Lightfeather	Bad River
	Katherine Balber Morrisseau	Red Cliff
	Mary Beth Leveque	St. St. Marie
Sleeping Bear Dunes National Lakeshore	Bucko Teeple	Bay Mills
	Robert Nygaard	St. Ste. Marie
	Steve Lewis	Grand
	Jeff Holt	Traverse
	Ken Ermatinger	St. Ste. Marie
		St. Ste. Marie
Voyageurs National Park	Gene Goodsky	Nett Lake
	Geraldine Smith	Red Lake
	Robert Strong	Nett Lake
	Marie Ottertail	Lac La Croix
	Margaret Porter	Red Lake
	John Boshey Sr.	Lac La Croix
	Alfred Henderson	Seine River
	Elaine Jourdain	Lac La Croix
	Less Morrisseau	Couchiching
	Jim Bushkegin	Seine River
	Allan Burnham	Seine River

Table 2.3 Site Visit Schedule

PARK	TRIP DATES	SITE VISIT SCHEDULE	ACCESS RATING
Sleeping Bear Dunes	7/16 – 7/19	North Manitou Island	Medium
		Pyramid Point	Easy
		Bass Lake	Medium
		Platte River Point	Easy
Pictured Rocks	7/20 – 7/31	Sable Falls	Easy
		Grand Sable Dunes	Easy
		Hurricane River	Medium
		Miners Beach	Easy
		Sand Point	Easy
		Munising Falls	Medium
		Beaver Basin	Medium
		Miners Castle	Easy
Apostle Islands	8/1 – 8/8	Outer Island	Difficult
		Oak Island	Medium
		Manitou Island	Medium
		Raspberry Island	Medium
		Stockton Island	Difficult
Voyageurs	8/10 – 8/14	Chief Woodenfrog Island	Easy
		Cemetery Island	Easy
		Moose Bay / Moose River	Easy
		Browns Bay/ Kawawia Island	Easy
		Cranberry Bay / Arden Island	Easy
		Sweetnose Island	Easy
		Ober's Island (not in park)	Easy

Landscape Instrument.

This form is designed to elicit responses on the nature and domain of regional and cultural connections among people, land, and resources. It also emphasizes the history of land and resource use from an Ojibway perspective. This instrument has been used on two previous projects successfully (Stoffle et al. 1998b; 1998c) and was applied upon the approval of the Midwest Region Senior Cultural Anthropologist. This form proved helpful for assessing the spatial extent, cultural content, and historical relevance of the Ojibway cultural landscape (Appendix A).

Site Specific Instrument.

A second form was used in this study in order to gain place specific information on the use and condition of natural and cultural resources. This form is referred to by the UofA team as the "Zion Form" for its genesis and successful use in an ethnographic overview of Zion National Park, Utah (Stoffle et al. 1998). This form has been administered in several projects before this one and has been tailored to meet the needs of each specific project, while its basic structure remains the same (Appendix B). The content of both instruments and relevance for this study are discussed in Chapter 6.

Given that not all the tribal representatives sent by their tribal governments to the site visits had previously visited the parks or sites within each park, our interviews allowed them to talk about *sites like the one being visited* so that the representatives could draw informed analogies and comparisons based on their pool of cultural knowledge.

Open-ended Interviews. Most consultants had comments to make about a site that went beyond the topics outlined in the interview forms. A few felt more comfortable talking freely about a site (e.g., elders who speak English as their second language or who could not hear very well). Open-ended interviews were carefully taped. Notes on open-ended interviews were taken in the field whenever appropriate.

Data Recording. Interviews were recorded in writing and tape. Specific features or resources referred to in an interview were photographed and recorded in a photo log. Each of four ethnographers interviewed a consultant privately, except in cases where two or more consultants asked to be interviewed together. Each interview and comment was recorded in a separate form.

A summary of the field visits is found in the document entitled *Third Trip Report & Project Update – Ojibway Traditional Resources in the Upper Great Lakes: A study of Ethnographic Resources in the States of Minnesota, Michigan, and Wisconsin* (Stoffle, Dewey-Hefley, Zedeno, and Pittaluga 1998).

Data Coding

In September 1998 the UofA team began coding the interview data. An ACCESS electronic database was designed to this effect. The database matches exactly the structure of the Site Specific and Landscape forms. Transcription of selected tapes and tape sections is being carried out along with data coding. The completed database was edited for accuracy.

Data Analysis and Write-up

Once coded data was proofed for error, data tables containing textual information for each section of each form were produced, taking care in reproducing consultants' statements as faithfully as possible. This information has been reported in two ways: (1) summaries of responses to the site specific instrument are found in each park chapter (Chapters Seven through Ten) and, (2) responses to the landscape instrument including a park-by-park summary and quantitative tables are in Chapter Eleven. Database reports containing individual responses to descriptive questions accompany this report in electronic format. General and park-specific preservation concerns and management recommendations are summarized in Chapter Twelve.

CHAPTER THREE

CULTURAL LANDSCAPE AND ECOSYSTEM MANAGEMENT IN THE WESTERN GREAT LAKES

The region being considered in this study is at the headwaters of three vast hydrological units, so the term "Western Great Lakes" is only a convenient device for referring to this ecologically complex region. A triple watershed divide begins in northeastern Minnesota. Along this divide, water flows to the east entering Lake Superior, the highest of the Great Lakes, and thence flows to the Atlantic Ocean via the Saint Lawrence Seaway. This is a journey of more than 1,000 miles. Water also flows to the southwest, joining the Mississippi River, and eventually the Gulf of Mexico. This is a journey of more than 2,000 miles. And, finally, water flows to the northwest, where it enters Hudson Bay and the Arctic Ocean. This is a journey of more than 1,000 miles. The Western Great Lakes region, therefore, is the center of one of the world's most complex hydrological systems that, in turn, is the center of Ojibway life.

The biotic and abiotic dimensions of these three great hydrological systems have been well described by Western scientists. Miron Heinselman's (1996) *The Boundary Waters Wilderness Ecosystem* is an outstanding example of scientific efforts to describe what is at the headwaters today and the forces that have shaped the upper portions of these ecosystems since the retreat of the glaciers. Heinselman, a forest ecologist, has crafted important synthesis essays about natural resources especially focused on lakes and landforms, forests, fire, mammals, and birds. In addition, he explains the human dimensions of ecosystem change ranging from Indian burning, to logging, to contemporary impacts of tourism. While Heinselman's essays are certainly not the only such synthesis, they have been an inspiration for this chapter and should be consulted for greater analysis of specific topics that can only be mentioned briefly here.

The complex ecosystem and human processes of ecosystem modification described by Heinselman and others (e.g. Foster and Whitney 1851; Flader 1976; Hough 1958; Lower et al. 1938; Rousmaniere 1979) are a foundation for understanding the proactive and reactive responses of the Ojibway people over the past 500 years. In order to build what might be termed an Ojibway perspective, we must render this diverse ecosystem more comprehensible so that the opinions of this ethnic group that are summarized in later chapters of this report are properly contextualized. Our goal is to present, simultaneously, Ojibway perceptions of specific landscape features and general views of regional land use patterns. This balance is needed in this report inasmuch as Ojibway people constantly move back and forth from narrow site- and resource-specific uses to broad regional dialogues when being interviewed about their traditional lands.

The parks under study manage unique features within this ecosystem, including features such as the Sleeping Bear Dunes in SLBE and the Au Sable Dunes and rocky shoreline in PIRO, the island environments in APIS, and the interior lake basins in VOYA. Also within this ecosystem are the traditional lands of the Ojibway and their modern reservations. Numerous renewable and nonrenewable resources are at the interface of parks and Ojibway current and potential interactions. This chapter introduces the conceptual framework that has guided our research. Particular attention is given to the development of technical concepts that fit well Ojibway views of land and resource use in the study area. The chapter concludes with a discussion of the implications of these concepts for resource management.

Ecosystem and Cultural Landscape

There are two closely related concepts that frame much of the following analysis: ecosystem and cultural landscape. These concepts have been used to organize the findings of this study because they (1) are central to understanding how the Ojibway view their world and (2) help build a conceptual and practical bridge between Federal management principles and Ojibway land and resource use practices.

Ecosystem

The concept of ecosystem is important because it is commonly understood by expert and lay person alike. It has become a part of the way we think about the land and the role of people who live on the land. Ecosystem is a concept that has a central interpretive position for biology and anthropology, a relationship that has been described by Moran (1990). As such, ecosystem is an essential bridging concept with which to talk about how natural and cultural resources are perceived and organized. Rappaport (1990: 69) states that both professional biologists and anthropologists are revitalizing the concept of ecosystem because,

> The ecosystem concept itself is a vital element in the construction, maintenance and reconstruction of the webs of life upon which we are absolutely dependent.

There are technical definitions of ecosystem which are used by both biologists and anthropologists but which are of little use to the present analysis. For example, when Eugene Odum wrote the *Fundamentals of Ecology* in 1953, he stimulated a variety of studies and theoretical discussions that tried to grapple with the idea that ecosystems were largely self-contained organized biotic and abiotic systems, whose parts were related in knowable ways and whose relationships were defined by inherent principles–somewhat like the basic principles of physics. While some scientists continue to pursue Odum-like models of ecosystems, most anthropologists have moved away from seeking basic ecosystem principles both because energy-level data about the human dimension of ecosystems largely do not exist and because many anthropologists do not believe there are inherent principles that govern human-nature relationships. Certainly, most anthropologists would distance themselves from ecological models where ecosystems are viewed as defining or determining human culture. Nonetheless, few anthropologists would maintain that ecosystems are either irrelevant in the lives of people or unaffected by being used over long periods by humans.

Attractive to both biologists and anthropologists is the notion that the ecosystem concept facilitates looking at humans and their environment in special ways. Foremost among these are the ideas of holism and functional interrelationships. Analyses that have been overly focused on single elements of the natural world or highly restricted geographical areas have failed to produce findings of how the world operates. Ecosystem analysis raises the number of variables to be considered and suggests they be studied over much larger geographic spaces. Ecosystem analysis also requires an understanding of historical processes. Ecosystem studies tend to be more holistic than in-depth functional analyses, although the quality of data that must necessarily be used is somewhat lower than those data available for studies that are more restricted in space and time.

The notion of scale, which is central in ecosystem studies, is another advantage to biology and anthropology (Allen and Hoekstra 1992: 2). The concept of scale implies that something other than the extent of spatial distributions of what is being studied is changing. Allen and Hoekstra (1992: 3) suggest that in biology the rate of change slows as the scale of analysis increases; therefore, at really large scales of analysis change will occur over much larger periods than at smaller scales. In anthropology, Goffred and Monica Wilson (1968: 24-30) note, that as human societies become larger they become more complex as social relationships are intensified, thus they hypothesized a relationship between social complexity and number of people. In this study of the Ojibway land and resource use in the Western Great Lakes, we suggest

that spatial scale does influence the complexity of human-nature relations, but perhaps not in ways anticipated by the Wilsons.

Before we leave the notion of scale as a factor influencing rates of change or complexity, it is important to suggest that scale is also tied to subsystems. Here we return somewhat to Odum's classic conceptualization of ecosystems as being self contained and self governed. While never perfectly contained, there continues to be evidence that as the scale of analysis increases there are critical breaks where the patterns revealed by the analysis seems to be moving from the study of one dimension of human-nature relations to another. In biology, probably the most common scale-based boundary is the concept of watershed. For various reasons, some of which are driven by the Federal and state agencies who manage various natural resources (see last section of this chapter), watersheds are points for ending one kind of study and beginning another.

In anthropology, watersheds too have been shown to be useful units of analysis. Anthropologists, however, favor bounded units defined socially (community), politically (nation), or culturally (area). When the spatially broadest analytical view is taken, it appears that there are sets of analytically distinct but interrelated sociocultural units. We find it useful to describe such sociocultural units as being "nested", each one existing inside of a larger one and all being both apart from one another and a part of the whole. Regardless of scale, analytical units traditionally used by anthropologists to understand human dimensions of complexity and change are limited in their potential for explaining human-nature relationships. We suggest that cultural landscape is the most parsimonious unit for analyzing such relationships.

Landscape is suggested by Allen and Hoekstra (1992: 54) as a critical concept within a unified ecology model. It is, they maintain, the second of two major considerations for addressing any ecological system, the other being scale. Landscape can be used as a point of departure for the study of ecosystems because it is unequivocally ecological and it is the most obvious and tangible of the large-scale ecological conceptions. Landscapes need not be large-scale, however, because the concept is independent from scale. According to this model,

> Landscapes are meaningful in their own right, so it is possible to consider differently scaled systems while using only the landscape criterion. Within large areas there are smaller subsets, which are mosaic pieces. Patterns may extend so that they become segments of larger ones. Smaller patterns may be just details from larger patterns or they could be autonomous with their own distinctive causes (Allen and Hoekstra 1992: 56).

This perception of landscape as a key consideration in biological ecology closely reflects our thinking about the role of cultural landscape in understanding levels of cultural construction of ecosystems. And while up to now this present analysis has been developed out of parallel discussions of ecosystems from first a biological and then an anthropological perspective, it is important now to note that new studies are being conducted that combine these approaches. Russell's recent book entitled *People and the Land Through Time: Linking Ecology and History* (1997) is a fine example of a researcher simultaneously trying to understand people and biology. Another recent example is Nabhan's *Cultures of Habitat: On Nature, Culture, and Story* (1997), where complex human and biological issues are presented in narrative fashion by an author who can best be described as a ecological humanist. Nabhan insists that we view humans as a part of ecosystems and not develop strategies for protecting the environment without incorporating stable local communities (Dyer and McGoodwin, eds. 1994). He observes that biological diversity occurs where there is cultural diversity.

Cultural Landscape

Ecosystems are somewhat self-contained physical and biological systems, which are nested like sets of increasingly larger bowls sitting together one inside the other. Ecosystems tend to be bounded watersheds and often have unique soils, microclimates, plants, and animals; ecosystems also tend to be bounded in the minds of people who use them; human boundaries, however, may not necessarily coincide with biological boundaries. When ecosystems, or portions thereof, become a part of the human environment, it is said they are *socially constructed*. This term implies that, through behavioral interactions between humans and nature, animals, plants, rocks, and water of an ecosystem acquire new shapes and meanings. Such social constructions of nature may be called, in turn, *cultural landscapes*.

A cultural landscape may be defined as a network of interactions between people, places, and resources. Landscapes may be characterized as having three basic dimensions: (1) formal, or the physical characteristics and properties of the natural ecosystem upon which they are constructed; (2) relational, or the interactive (behavioral, social, symbolic) links that connect people with land and resources at various scales, and (3) historical, or the sequences of links that result from the social construction of the environment through time. It is important to note that cultural landscapes do not exist outside historical (e.g., coevolutionary) and relational (symbiotic, dominant) links (Zedeno et al. 1997: 126).

The processes by which ecosystem components become linked to humans, thus forming a cultural landscape is the subject of considerable scientific research (e.g., Carmichael 1994; Cosgrove 1984; Jackson 1984; Greider and Garkovich 1994; Griffith 1992; Kelley and Francis 1994; Walker 1991; Zedeno 2000), which need not be fully repeated in this report. A key point in the conceptualization and practical application of the landscape concept in ethnographic and ethnohistorical studies is that cultural landscapes constructed upon a given ecosystem will be as diverse as the groups of people interacting with that ecosystem. So, for example, if Ojibway people perceived the Western Great Lakes as containing places chosen for them and culturally integrated as a homeland by a sacred shell, they will behave with appropriate respect for all of the resources of this homeland provided by the Creator. If, on the other hand, another people perceived these lands and waters as unrelated pieces of the earth that happen to be located within a park, they will interact with the natural resources as though these were something to be individually conquered by climbing rock walls, hiking to earn patches, and even kayaking when the river is filled with turbulent spring runoff waters.

To say that a human ecosystem is socially constructed provides a frame for understanding why different groups of people seek to interact quite differently with the same natural resources. Both the Ojibway people and the wilderness adventurers perceive themselves as behaving correctly within the contexts of their own social construction of nature. From a natural resource management perspective, however, people with different social constructions will ask resource managers to permit very different and often culturally conflicting activities to occur within the same area.

Our studies with American Indians (Zedeno et al. 1997; Stoffle et al. 1997; Stoffle et al. 1994) and among rural North American communities (Stoffle et al. 1987, 1988; Stoffle (ed.) 1990) suggest that any specific human society will perceive a limited number of types of cultural landscapes, each nested within another and thus constituting an overall ethnic group response to a large spatial area. These levels of cultural landscapes may be defined as (1) holy land, (2) storyscapes, (3) regional landscapes, (4) ecoscapes, and (5) landmarks.

Holy Land. This is the largest unit of land attachment for a people. It is where the Creator placed them and thus they perceive a divinely ordained birthright connection with all the land and resources it contains. Jews, Christians, Muslims, and Mormons all have holy lands. Manifest Destiny, the theory that

guided early United States national expansion is similar in structure and function as a holy land birthright. All Native American ethnic groups perceive such an attachment to portions of North America.

Storyscapes. Storyscapes describe the links that exist between a people's historical memory and the environment. Storyscapes are formed with a people have a song or story that moves along the land; hence, they have an explicitly geographical, lineal sequence. Storyscapes tend to have a beginning and ending place as well as specific places along the way. Migration traditions are classic examples of this type of landscape. The Oregon Trail, for example, represents the Euroamerican settling of the Northwest and the fulfillment of the Manifest Destiny. Similarly, the Honeymoon Trail symbolizes the centrality of the L.D.S. Church Temples for marriage during the Mormon settlement of their holy state of Deseret. American Indian story and songscapes may represent a path to heaven like the Salt Song trail that is shared by the Southern Paiutes and Hualapai or the Trail of Tears, which represents forced relocation to the Cherokee people. As we explain in Chapter Four, the Ojibway migration tradition storyscape is critical for further understanding their pattern of expansion and settlement in the Western Great Lakes region.

Regional Landscapes. These are spatially large areas that tend to be defined either by some obvious shift in ecology or by some arbitrary human perception. In many cases, a regional landscape is defined by an obvious natural landscape like the Mohave Desert or the Western Great Lakes. For a biotic or abiotic region to become a regional cultural landscape some human interactions need to be differentially centered on the area, otherwise there would be no reason to define the concept. The Mohave Desert, for example, constituted a special place that was intensively used and culturally adapted to by a number of Southern Paiute groups. Similarly, the Western Great Lakes were central in the lives of all of Ojibway bands. Regional landscapes represent the broadest pattern of land and resource use by an ethnic group; hence, it encompasses substantial variation in the nature of specific interactions between an ethnic group and the regional environment.

Ecoscapes. These are cultural landscapes that closely match obvious natural biotic and abiotic ecosystems or subsystems. A well-defined portion of a watershed or mountain range or canyon or river would serve as an ecoscape. Human uses of this area would correspond closely with the distribution of natural resources it contains. Ecoscapes are smaller and much more clearly bounded than regional landscapes. Lake Superior, for example, is a clear cultural ecoscape for the Ojibway people. It was central to the lives of many related Ojibway villages located around its shores and intensively used. Ecoscapes are important because they illustrate a juxtaposition of naturally and cultural defined units; there is a more or less perfect match between how naturalists and human groups are defining the units to be specially managed. Ecoscapes, therefore, are among the most useful cultural landscapes for land managers to identify.

Landmarks. Landmarks are places characterized by some distinctive resource (e.g. old growth forest), outstanding natural feature (volcanic cone, waterhole, unusually shaped hill), or the remains of specific activities (burial mound, rock art panel). Landmarks are the smallest most clearly defined components of a cultural landscape, and generally correspond to a locus of interaction between humans and a natural feature or resource. As such, they are easiest to manage. They remain, however, a piece of cognized ecosystem and as such derive much of their significance from the role they play in larger cultural landscape units.

Layering Cultural Landscapes

Any area or region can have more than one cultural landscape attached to it; conversely, a cultural landscape may crosscut more than one area or region (e.g., migration storyscapes). This is a concept called *cultural landscape layering*. Layering can occur when one ethnic group has more than one cultural landscape associated with an area or region. As explained in subsequent chapters, Ojibway land and resource

use history illustrates a layering of holy land, story scape, regional landscape, ecoscape, and a multitude of landmarks. Layering also can occur when an area or region has been lived in by many ethnic groups and each has established a culturally unique construction in the same area.

Layering by Multiple Ethnic Groups. Sometimes different ethnic or social groups perceive the same place as being sacred, such as Mt. Shasta is perceived by American Indians and New Age Church practitioners. Other times different ethnic groups have very contrasting views of the same place, such as Devil's Tower in Wyoming, which is viewed by rock climbers as a place that must be conquered and by American Indians as a sacred shrine (Roberts 1998). The Western Great Lakes region has an extraordinarily complex history of cultural landscape layering by multiple ethnic and social groups.

Landmark Layering by One Ethnic Group. The meaning of a place is made more complex and perhaps more difficult for others to understand when one ethnic group's activities have resulted in the cultural layering of a place; in other words, a place has become a component of very different cultural landscapes. A mountain, for example, could be a landmark where a people traditionally went to conduct religious ceremonies, subsequently it became a place of refuge where warriors successfully hid from their enemies and, later, a national park where Indian people now return as visitors bringing their children to teach them about their people's cultural heritage. Each different use (religious ceremony, hiding from enemies, and cultural education) is an important part of the lives of the people. Each use, in turn, has its own connections in a specific cultural landscape that connect it to other ceremonial sites, other places where the people were attacked or hid, and other places used to teach cultural history. The cultural meaning of such a place, therefore, accrues through time.

Ecological Stewardship

The National Park Service, along with other Federal land management agencies, is seeking new ways to view, study, and manage the human, biological, and physical resources for which they are responsible. The current ecological stewardship movement is based on principles (both established and yet to be established) of ecosystem management. Recently, Yaffee and others (1996) intensively studied 105 ecosystem management projects that were selected from a total of 619 projects nationally. The research is an effort to systematically assess what is happening nationally, why such projects are begun, what have these projects produced, and why have projects succeeded or failed.

Today, there are major efforts completed and underway to more clearly define what is involved with ecosystem management, how to collect new data to inform land use managers, and help define a process for implementing new management practices. Perhaps the most recent and broadly applicable of these efforts has been released by the Interagency Ecosystem Management Task Force (1995) as a three-volume report entitled *The Ecosystem Approach: Healthy Ecosystems and Sustainable Economies*. This report is designed to provide clear direction to Federal agencies in their efforts to adopt a proactive approach to ensuring a sustainable economy and a sustainable environment. The Task Force report (1995: 3) provides the following key definitions:

> *An ecosystem* is an interconnected community of living things, including humans, and the physical environment within which they interact.
>
> *The ecosystem approach* is a method for sustaining or restoring natural systems and their functions and values. It is goal driven, and it is based on a collaboratively developed vision of desired future conditions that integrates ecological, economic, and social factors. It is applied within a geographic framework defined primarily by ecological boundaries.

The goal of the ecosystem approach is to restore and sustain the health, productivity, and biological diversity of ecosystems and to restore and sustain the overall quality of life through a natural resource management approach that is fully integrated with social and economic goals. This is essential to maintain the air we breathe, the water we drink, the food we eat, and to sustain natural resources for future populations.

This applied ethnographic study specifically addresses components of these definitions in the following ways:

The components of an ecosystem are integrated and these relationships can only be understood through interdisciplinary and holistic analysis.

This study looks at many aspects of Ojibway culture associated with these ecosystems including myths, land use values, plants, and animals.

The ecosystem approach emphasizes the use of information from both science and the knowledge of people in local communities.

This study presents the cultural perceptions and knowledge of Ojibway people about these ecosystems, and places this indigenous knowledge in context through the use of social science findings and historic documents.

A goal of the ecosystem approach to management is to restore the functions and values of natural systems.

This study identifies Ojibway ecosystem values and recommends ways in which the ecosystems can be physically and spiritually restored.

Ecosystem management involves identifying a shared vision of desired future ecosystemconditions that integrate ecological, economic, and social factors.

Ojibway people have shared their vision of what these ecosystems were under traditional Ojibway management, what occurred to the natural resources and the Ojibway people after encroachment, and how to begin to reassemble and restore the components of the ecosystems, including reintegrating Ojibway people.

Ecosystem management seeks common solutions by forming partnerships between Federal, state, and local governments, Indian tribes, landowners and other stakeholders.

The National Park Units involved in this study have each established some relationships with the Ojibway tribes in their areas. The purpose of this study is to provide region-wide information from many Ojibway tribes so that a reasonably complete information base is available and can potentially serve to facilitate future relationships.

Science of the Human-Ecosystem Interface

People are the newest and certainly the most difficult component to incorporate in the ecosystem approach. This situation probably occurs because Federal land management agencies have more experience managing the resources than understanding and managing the resource users. This legacy has left many

Federal agencies with an information gap regarding diverse peoples and experience that comes from working with communities, organizations, and American Indian tribes. Filling this gap is essential if the new ecosystem approach is to succeed.

Everywhere, park rangers and other natural resource scientists are grappling with what they call the human dimension of ecosystem management. According to a recent report by the Forest Service (Ecological Stewardship Workshop 1995: 7), the term *human dimension* refers to:

> An integral component of Ecosystem Management that recognizes that people are part of ecosystems, that people's pursuits of past, present, and future desires, needs and values (including perceptions, beliefs, attitudes and behaviors) have and will continue to influence ecosystems and that ecosystem management must include consideration of the physical, emotional, mental, spiritual, social, cultural, and economic well-being of people and communities.

This definition is especially rich in details about what human variables should be considered and how significant people are in the new ecosystem approach. However, there are few clear guidelines for foresters, park rangers, and other natural resource managers who now want timely and credible information about people and their ecosystem interactions.

While most Federal agency personnel have little experience systematically consulting with many types of people and generating problem-specific information about how these people use ecosystems, many professionally trained social scientists are familiar with both of these issues. A few agencies have social scientists on staff, such as the Applied Ethnography Program of the NPS. Where agency social scientists are not available, land managers will be expected to personally begin interacting with non-agency social scientists for the first time. Thus, it is useful to briefly review social science studies of the human-ecosystem interactions so that natural resource managers will have some perspective on what to expect from social scientists and which social scientists are professionally trained to provide the research to answer ecosystem management questions.

Journals like *Human Ecology* and *Society and Natural Resources* are exclusively devoted to publishing scientific research on these issues. Most other major social science journals like *Human Organization* and *Rural Sociology* regularly feature articles that can be called social ecology, political ecology, or cultural ecology. The *Journal of Political Ecology* is an electronic journal at the University of Arizona devoted to the interdisciplinary study of these issues. Books and chapters summarize current findings as well as integrate these findings into models that are tested by future research. Often, these are the published results of a major symposium like *Man's Role in Changing the Face of the Earth* (Thomas 1956), or "The Impact of Human Activities on the Physical and Social Environments: New Directions in Anthropological Ecology" (Montgomery, Bennett, and Scudder 1973), or *The Ecosystem Approach in Anthropology: From Concept to Practice* (Moran 1990) or *Population - Environment Dynamics* (Ness, Drake, Brechin 1993). Other research findings are produced when one agency attempts to address these issues from its own perspective, such as *Social Aspects of New Perspectives in Forestry* (Stankey and Clark 1992) and *Institutional Barriers and Incentives for Ecosystem Management* (Cortner et al. 1995).

Although natural history, the ancestral science of biological ecology (Egerton 1985), preceded its sociocultural sister sciences, the latter were well established as legitimate fields of study by the late 1800s through the research of a diverse set of international scholars like the American George Marsh, the Russian Alexander Woeikof, and the Frenchman Elisee Reclus (Thomas 1956: xxviii - xxxvii). Egerton (1985: 103)

even suggests that when pure ecology became more generally applicable to human problems it too began to consider social variables, because "the goal of applied science is to achieve an understanding of nature in relation to human endeavor." Although biological ecology and human ecology may have taken different approaches, they both seek to better understand the human-environment interface and they both have worked on this issue for more than one hundred years.

In short, there are well-established fields of study in social science that contribute answers to questions about the human dimension of ecosystem management. If land management agencies currently know more about natural resources than human resource users, it is because the former have received more attention due to their central importance in past natural resource management practices. The new ecosystem approach to land management recognizes the critical role humans have in the ecosystem and the general lack of available information on these human activities. Thus, there is a dual crisis facing most land use managers–to decide how to study humans and to select appropriate scientists to conduct these studies. Needless to say, if social scientists were asked to design studies of wildlife or forestry they would be at a great disadvantage. Likewise, when wildlife biologists are asked to design a Native American ecosystem study they may be both perplexed and worried over the effectiveness of their labors.

Creating Useful Ecosystem Social Science

Ecosystem management has created a demand for applied social science studies but how do agencies assure that useful studies are being funded? It should not be assumed that, by funding social science studies, managers will know exactly what they need in order to work effectively with natural resource users and to form policies that create better human-nature interactions. There is an obvious need for advice from agency-based social scientists, and the demand on their time is expected to drastically increase with a shift to the ecosystem approach to management. Agencies can also draw upon university-based social scientists for advice and labor. Over time, as more and more ecosystem social science studies are funded, agencies will develop an understanding of what human variables are most critical, what findings are persuasive in the formulation of public policy, and which types of social scientists are useful for certain types of studies (Van Willigen, Rylko-Bauer and McElroy 1989; Wulf and Fiske 1987).

Past lessons can be useful in the creation of effective ecosystem social science. Two experiences in which the report authors have participated in recent Federally sponsored research may be useful to improve natural resource management; these are (1) working together and (2) shortfall studies.

Working Together

There are studies jointly conducted by social scientists and natural resource managers that address the issue of how to make social science findings useful for managers. The Great Lakes Fishery Commission, for example, funded a two year-long study called "Social Assessment of Fisheries Research," which involved more than 50 managers and social scientists who worked together to bridge the gaps between the needs of fishery managers for findings on human fishery uses and the desire of social scientists to conduct studies that resolve theoretical questions. The findings of these efforts were published as a special issue of the *Journal of Fishery Science* (Talhelm and Libby 1987).

The Great Lakes fishery management strategy for "working together" is virtually identical to the one that culminated in the recent Ecological Stewardship Workshop (1995), which was sponsored by dozens of Federal agencies, private foundations, and natural resource interest groups. This workshop paired teams of scientists and natural resource managers for two weeks in an effort to have them jointly produce interactive essays about ecosystem management. These essays are expected to be useful to both scientists and managers and, when published, serve as a practical guide for participants in the ecological stewardship movement.

Working together is essential for ecosystem management so that scientists and natural resource managers can begin to develop a common understanding of what research findings are needed to formulate, implement, and monitor natural policy. Without the time and opportunity to establish a common ground, shortfall studies may occur. Needless to say, working together is critical in order for managers to understand user groups as well as they understand components of the natural ecosystem.

Shortfall Studies

Significant social science studies that are useful to land managers may not be forthcoming, even when the appropriate researchers are working with knowledgeable managers who have provided sufficient funds to conduct the research. The possible short-comings of what are called *shortfall* studies, can derive from the following factors: (1) scale – problems with larger than normal analytical units, (2) holism – need for new variables and interdisciplinary methodologies, and (3) smart databases – which must be accumulated, modeled, and updated to meet changing ecosystem conditions.

Scale

Agencies must consider the broad-scale, long-term ecological consequences of their actions (Interagency Ecosystem Management Task Force 1995: 17-18).

Ecosystem research involves new sizes of analytical units. Previously funded agency research has focused on and usually has been geographically limited to lands specifically managed by the agency. From a practical standpoint, even though natural and cultural resources obviously extend beyond the park, forest, or whatever lands the agency manages; the scientists have been restricted from conducting studies beyond the Federal administrative unit. As research is less geographically bounded by the administrative unit itself, new questions arise about what is the scale of appropriate ecosystem studies. Once we start expanding, where do we end? How do we come to agree upon common criteria so that all of the new ecosystem studies correspond geographically?

Time is another type of scale issue that must be addressed by the new ecosystem research. Previous studies have been designed to answer immediate management questions, often to the exclusion of temporally broader questions about the formation and dynamics of the ecosystem. In general, each science will have a preferred time frame for best understanding its research questions. Usually, the greater the time depth under consideration the more information is required to provide an answer to a research question.

Longer analysis time frames will combine with geographically broader study units to produce new kinds of studies–often studies that have never been conducted by either scientists or agencies. These new scales of analysis will make it even more important that all scientists conducting ecosystem research use similar analysis frames.

Holism

Under the ecosystem approach, management is oriented towards interacting systems, and addressed ecological, economic, and social concerns (Interagency Ecosystem Management Task Force 1995: 19).

Traditional resource management tends to be oriented selectively toward certain resources, such as timber, minerals, single wildlife species, water, or cultural resources, with less attention paid to other resources or to the interdependent relationship among these resources. New ecosystem studies must look at many aspects of the ecosystem and their interrelationship to one another. This requires multivariable models

that probably have not been developed because either the funding or the expressed policy need for them had not previously existed.

Holistic social science studies not only include the widest appropriate array of social and cultural variables, but also include all appropriate kinds of people. The term **cultural affiliation** is used to specify American Indian ethnic groups and tribes who have cultural ties to parks and other Federal lands. Other types of people also have social or cultural ties to Federal land management units and these people should also be included if all the human dimensions of the ecosystem are to be understood.

Holistic studies tend to require interdisciplinary teams. Botanists work with cultural anthropologists to assure that American Indian ethnobotanical interviews are scientifically referenced. Climatologists work with social scientists to triangulate archaeological findings about shifts in agriculture over millennia. Even different types of social scientists must work together so they produce comparable findings about different types of culturally affiliated peoples.

> *Smart Databases*
> *Under the ecosystem approach, resource management plans are based on a collaborative vision for the ecosystem, considering the mandates, needs, interests, and goals of all stakeholders. Management plans and actions are modified as necessary, based upon changes in our knowledge of the ecosystem, new information, availability of new methods and approaches, and assessments of progress towards goals* (Interagency Ecosystem Management Task Force 1995: 19).

Ecosystem management needs to be smart. It needs to be built upon interactive databases that are constantly updated by new studies. Unlike static databases of the past that provided simple inventories of natural resources, open-ended databases are needed to match the perspective of ecosystems as constantly changing. Open-ended databases need to be able to answer questions that are not even conceived of when natural resource studies are designed and conducted. In other words, smart databases are designed to be open-ended, cumulative, and oriented to future problems.

Social science studies require smart-type databases inasmuch as human societies and cultures are constantly changing. In human societies the most rapid changes tend to occur in what are called **opinions**. As a result, opinion polls are conducted as often as necessary. More basic to humans are **values** that tend to persist throughout the life of the individual and even to characterize the individual's ethnic group over generations. Value-based data are a more fundamental type of social science data for building land use policies (Stoffle et al. 1987). A collaborative vision for an ecosystem should be developed from shared values, not from the more ephemeral types of social data such as opinions. Thus, it is essential for natural resource managers to know about and to specify exactly the kind of social science data they need.

Once the appropriate type of human dimension data is incorporated into a smart database, then appropriate monitoring is necessary. *Social indicators* are ways to easily sample different human populations to determine if significant changes have occurred to warrant a reconsideration of existing land use policies. Social indicators, however, can only point out when new studies must be conducted; they do not replace the continual collection of primary information that is then incorporated in the smart databases.

CHAPTER FOUR

HISTORICAL OVERVIEW OF OJIBWAY LAND USE IN THE WESTERN GREAT LAKES REGION

This chapter provides a general overview of land use history of the people who became known historically as the Ojibway. Because the Ojibway were and are part of a larger kin-based network of people spread over the vast sub-arctic region of southern Canada and northern United States, it is difficult to be wholly exclusive or inclusive in their history. Ojibway bands inhabited a larger territorial range than any other Indian tribe in North America (Tanner 1986), which makes it difficult to speak in general terms about them as a group. Resources varied over this region, and subsistence patterns were adjusted locally by each band to exploit those resources where they were most abundant and reliable. This resulted in great subsistence variability across space. The individual bands of Ojibway were thus not connected by a uniform subsistence base but they were and are connected by a clan network. These Algonquian-speaking clans had been seasonally mobile for several centuries are probably autonomous groups before the arrival of Europeans on the North American continent; in fact, the earliest accounts do not talk of "Ojibway" or "Chippewa" but of a number of distinct, but related, groups (e.g., Amikwa, Saulteur, Outchibou, Marameg; see Schenk 1997: 28 for a complete and dated name list). After sustained contact with Europeans the Ojibway became increasingly village centered. Small bands, however, continued to seasonally use the countryside, particularly during the eighteenth and early nineteenth centuries—John Tanner's captivity narrative exemplifies land use activities during this time period (Tanner 1994). These people became officially known as "Ojibway" after the publication in 1885 of W. Warren's *History of the Ojibwa People"* (Warren 1984). Therefore, our usage of Ojibway to recount the earliest periods of their history is somewhat arbitrary.

Numerous primary and secondary sources provide background information for detailing the genesis and history of Ojibway occupation in Michigan, Minnesota, and Wisconsin and their interaction with European and American settlers. While a number of these sources were consulted for this chapter, the bulk of this information can be found in Schoolcraft (1838), Kohl (1956 [1860]), Warren (1984 [1885]), Blair, ed. (1996 [1911]), Levi (1956), Kinietz (1947, 1965), Quimby (1960), Densmore (1979), Tanner (1986), Hickerson (1962, 1970, 1974), Wright (1965), White (1991), Cleland (1992), the *Jesuit Relations and Allied Documents* (Thwaites, ed. 1959), the *Journals of Alexander Smith* (Coues 1897), and the *Handbook of North American Indians*.

Prehistoric Background

There is no clear-cut archaeological evidence of prehistoric Ojibway roots in the Great Lakes area (Cleland 1992: 29). However, possible late prehistoric or protohistoric historic Ojibways or their close allies, the Potawatomis and Ottawas, may have resided in the area during the Juntunen phase of the late Woodland period, ca. AD 1400-1600 (Kinietz 1965; Danziger 1979; Cornell 1986; Warren 1984; Levi 1956; Benton-Banai 1988; Copway 1850). Given the paucity of information regarding connections between historic populations and groups who inhabited the Western Great Lakes region in the earlier prehistory, land use patterns before AD 1400-1600 can only be interpreted from a multiethnic Indian perspective. This said, the descriptions of life between 5000 BC and AD 1600 are not going to be covered in depth here, as they may not be as relevant to understanding Ojibway land and resource use as the years after the turn of the

seventeenth century. Information on park-specific prehistoric occupation and related cultural resources is summarized in subsequent chapters.

During the Late Archaic, the northern woodlands changed from predominantly mesic forests to boreal forests or to transitional forests. Native Americans in the Great Lakes forest area were organized in small hunting and gathering bands but showed sedentism, agricultural specialization, and long distance trade in some regions, such as the lower peninsula of Michigan. During the Woodland period (600 BC - 1600 AD), the area was characterized first by its Hopewell influences and later by Norton burial mounds and copper art. In the Late Woodland, the seasonal village complex gave rise to the lakeshore fishery complex along the lakes, and mixed crop farming extended further inland to include the wetland areas (Cleland 1992: 24-30; see also Quimby 1960). It was in this age of increased specialization that the Anishinabe peoples (ancestral or proto-Ojibway) migrated into the region.

Migration (chi-bi-moo-day-win)

Since prehistory, the Ojibway have been a diverse people spread out over a large geographic area. Geographic dispersal due to territorial pressure and warfare with other tribes, exacerbated by the French intrusion in the seventeenth century, have blurred the boundaries of Ojibway territory during the late prehistoric and early historic periods (Blair ed. 1996; Champlain 1922; Hickerson 1962, 1970; Quimby 1960; White 1991). Preceding the French occupation, the Ojibway had been settled along a large geographic area including the St. Lawrence area of the eastern seaboard. Several hundred years before the French contact, the Anishinabe began their migration toward the Upper Peninsula of Michigan (Benton-Banai 1988: 94; Cornell 1986: 76; Levi 1956: 11; Warren 1984: 79).

Reasons for this migration have been attributed to disease by scholars; oral history also provides information on pre-migration conditions. The diseases that plagued the Anishinabe were likely brought about by Norse excursions into eastern Canada around AD 900 (Cornell 1986: 76-77). When the Norse reached what they called Vinland in search of wood, they set up temporary housing and stayed long enough for their Scandinavian diseases to have a major impact on the native population. Oral tradition relates that the Anishinabe people suffered extreme hardships (Cornell 1986: 76) and ravages of sickness and death (Warren 1984: 79) before and during their migration into the Great Lakes area. Tradition also relates that it was around AD 900 that ancestors of Ojibway, Ottawa and Potawatomi peoples began their travels along the waterways that feed the Great Lakes to escape the disease that had greatly reduced their population (Benton-Banai 1988: 102).

The Ojibway migration legend (*chibimoodaywin*) begins with the forecast of a series of Seven Fires that would lead the Anishinabe out of the St. Lawrence area. Legend suggests that the bands of people living along the northeast seaboard were so many and powerful that if one was to stand on the highest mountain and look in all directions, they would not be able to see the end of the nation (Benton-Banai 1988: 94). This success is seen as a backdrop to show that the proto-Ojibway were successful and had no climatic or warfare stimuli for migrating at the time of the legends prophecy that urged them to move west. The prophecy occurred in a dream that foretold the destruction of their people by a fair-skinned race unless they moved west, and away, from the eastern seaboard. Along this migration a few chosen Anishinabe were charged with carrying the sacred fire and to keep it burning constantly along the migration route (Benton-Banai 1988: 94). In Warren's account the sacred fire is a metaphor for the Midewiwin medicine lodge ceremony (Warren 1984: 80).

The Anishinabe were given seven signs to let them know if they were following the right path. These places were known as fires because it would be at each spot that the sacred fire would be allowed to

rest. They knew a little about what each fire would look like, but could only be sure if they came upon a seashell (*megis*) suspended in air (Warren 1984: 78; Benton-Banai 1988: 96).

The First Fire was at the turtle-shaped island, which is believed by Benton-Banai (1988) to be north of present day Montreal in the St. Lawrence River. Between the first and second fire stops they fought with the Six Nations of the Iroquois. The Second Fire was at *Kichikabekong* (Niagara Falls), where the Anishinabe stayed for a while before continuing west. The Third Fire was located at the base of Lake Huron, on the Detroit River between Lake Huron and Lake Erie. At this point the Anishinabe stopped to regroup and decide in which direction to continue. While resting here, the proto-Ojibway and the Iroquois declared a temporary peace. Among the Anishinabe, three groups began to emerge, the Potawatomi, the Ottawa, and the Ojibway. The three groups decided that each would follow a different path in search of the remaining four fires (Benton-Banai 1988: 95-99).

From the third fire at Detroit, the Potawatomi headed south and west, the Ottawa and Ojibway north and west. Danziger (1979: 7) and Benton-Banai (1988: 98) support the legend that the three groups separated at Lake Huron, the Potawatomis migrating into lower Michigan, the Ottawas settling in the Lake Nipissing area and on several of the Huron islands, and the Ojibway stretching from Sault Ste. Marie and upper Michigan along the northern and southern shores of Lake Superior (but see Greenberg and Morrison 1982). The Ottawa and Ojibway first split from their northerly path at the Fourth Fire in Manitoulin Island, Ontario.

At Manitoulin Island the leaders decided that, in order for all to survive, a group of Ojibway and some Ottawa must continue west in search of the last fires. At Sault Ste. Marie or *Baw-wa-ting*, the people found the Fifth Fire. A group settled in this place because had rich fisheries and provided a good living situation. The migration again split, one group heading north along Lake Superior to find the Sixth Fire at Spirit Island on the western end of the lake. The other group traveled along the southern shore of Lake Superior. When the groups met again it is said that they found wild rice and settled on Spirit Island (Benton-Banai 1988: 101). Now moving east, south of Lake Superior, a small band of Ojibway migrated to Madeline Island, the place of the Seventh Fire and final migration point. At Madeline Island the Sacred Fire, which the Ojibway had kept lit and carried along the 500 year migration could now rest (Benton-Banai 1988: 102) (Figure 4.1).

Because the latter portion of the migration coincided with the time of European explorations, it has been difficult to pinpoint their exact locations or settlements in the Great Lakes area that date to the migration period. Benton-Banai relates that oral tradition places the Ojibway in the western Great Lakes area, specifically Lake Superior, as early as AD 1400 (1988: 102). Cornell (1986) places the Ojibway along the north shores of Lake Superior and the Upper Peninsula of Michigan by AD 1500, and Copway (1850: 22) suggests a secondary migratory split between the Ottawa and Ojibway occurring around 1613. These dates suggest that the Ojibway and Ottawa reached the eastern end of Lake Superior in the late 1400s and were traveling eastward toward Chequamegon Bay, Wisconsin along the southern shore following the settlement at Spirit Island in the 1500s. Copway's date of 1613 may refer to the later return of a group of now distinct Ojibway and Ottawa to the Manitoulin Island settlement. Kinietz (1965: 317) also suggests a southeasterly movement in the early 1600s, around the time of European contact.

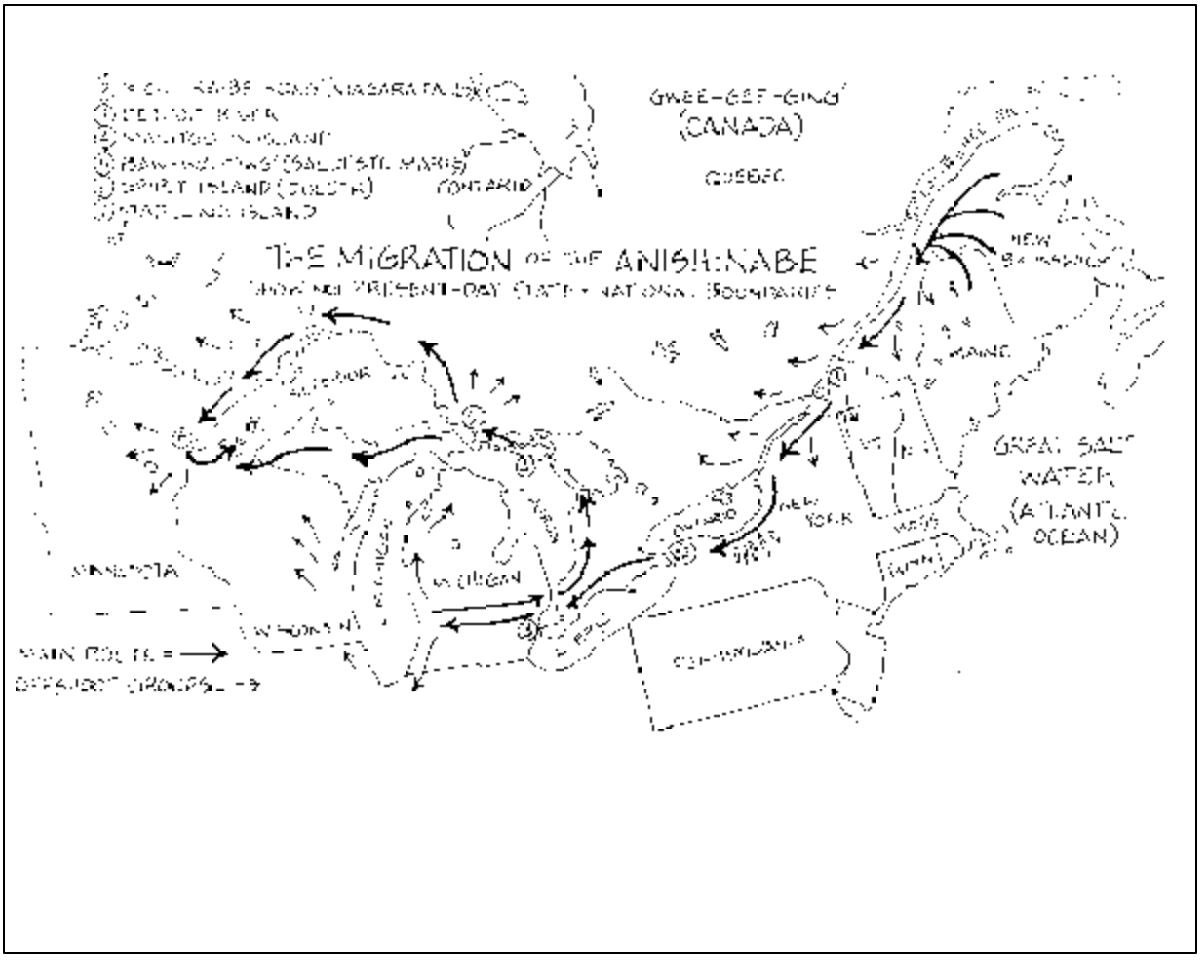
European-Ojibway Interaction in the 1600s

The earliest known contact with Europeans occurred when Samuel Champlain, the founder of New France, established friendly relations with the Ojibway at Sault Ste. Marie in 1609. The group of Ojibway that the French explorer met was either Ojibway or a mixture of Ojibway and Ottawa. Some bands of Ojibway had been in that area probably since the turn of the sixteenth century. In the following year, 1610,

Champlain sent Etienne Brule and other French explorers to set up trading partnerships with the *Saulteurs* and acquire knowledge of the Ojibway language to facilitate long-term commercial transactions with the Algonquian-speaking tribes (Levi 1956: 18, 22). Judging from these records and oral tradition, it is possible to date steady Ojibway occupation in the Western Great Lakes region at least in the mid-to-late 1500s, and most definitely by the early 1600s (see Chapter Eight for a discussion on settlement dates).

Kinietz (1965: 317) maintains that at the time of sustained contact in the 1640s, there were relatively few Ojibway in the Sault Ste. Marie area, these small villages being the advance guard of their southwesterly migration (Kinietz 1965: 317). Cornell, however, states there were numerous clans in that area and in Saginaw Bay (Cornell 1986: 88). Some of the confusion as to the dates of steady Ojibway occupation of land in Lake Superior and Lake Michigan shores in the first half of the 1600s may arise from the seasonal movement and autonomy of each band of Ojibway, which Hickerson refers to as the totemic proto-Chippewa (Hickerson 1962: 88). Perhaps the most definite evidence of Ojibway presence across the shores of Lake Superior, from Sault Ste. Marie to Spirit Island in the seventeenth century comes from eyewitness accounts by the French explorer LaGarde (Drier and DuTemple 1961: 37) and the Jesuit Father Allouez (JR Vol 1666-67: 265-267), who in 1636 and 1666, respectively, observed Ojibway or proto-Ojibway groups (Agonkian-speakers related to the Saulteurs) living and fishing in the copper-rich islands and western shore of Lake Superior.

Figure 4.1 – Map of Ojibway Migration by Benton-Banai (1988)



By the mid-1600s, the Ojibway had already demonstrated some changes due to contact with Europeans. Their seasonal activities began to focus on acquiring furs to trade for French goods offered by Ottawa middlemen. As the century grew on, the Ojibway of Sault Ste. Marie would become increasingly important to the fur trade (Cleland 1992). Most scholars agreethat the Ojibway were familiar with and participated in the dispersal of European goods by the time any one group had sustained contacts with European traders or missionaries. The Jesuits had made extensive note of the Ojibways of eastern Upper Peninsula of Michigan by 1640 (Thwaites 1959: JR 18: 230). Once exposed to the useful goods of the French, the Ojibway were as eager to fully participate in the Fur Trade as the Ottawa and other Algonquians who had traded for decades before 1640. In search of more beaver to hunt, more and more settlements of Ojibway could be found around Keweenaw Bay and by the 1660s the Ojibway were firmly ensconced in western Wisconsin and Chequamegon Bay (Tanner 1986: 32; Thurner 1994: 20).

Ojibway Sociopolitical Organization and European Colonization

The reorganization of formerly mobile bands into village-centered sociopolitical entities was one of the most important demographic consequences of the increasing French influence and endemic native wars. Several well-known Ojibway villages were established during this period, particularly along the southern shore of Lake Superior in Keweenaw Bay, La Pointe, and Sault Ste. Marie (Levi 1956: 12; Tanner 1986: 32; Warren 1957: 126). Fortified Ottawa-Ojibway villages were also present on both sides of the Straight of Mackinaw, namely, St. Ignace and Michilimackinac (Cornell 1986). The village of La Pointe at Chequamegon Bay was considered a common home for many hunting parties who returned there at different seasons of the year; grand medicine rituals and war party meetings were carried out there (Warren 1957: 127) (see Chapter Eight's regional history). Another large village of 100 houses in Lac Court Orielles, Wisconsin was visited by Radisson's party in 1661 (Adams 1961: ff60:lvii) This seasonal village was connected to La Pointe by an ancient trail.[1] These villages, among others, became centers for political, social, and economic activities in which the Ojibway as well as other Algonquian speakers and the French participated. However, they contained only a fraction of the population dispersed across the Western Great Lakes shores and interior waters.

By the mid-seventeenth century the new Ojibway villages were feeling increasing pressure from the Fox, Huron, and Algonquian allies who had moved into the Lake Michigan and Lake Superior areas as a result of Iroquois war raids. At the same time, Ojibway hunting parties were pushing further into Dakota (or Eastern Sioux) territory searching for resources for both subsistence and trade. Thus, the Ojibway had to constantly reaffirm boundaries along both the western and eastern fronts (White 1991: 1). Reaffirming the tenuous native boundaries usually took place in the form of gifts, particularly among groups such as the Sault Ste. Marie Ojibway who had control of a major trading route. It is important to remember though that each group from Sault Ste. Marie to Keweenaw Bay were autonomous and could make alliances with French and native fur traders independently from one another (Pittaluga 1996: 41). In fact, individuals from the same band could deal in the trade on their own and would make long trips to their trading houses in order to get better deals and keep one-on-one partnership loyalties.

The Huron-Iroquois War

The migration and relocation of ethnically diverse peoples in villages near missions and military posts increased during the Huron-Iroquois war in the mid-1600s. Next to these, they could gain protection and reinforce alliances against the Iroquois (Tanner 1986: 37). The Iroquois Nations of the east had been trading with the English for some time and were rapidly exhausting their beaver supply. Meanwhile, the Ojibways were expanding west and south due to prosperous trade with the French. Having good trade relations with the Dutch and English but a depleting fur supply, the Iroquois decided to make war on the Huron and others trading with the French. By making war they could have control over the contested resources, or at least prevent others from benefiting by trade. This decision was both logical and strategic in

that the Iroquois stood to gain more from trading with the British due to British higher prices for fur while preventing the Huron and Algonquians from using Iroquois hunting and trapping grounds, than they would if they had switched loyalties to the French (Cornell 1986: 90).

Having then decided to push the Huron and allied groups out of their grounds, the Iroquois began systematic raids along the Lakes. By 1648 the Iroquois had pushed the Huron out of their land into the Tionontati, Erie and Ottawa regions to the south and west. The movement of the Huron pushed the French trade west and complicated hunting relations with the Ojibway and other western Algonquian groups (Tanner 1986: 30). The Ojibway stronghold in Sault Ste. Marie and in Wisconsin was flourishing; however, population movements of the refugee Huron and Fox pressed the Ojibway to further expand west. Tanner maps the Ojibway as not having a strong presence at Sault Ste. Marie between the years 1650 and 1662 due to this population pressure. The Ojibway population had scattered into villages and camps west from the rapids and during those years only ventured to Sault Ste. Marie to fish and trade. Even after an overwhelming Iroquois defeat in 1655 by the Ojibway and their allies, the Ojibway did not move back to this area on a permanent basis until after their final battle and victory over the Iroquois in 1662 (Tanner 1986: 32).

The French explorer and trader Nicholas Perrot identified the Iroquois defeat in 1655 as the Ojibway's first real involvement in the warfare between the Iroquois and Huron and Ottawa in Illinois country (Blair ed. 1996 (I): 153). Copway (1850: 78) also states the Ojibway had little involvement in war the first half of the seventeenth century, but had obtained firearms with steady commerce around Lake Superior and were able to lend great assistance when they did attack in 1655. Around the year of 1652, the Iroquois, desiring Ojibway goods, attacked and killed Ojibway traders on their way to Montreal. In 1653 an Ojibway-Iroquois council convened below Sault Ste. Marie where peace was supposed to be made. This peace lasted about three years before the Ojibway became incensed at a recent killing of some of their traders. The Ojibway, Ottawa and Nipissing waged war against the Iroquois on the grounds that the latter had prevented them from trading with the French and sought to make no reparations (Copway 1850: 82-87). The battle of 1655 occurred when the Iroquois, unsuccessful at encroaching into the Potawatomi area south of Lake Michigan, split into two groups to head back into Iroquois country. The northern expedition was surprised and attacked by the Ojibway south of Sault Ste. Marie (Blair ed. 1996 (I): 153), resulting in a defeat from which the Iroquois never recovered.

Even after this defeat, the Huron and Ottawa began another migration away from the Iroquois in 1657, pressing into Chequamegon Bay. Following this battle, the Iroquois focused its energy on blocking the Ottawa River to prevent trade with the French (Tanner 1986: 31). The Algonquian groups, including the Ojibway, concentrated on staying north and center from the Dakota Sioux and the Iroquois for the next few years. The Sioux were not yet enemies of the Ojibway, and in fact had reached a tentative alliance with them. The Ojibway, having an established relationship with the French, would supply the Sioux with French goods so long as they were allowed to hunt in the Sioux forests of Minnesota. This arrangement was mutually beneficial in times of relative peace.

In 1662, however, the Ojibway, Ottawa, Nipissing and Amikwa journeyed into the Sault area to hunt and fish. At the same time a group of Iroquois had approached Sault Ste. Marie in search of a village, which could be forced to give them food. The Iroquois sent out a scouting party, but the Ojibway had already seen them and sent out their own scouting party. The Iroquois did not want the Ojibway to know they were there so as to prevent them from warning the nearby village. Thus they remained as still as possible while the Ojibway party floated past. The Ojibway however continued on, not to the village, but to the unsuspecting Iroquois camp, and at night, attacked and massacred the whole camp. When the Iroquois scouting party returned, they found only headless corpses on the ground, and the bones of those whose flesh had been

eaten, [and] they made diligent haste to carry back to their own country this dismal news. It is said that the Iroquois have not dared since that time to enter the Lake Superior area (Perrot in Blair 1996 (I): 179-181).

In reality the Iroquois would continue to push entire villages south and west of the Great Lakes, but by 1670 the French and the allied Indians were beginning an offensive against the Iroquois, which would eventually push them completely out of the Huron area. In the winter of 1670, Perrot stayed with some Ojibway and Ottawa on Manitoulin Island. While there he urged several chiefs of the Amikwa, Potawatomi, Sauk, Fox, Saulteurs, and others to accompany him to Sault Ste. Marie for the arrival of French officials (Perrot in Blair 1996: 220-225). Kinietz (1965: 320) writes that the Saulteurs, Mississauga, and Amikwa numbered only 1,600 at the time of this meeting. It is clear from Perrot's account that the treaty that brought the representatives to Sault Ste. Marie actually gave over each tribe's sovereignty to the French. As each village was a separate autonomous group and no one chief had the power to make this declaration, it would not be surprising if the Chequamegon Ojibway were not even aware of this treaty signed by the Saulteurs.

It would not be until 1701 that a treaty would be drafted, after several years of disease and warfare, declaring Iroquois truce with France and the other tribes. This treaty also declared Iroquois neutrality in any skirmishes between the French and British. Thereafter, both the French and the British took the opportunity to expand their influence in trade. However, once the Iroquois threat was subdued, new tensions emerged with the villages of refugees now wanting their traditional land back east of Lake Huron. At the same time, the western Ojibway (Pillagers and Chequamegon bands) wanted to keep tentative control on the contested Sioux and Ojibway land in Minnesota. The Ojibway-Dakota relations, which had started as a consequence of expansive trade and refugees pushing into Ojibway land, and consequently the Ojibways pushing into Dakota land, was beginning to get tense in the 1700s. In the first decades of the eighteenth century the events involving the French, the fur trade and the Mesquakie (Fox) wars would exacerbate this tension.

The Fox Wars

At the end of the Huron-Iroquois war yet another wave of population dispersal began; throughout the early eighteenth century many groups moved into areas previously vacated because of the Iroquois threat. These areas included the rich inland lacustrine and riverine environments of northern Wisconsin and the Lower Peninsula of Michigan (Tanner 1986; White 1991). As Warren (1957: 126) described,

> They radiated in bands inland, westward and southward towards the beautiful lakes and streams which form the tributaries of the Wisconsin, Chippeway, and St. Croix rivers, and along the south coast of the Great Lake to its utmost extremity, and from thence even inland unto the headwaters of the Mississippi.

At least one Ojibway village was established near Grand Traverse Bay by the late 1800s (White 1991: 185). Further population movements occurred during and after the French and Indian war, particularly west of the Mississippi and into the northern plains, thus encroaching into Dakota and Fox hunting territories (Warren 1957: 126; Levi 1956: 32).

Between 1700-1740 the Ottawas and Huron-Petuns were running an active campaign to keep out the Iroquois. The Ojibway were reclaiming land from around Green Bay up into central Canada, in the process claiming some Sioux territory to which the Sioux had given them only tentative hunting rights. The Fox wanted Michigan, and especially the Detroit area to exert control over the French access to the Dakota. They began an aggressive campaign against the French whom they saw as preventing them from carrying on the fur trade. The French, in turn, sought to exterminate them (Tanner 1986: 42). Debuisson, from Fort Detroit, appealed to the Sault Ojibway, Mississauga Ojibway, and Ottawa to rescue him from the Fox who had become aggressive in their disdain of the French. The Ojibway went to his aid as a sign of their loyalty

to the French. After the defeat of the Fox, the tension between the French and Fox created an atmosphere of aggression. The Ojibway further managed to wrest the Wisconsin River hunting grounds from the Fox. A final battle between the Fox and the Ojibway was fought at St. Croix Falls, Wisconsin, and won by the latter around 1755 (Taylor Dunn 1965: 12).

The conflicts between the Indian groups and the French created two phenomena; first the French were constantly suspicious of Indians turning to the English as the Fox had threatened to do, leading to more aggressive tactics on part of the French, and second, the French became increasingly embroiled in intertribal battles for trapping rights in which they need not have become involved (White 1991: 156-161). The most important consequence of the Fox wars was the impact they made on Dakota-Ojibway relations. The Dakota and the Fox were allied by their common interests in Plains resources, trading partnerships, and war. When the Ojibway aided the French against the Fox, it strained the already tense peace they held with the Dakota in Minnesota.

The Ojibway-Dakota Conflict

Ethnohistoric documents indicate that the origins of the Ojibway-Dakota conflict date as far back as the Iroquois wars, when the Dakota reacted violently to the encroachment of Ottawa and Huron refugees in their hunting and foraging grounds (Magnaghi 1984: 2). Acts of violence against Ojibway allies in turn provoked retaliation campaigns which worsened as the Ojibway expanded south and west into the Upper Mississippi Valley. Concurrent to the expansion of the early 1700s many settlement locations along the shores of Lake Superior and northern Lake Michigan continued to be occupied by Ojibway and other Indian groups. Chequamegon Bay was increasingly important to trade between the Dakota and Ojibway. From 1720-1760 the Ojibway had expanded to the Thunder Bay area in northwestern Ontario, the Vermilion River that connects Vermilion and Crane Lakes in Minnesota, and Ft. St. Pierre (now Ft. Frances) in Rainy Lake (Tanner 1986: 40).

As we said above, the Ojibway were not a single polity in the early 1700s. Politically speaking the Ojibway were organized into semi-autonomous bands connected by kinship and trade, but not necessarily on the same side of any one specific issue. They were more like potential allies, alliances realized chiefly in war and, at times, in the negotiation of treaties (Hickerson 1970: 77). The villages around Lake Superior that had formed a century before became increasingly less connected in terms of a unified political identity. In fact, differences among the Ojibway bands were beginning to solidify; it was important then to treat the Chequamegon Bay, Keweenaw, Saulteurs, and Detroit bands as separate entities both in trade and in politics (White 1991: 147). This "rediscovered" political autonomy had its roots in a pan-regional pattern of population dispersion caused by war during the eighteenth century. Endemic war and population movement would in the end change profoundly social and economic patterns associated with ancient land use practices.

In the case of the Chequamegon Ojibway, this group had established a tenuous trade partnership with the Sioux who were eager for the European goods. The Sioux allowed the Ojibway and Ottawa to hunt on their lands insofar as it was for their mutual benefit of trade. The French, having become frustrated at the Fox interference in trade with the Sioux, increased the competition in the Minnesota and Wisconsin areas by starting direct trade with the Dakota. Direct trade not only eliminated the very reason for Ojibway occupation, according to the Sioux, but also made the Dakota and the Ojibway competitors (Danziger 1979: 36; Hickerson 1970: 66). Before 1736, the Dakota had occupied the land southwest of Lake Superior and along the Upper Mississippi River. After this year, however, the alliance of Ojibway, Cree, and Assiniboine against the Dakota would push their boundaries farther south and west.

By 1736, war had erupted along the Mississippi River and the contested area from Minnesota to Wisconsin. Warfare continued virtually uninterrupted despite the fur trade until July 1787, when the Ojibway, Ottawa and Sioux signed a peace treaty. The reason for this sudden treaty was most likely the smallpox epidemic decimating the Ojibway settlements in northern Wisconsin and Minnesota (Lovisek 1992: 289-90). Whatever the reason, the peace was short-lived and war broke out again along the Sioux-Ojibway boundaries. The uninhabitable war zone halted all possible missionary and expansion goals well into the 1800s; hostilities continued even after the Peace Treaty of Prairie du Chien was signed in 1825. Fur traders with the Hudson Bay Company urged the warfare to cease so as to increase productivity from the Ojibway traders, but even when the second epidemic hit in 1835, this time of both influenza and whooping cough, the Ojibway and Sioux did not cease the warfare (Lovisek 1992: 294). The Ojibway, despite these intermittent battles had achieved a strong hold on northwestern Minnesota in the 1800s (Tanner 1986: 43). Eventually, the alliance forces pushed the Dakota completely out of the rice lakes and prime fur hunting areas. In the last four decades of the eighteenth century the Ojibway had exclusive control over important fur trade centers at Sandy and Leech Lakes (Hickerson 1970: 71). Behind all of the native wars was the issue of access to the fur trade.

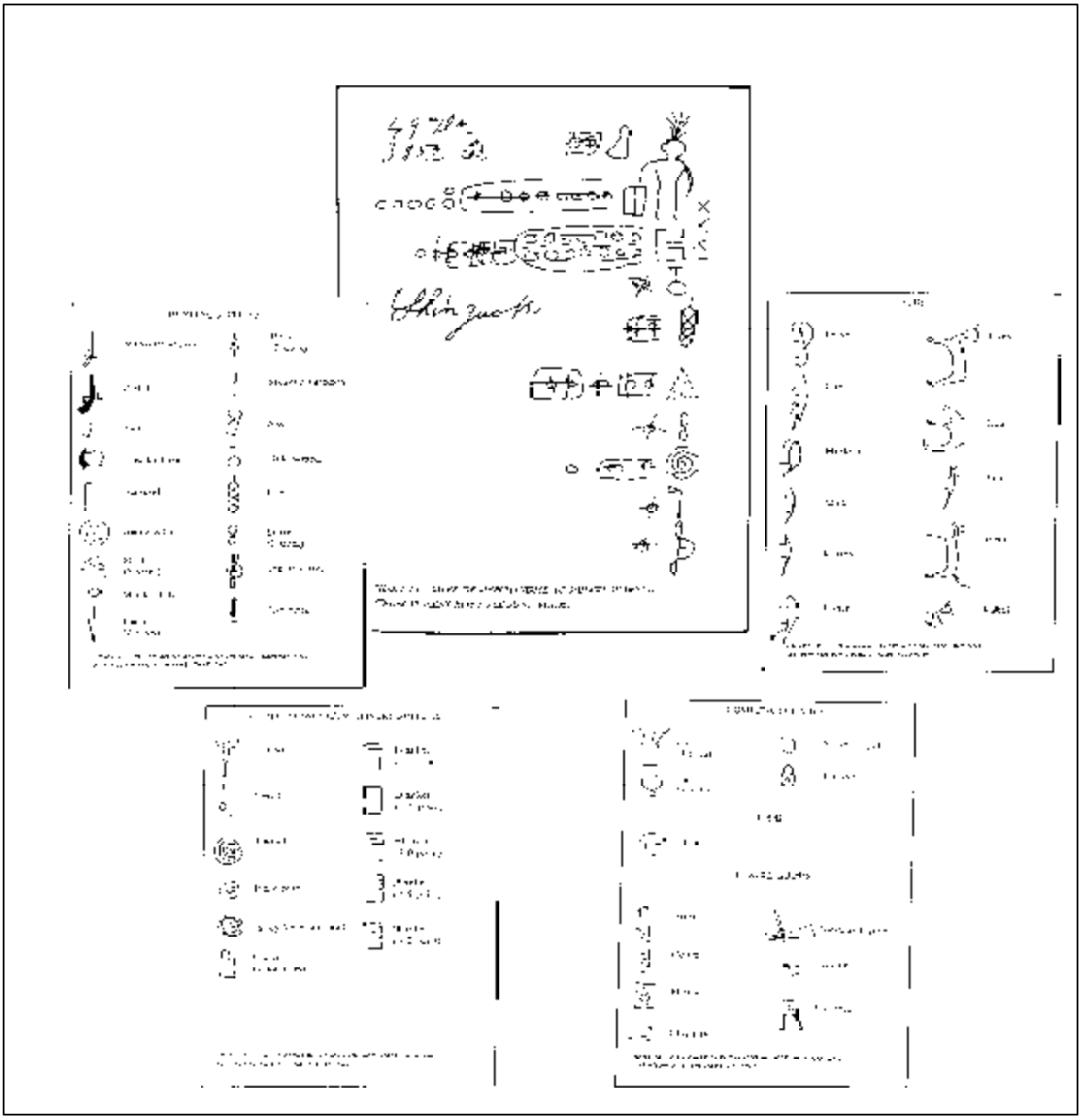
The Fur Trade

At the turn of the eighteenth century the fur trade had already made a great impact on village life. After a century of war created in part by the drive for fur, the Great Lakes Indians were inseparable from the influences of the fur trade. Beginning from eastern contact in the 1500s, the fur trade and historical events surrounding it brought not only competition with other Indians and intricate intermarriage with Europeans but disease and alcohol related deaths. An example occurred with the French explorer Etienne Brule. Having been sent to establish trade with the Ojibway, he stayed with the Huron and became involved in Huron life, eventually marrying one of the women. By 1632, though, the Huron had killed him because of his disruptive lifestyle and manipulative trading schemes. By the time trade was established at Chequamegon, the practice of intermarriage between French traders and Ojibway women was fairly common (Levi 1956: 24). This intermarriage with Europeans would eventually allow white traders and government officials like Schoolcraft and Smith to claim land in the eighteenth and nineteenth centuries.

Another practice of the French fur traders was participation in Ojibway ceremonies (Levi 1956: 24). In the east, however, the English wanted no part in associating with their native traders (Cleland 1992). The difference between the two practices is important for two reasons: first, the Ojibway had a stronger reason to fight for the French due to kin ties than the Iroquois or other English allied groups had; and second, when the English later had control of the upper Midwest area, their lack of understanding of the Ojibway life-ways caused great distress (Cleland 1992; Levi 1956: 19; Coues 1897).

An additional factor affecting the fur trade was the cultural practice of adoption among the Iroquois and Algonquians. Revenge warfare was implemented on a large scale due to the interference of the French and the English, and this coupled with a steady increase in disease in the villages required an increase in adoptions to keep the population levels steady (Cleland 1992: 121). Warfare between the Fox and French and later the Ojibway and Sioux for fur and trade prompted loss of life, and raids took the lives of many children. The grieving village would then raid other villages, even if they were European or American settlers, and take children. Such is the case of John Tanner, an Ojibway of English descent, who was captured by the Shawnee and adopted by the Ojibway to live among the Ojibway bands of Minnesota and broke out between France and England. Losing loyalties to the British's lower fur prices and growing proximity to Detroit and other areas near Ohio, the French increased pressure on the Ojibway up north in Wisconsin and

Figure 4.2 Sales of Merchandise to Shingwokaunce, from Fulford (1992)



Minnesota to support them against the English (Cleland 1992: 122). However, the Ojibway were at the time engaged in war against the Dakota and could not provide a good defense (Danziger 1979: 38).

In 1752, the Ojibway, along with some St. Ignace Ottawa led an unauthorized attack, in the name of France, on British Pickawilly. While not officially condoned by the French it started a wave of French-allied Indian attacks on British forts along the Ohio River (Danziger 1979: 39). The Ojibway were even involved in the battle for Quebec, hundreds of miles from their Lake Superior villages. After the fall of France and the signing of the Treaty of Paris in 1763, ceding New France over to England, the Ojibway concentrated on protecting their vast stretch of land from west and north of Keweenaw Bay south to the Mississippi valley (Danzinger 1979: 40).

Consequences of the French and Indian War and the Treaty of Paris involved not only control of territories and trade networks, but also the right of settlers to occupy land in and near the Ohio valley. In 1768, the British attempted to ameliorate the growing animosity of Great Lakes Indians towards the high-handed manor of the British settlers. Alexander Henry, Jr. was sent out to the Ojibway of Sault Ste. Marie and later to Madeline Island to reassure the bands and reestablish the fur trade. He made several remarks about the unwillingness of the Ojibway to trade with the English as they had with the French (Coues 1897). The British not only did not supply them with ammunition and provisions needed for hunting and trapping expeditions, but also showed no intention of developing the type of relationship the Great Lakes Indians had with the French (Levi 1956: 24; Tanner 1986: 48). As a result, trade relationship across the Great lakes suffered a serious blow.

Another consequence of the French and Indian War was the depletion of male warriors to travel far from the Lake Superior area. For lack of safety in their homeland many Ojibway women traveled along with these men to ensure the survival of their children. This displacement had a profound effect on traditional seasonal activities (Cornell 1986: 93).

The American Period: Treaties and Reservations

Once England gained control of Canada and Spain of Louisiana, England concentrated on developing means to govern a land whose people not only distrusted them but with whom their traders could not communicate successfully (Cleland 1992: 143-145). However, just as the Ojibway and other groups had begun a tenuous peace, the waves of White settlers created a whole new set of problems. Settlers quickly populated the Ohio River valley and displaced hundreds of Indians. The British sought to dissuade this movement by unleashing a series of acts, which penalized the unauthorized movement of colonial settlers. Unknowingly, the very acts that they issued to stop the flow of settlers were partly responsible for the uprising of the American Revolution. After the second Treaty of Paris sealing the victory of the American Revolution was signed in 1783, the new Americans felt that the land ceded to them in the Treaty of Paris included the land where the Ojibway and other Great Lakes Indians lived (Tanner 1986: 69). Although the warfare between the Ojibway and the Sioux made merchants extremely wary of entering the land west of Michigan (Hickerson 1970: 81; Coues 1897: 300), the Americans increasingly sought the Ojibway hunting lands along and beyond the Ohio River.

The Northwest Ordinance of 1787

Once independence from England was achieved, the American government immediately sought to recuperate its loss of treasury by selling land in an orderly fashion. Initially the land, which the government sold to the settlers, was along the Ohio River, but soon the encroaching settlers were buying and then squatting on land in traditional territory of the Western Great Lakes Indians. In 1787, the government passed the Northwest Ordinance which was supposed to protect native interests in regards to land purchasing by restricting the area in which white people were allowed to settle, but due to either lack of implementation or

enforcement, Indian concerns were completely disregarded (Cleland 1992: 153). Ensuing raids by Indians on white settlements and cavalry raids on Indian villages brought Ojibway and Ottawa people down into Ohio to fight next to their allies. Encouraged by the British in an attempt to regain control of that area, the Indians attacked with renewed vigor, but when they in turn asked for aid from the British, they found the doors slammed in their faces, literally and figuratively (Cleland 1992: 155-6).

The Treaty of Greenville, 1794

After the British and the Americans convened with the Indians of the upper Great Lakes and Ohio Valley, a truce was obtained which actually gave some leverage to the Great Lakes Indians–at least on paper. The American government again established a territorial line, which the settlers were not supposed to cross, this time in the Great Lakes area. The Treaty of Greenville may have been an unspectacular treaty politically, but it nevertheless brought widespread economic and environmental change (White 1991: 476). By 1802, settlers had so pushed the boundary line set by this treaty that the American government was urging Indians to give up even more land (Cleland 1992: 166). Between the years of 1790 and 1820, the Americans changed tactics. The expansionism driving the settlers would not stop for Indians, and a new policy of assimilation was adopted on the premise that the Indians were standing in the way of divine right (White 1991: 472-473). Due to conflict arising from nearby settlers, more and more Ojibway villages were abandoned and their inhabitants forced to regroup in fewer larger villages.

After initial attempts to set up standard operating procedures with the American Indians failed, the government created a formal organization called the Commission of Indian Affairs (the future BIA) in 1822. Along with the Commissioner there was a Superintendent of the Michigan, Wisconsin, and Minnesota territory. This position fell to Lewis Cass, who in turn appointed Henry Schoolcraft as the Indian Agent at Sault Ste. Marie. Both men were responsible for gaining cooperation from the tribes (Cleland 1992: 203). Beginning with the establishment of the first Indian Agency near La Pointe in 1822, lands were ceded to or purchased by Euro-American settlers and government agencies; schools and reservations were created (Densmore 1979: 7). No significant Indian relocation took place in the Upper Great Lakes, however, and the signing of numerous state-specific and regional treaties caused further attrition of traditional resource areas. Three treaties in particular were seen by the American government as appeasing all parties involved in the quest for land, yet actually deprived the Ojibway of access to necessary resources.

Treaty of Springwells, 1815, and Treaty of Saginaw, 1819

After Tecumseh's defeat at Tippecanoe, the anti-Indian focus of the expansion movement became a political issue aggravated by the war of 1812 between the British and America, in which the Ojibway rarely remained neutral (Cleland 1992: 170). Eventually after several raids and battles, at Moriaviantown, Tecumseh was killed. The Treaty of Springwells was drafted to gain official peace between the Great Lakes tribes and the United States. But the economic consequences of war, trade, and displacement were not easily resolved.

Cleland (1992: 180) states that, by the 1820s, beaver, otter, and marten had been virtually exterminated from the Great Lakes forests, thus increasing the tribal need for retaining traditional lands. Nonetheless, the treaty of Saginaw granted the United States 6 million acres (See Avery 1866), including land that was central to Ojibway sovereignty and identity (Cleland 1992: 212). It also included a provision that would give each individual Saginaw Ojibway a section for farming use. This treaty, however, did not dissuade white speculators from cutting trees and draining nearby swamps for their use.

In the years between the signing of the Saginaw Treaty and the Treaty of Washington, speculators found large deposits of copper in the heart of traditional Ojibway land. The newly appointed Governor Cass asked the Ojibway to convene with him at Fond du Lac in 1826 to try and make a deal which would eventually give the US government access to all of the copper of the area. This attempt failed, but disease and

starvation soon forced the Ojibway to contemplate meeting with the government again to cede copper-rich land (Cleland 1992: 392-394).

The Ottawa-Chippewa Treaty of Washington 1836

After a series of epidemics that spread across the continent between 1830 and 1835, harsh winters, and a marked decline in the fur market, the entire Great Lakes region was suffering from lack of food and other essential resources. Both the Ojibway and the trading companies suffered from harsh winters and diseases in the animal population. The Ojibway were eating more and more of the food they caught and did not have furs to trade. Traders decided to cash in on Indian debts, forcing many Indians to begin selling bits and pieces of their land (Cleland 1992: 212). Schoolcraft and others were actively pressing for Indian removal to the west. The northern Ottawa were so heavily indebted that they decided to cede Manitou Island, which they had, until then, shared with the Ojibway. Once at Washington D.C., Schoolcraft and other white individuals with Indian ties managed to secure land and money rights for their children (and themselves, including reservation land set aside in earlier treaties. The Treaty of Washington ceded 13 million acres of land to the United States in return for twenty years of payments for education, medicine, provisions, and $300,000 in annuities to pay off trading debts. Unfortunately, this treaty was amended significantly after the Indian delegation had gone home. Amendments limited Indian use of reservation land to five years, unless they chose to move to the west where the US would grant them land.

To gain the approval of Indian leaders, Schoolcraft summoned them and explained that none of the goods or money secured by the treaty would be given unless they signed the amended version. Forced into a corner the delegates signed. The consequences of this treaty were more than loosing land and money; the Indians who had moved to the reservation were now afraid to settle permanently for fear they may be made to move in five years when the U. S. needed the land (Cleland 1992: 221-227).

American Reservation and Assimilation Years

After the 1840s life seemed to get worse on and off the reservations. With the increasing influx of European and American settlers at a far more rapid rate than the removal policy could open lands for settlement, Indian agents were looking for ways of dealing with the Ojibway and Ottawa of the area. Under Indian Agent Manypenny's mandate the educational emphasis of civilization was implemented in the hopes that, if civilized, the Indians would blend in and disappear. Indian populations had been greatly diminished by great plagues that ravaged the continent in the 1830s, and the survivors were more willing to give in to the government's demands for assimilation or removal than they had in decades past.

However, by 1845 the educational support and the money promised to the Ojibway in 1836 was still not forthcoming and many individual bands of Ojibway agreed to unite and petition the government for the rights granted under the Treaty of Washington. In the process, entire villages were abandoned and meeting places were established at Rice Lake, Muncytown, and Owens Sound Bay (Copway 1850: 203). In 1849, the government created the Department of the Interior and the Commission of Indian Affairs was transferred to this department from the Department of War. Manypenny's ideas following this change involved settling the Indians on prescribed plots of land so that local agents could regulate money flow from the government to the tribes. This was seen as a protective measure to prevent non-Indians using land set aside for Indians from appropriating the annuities which had been intended for Indian use, and to ensure that the government had easy control over the Ojibway bands (Cleland 1992: 235).

This policy was not easily enforced because the 1836 and 1837 treaties with the Ojibway had left them wandering the land set aside for them for fear that, at any moment, the President could force them to move west and out of their traditional land. This tenuous situation continued well into the 1850s, and in 1855 more treaties scattered the Ojibway bands across Michigan, Minnesota, and Wisconsin. The Indian

allotments abutted White settlements and created violent tension (Cleland 1992: 237). One government's solution to this tension was to move the Indians away from the settlers, but actual massive removal did not occur. In the end, it would be land taxation that would succeed in removing Indian families and even entire bands from government allotments in the three states, but particularly in Michigan (White nd).

During the Civil War the Ojibway and other Indian groups in the Great Lakes continued to struggle against White settlers and hunters who had encroached the land set aside for Indian use. In 1864, however, a new treaty was drafted that would provide educational and agricultural support to reservation Ojibway. In practice, this treaty no more protected the Ojibway from corruption and encroachment than the earlier treaties had (Cleland 1992: 239). Although the Ojibway remained on their land throughout the 1800s and were not relocated, their struggle for economic solvency and political sovereignty continued well into the twentieth century. Several issues made the transition from traditional life to assimilation difficult and ultimately unsuccessful. First, the allotment of land to individual families was a foreign concept for a people that had previously shared land communally. Second, the Ojibway who did not live on the reserved land were not eligible for what little moneys actually came through in the form of government aid. And third, Indians on and off reserved lands were not considered citizens and thus could not access benefits granted to other Americans (White nd). Furthermore, the annuity system was not implemented equally in all areas and for all Indian individuals, and thus it did not provide large-scale relief.

Citizenship was granted in 1924 to Civil War Indian veterans to help assuage the lack of benefits (Cleland 1992: 268). But the Ojibway would soon suffer another setback as the nation headed into a depression: they could no longer hunt without a license, yet most could not afford to buy one. All food had to come from government assistance, but the Commission of Indian Affairs was so corrupt that supplies rarely got to the Ojibway. In 1928 the Merriam report exposed some of this corruption and outraged many Americans. President Roosevelt appointed John Collier as head of the Commission of Indian Affairs. Collier set up a job program, which would bring in enough money to the Ojibway during the depression to curb the rate of starvation.

In 1934, the present reservation system was established. It required that the bands or tribes who wanted to continue gaining monetary support from the government be responsible for setting up and maintaining a tribal government. This system made the Ojibway and others directly responsible for the smooth running of their reservations and communities with a bureaucracy modeled after the Anglo-American fashion (Cleland 1992: 269; Benton-Banai 1988: 111). This law was called the Wheeler-Howard Act, or the Indian Reorganization Act (see U.S. Statutes At Large, 48: 984-88). The Act was founded upon the philosophy that assimilation and segregation are both up to the individual, thus creating a self-governing reservation would allow each individual to decide whether he or she would incorporate into the white world or remain on the reservation.

While this philosophy did not produce the intended results due to poverty and health issues, the intention was nonetheless to preserve and encourage tribal communal life (Danziger 1979: 134). The act also instituted the policy of federal recognition; this policy has made an extraordinary difference in the life of Indian communities, who by being federally recognized gain access to political and economic sovereignty. Indeed, federally mandated consultation about ethnographic resources is conducted in a government-to-government fashion with federally acknowledged tribes.

Currently, there are numerous Ojibway and Ojibway-Ottawa groups that have obtained federal acknowledgement and restitution for lost lands in Michigan, Wisconsin, and Minnesota. Tribal casino revenues constitute a critical source of funding for the purchase of tracts of traditional land that is being incor-

porated to the original community allotment or reservation. Yet, many areas of cultural significance are under control of the state and federal governments, or in private hands.

[1] This village has been variously described as Huron (Adams 1961 ff60:lvii), Ottawa (Tanner 1986: map 6; see Magnaghi 1984), and Chippewa (Verwyst 1886), thus highlighting the intense interethnic mobility during the seventeenth century.

CHAPTER FIVE

OJIBWAY TRADITIONAL RESOURCE USES

This chapter surveys the variability of resources and their uses in traditional Ojibway society in the Western Great Lakes region, with particular attention to Ojibway groups inhabiting the states of Michigan, Minnesota, and Wisconsin. In doing so it describes how the primary resources were used for subsistence and religious purposes. The time period covered in this summary is equally broad, beginning in the seventeenth century and continuing until the twentieth century; since it is difficult to pinpoint whether certain traditional resource uses have been extinguished and, if so, who does or does not practice them across the study area, we use present tense to refer to different uses, except when time frame of each use is specified in the consulted sources. Although numerous sources were consulted for drafting this chapter, the bulk of the information contained here was found in the *Jesuit Relations and Allied Documents* (Thwaites, ed., 1959, hereafter referred to as JR in citations), Densmore (1928, 1979), Gilmore (1933), Great Lakes Indians Fish and Wildlife Commission (GLIFWC) (1993), Hickerson (1962, 1970, 1974), Kinietz (1947), Kohl (1956), Landes (1938, 1969) Levi (1956), Smith (1932), Warren (1957), White (1991), and Vennum (1988). These sources were reviewed and all information directly addressing the history and traditional uses of specific resources was extracted. It must be emphasized that the information presented here is not exhaustive, but an illustration of the diversity of traditional Ojibway uses of natural resources in the study area. The following text complements a regional and park-specific resource inventory stored electronically in the attached electronic ACCESS Database files.

The Southwestern Ojibway

The southwestern Ojibway, whose territory once included large portions of what is now the Western Great Lakes region of northern Michigan, eastern Minnesota, and northern Wisconsin, relied largely on seasonal staples such as wild rice and maple sugar within their diversified subsistence strategy. Fishing, hunting, trapping, and gardening complemented wild plant gathering, where the climate allowed. The Ojibway moved regularly to seasonal camps near whichever resource was available during that season. However, it is important to note that while the Ojibway did rely most heavily on the seasonal food source during its season, this subsistence strategy also involved the preservation and storage of a large amount of animal and plant resources. The Ojibway developed a fine technology for food preservation and cached a portion of all the seasonal harvests, including fish, game, crops, and other plants (Landes 1938: 126-128; Levi 1956: 228). Thus, they were able to utilize seasonal foods throughout the year. This was especially useful during the winter months and during times of crop failure or game scarcity.

In colonial times seasonal foods that were so important to the survival of the Ojibway came to be favored by the European settlers as well. This created a market for native foods, which was supplied at first by native people, including the Ojibway. Fish, game, furs, wild rice, and corn whenever available were traded for guns, gunpowder, tobacco, textiles, silver, and other European products. At least during the French occupation of the Western Great Lakes, missionaries, traders, and *coureurs de bois* (woodland trappers) largely depended on native products for their subsistence, particularly in the remote western areas that were far removed from major travel routes and trading posts.

Although initially the Ojibway did not practice corn agriculture, it is known that in protohistoric times the bands living along the eastern shores of Lake Superior traveled to Huron villages to trade fish and furs for native corn (JR 13: 191; 14: 7). Cultivation of domesticates was adopted by the formerly mobile fisher-hunter bands as a result of the adoption of a more settled village life in the seventeenth century and thereafter. However, this subsistence activity remained only a marginal complement of their main activities: fishing, plant collecting, and hunting. Corn agriculture was far more common among the eastern Ojibway of southern Michigan and the Lower Great Lakes than among the southwestern Ojibway. The western bands, on the other hand, maintained small vegetable and potato gardens in mild years (Kinietz 1947: 67; Cornell 1986: 82; Levi 1956: 225).

The Annual Cycle

Observations about the annual movements of Ojibway groups from camp to camp according to the seasonal availability of food resources were recorded since the seventeenth century. Few recorded systematically the sequence of activities of an Ojibway band (but see Densmore 1979; Quimby 1960). Although an Ojibway band or community carried out main subsistence activities, such as hunting and fishing, year round, there were special times of the year when the people concentrated their efforts on one particular endeavor. A band of 600 Ojibways could have about 30 families of about 20 persons each. Such a band would have used an area of at least 12,000 square miles during their annual rounds and probably much more (Quimby 1960: 122). There were, however, areas where resources were particularly rich and diverse; bands living in such areas (e.g., Grand Island/Munising Bay bands, Michigan) did not have to travel far each season to obtain subsistence resources.

According to the narrative provided by Nodinens–an elderly member of the Mille Lacs Band of Chippewa–to Densmore in the early 1900s (Densmore 1979: 119), the annual cycle, or "industrial year" began in the late fall. During this season most efforts were devoted to obtain and to cache foodstuffs and other resources in preparation for the long winter. In this narrative, Nodinens related how her father kept track of time by cutting notches on a wood stick large enough to contain the notches of an entire lunar year. He always began a new stick in the fall. A brief summary of the annual cycle, as described by Nodinens, is provided in this section and supplemented with information from other sources. Detailed descriptions of each subsistence activity and associated resources are included in the following sections.

Fall Activities. In autumn a band separated into family units. Among the women, late fall activities typically began with the systematic storage of wild rice and maple sugar and involved continued drying of fish and game obtained in the summer months. Special preparations for setting up the winter camp followed storage activities. These preparations included the weaving of bulrush mats for the winter wigwams and the inventory of personal clothing. Weaving the mats was an activity that required the participation of several women and children in a family and entailed the curing of bulrush weeds, making of ropes, and making of the tools needed to weave and sew the mats. In many areas, the fall was a special fishing season, particularly just before the lakes froze in November. The women would set their nets, aided by the men only in the coldest of winter. Dried fish constituted a critical food supply in the winter, particularly in years of poor hunting (Densmore 1979: 120).

Winter Activities. Once the food, clothing, and other supplies needed for the winter were collected, inventoried, and made ready for transport, the group set out to their winter camp or "game field" (Densmore 1979: 120). This camp would be located in the woods, where the men would clear the snow to build the winter wigwam and collect wood. At this time, the women would set the meat drying racks. Throughout the winter, family men devoted their time to hunting large game and to setting up traps in a separate portion of the band's territory (Quimby 1960: 122; Landes 1968: 7). Some of the men started on

their hunting trips in the middle of the winter and did not come back until after the spring work was done; then, they rested for a while and started off on their fall hunting and trapping. During the winter the women devoted their time to tanning hides, weaving and embroidery, and making or repairing fishing nets and other equipment (see Landes 1938: 126-128).

Spring Activities. Toward the end of the winter, the bands started toward the maple sugar camps (Landes 1938: 1; 1968: 5). Line and hook fishing was common among the men in sugar camps near the lakes. Abundant fish could be caught and smoke dried during these months. Cached food supplies were always tapped at the end of the winter, before the first thaw. The spring maple sugar season was also a special season for gathering other resources, such as cedar bark, which could only be stripped in the spring. By the end of the sugar season, there was enough food to support the band during the planting of the gardens. In the late spring, the band moved to the garden camps, usually located along the lakeshores or other water sources. Lodges were repaired and cleaned. Men and children worked in the gardens. Women gathered birch and cedar bark for a variety of uses. Catching of waterfowl was also typical of the late spring.

Summer Activities. From May to August summer fishing, particularly sturgeon fishing, took place at large fishing camps where the bands reunited in a large seasonal village. Many bands living south of Lake Superior did not plant their corn until June (Quimby 1960: 122). The late summer was devoted to plant gathering, particularly wild rice. The village would break up and the bands would move to their rice camps. Other plants, such as fruits and medicines, were gathered most intensively during the month of August (Landes 1938: 2, 127); berry picking was an important activity that marked the end of the summer season. Certain mushrooms were gathered in late summer and early fall. Some were baked with meals instead of rice, so the rice supply could be saved for winter. Two mushroom species, Fomes ignarius and Fomes fomentarius, were gathered to aid in honey collecting. These mushrooms were smoked on a stick in a campfire and waved in front of the hive. The smoke is said to have a sedative effect on the bees, making honeygathering easier (Keewaydinoquay 1978: 2).

At the end of the summer the bands returned to their gardens for the harvest. A first fruits ceremony and feast took place during this time. Plants were dried and stored in caches. Once the harvest ended, the women readied themselves for the fall fishing season and the men usually left for duck-hunting and trapping activities (Landes 1968: 7).

Individual Life Cycle

Information on the individual life cycle as it pertains to natural resources was taken primarily from three ethnographic sources, Densmore (1979), Kinietz (1947), and Landes (1938). These ethnographers worked in the first half of the 20th century, gathering information on contemporary practices and supplementing it with either data from older sources or information remembered from the "old days". Kinietz recorded customs at the Ojibway village of Lac Vieux Desert, Wisconsin–a village which, according to the author, displayed "unusual conditions at the time, with its "integrated community life, conservatism in preserving native customs and relative isolation..." (Kinietz 1947: vii-viii). Densmore, who collected data mostly in Wisconsin and Minnesota, "frequently embellish[ed] her descriptions of particular customs with the reminiscences of her informants" (Marchetti-Archabal 1979: np), thus she included information about resources which were no longer in use. Landes (1938) worked primarily among the Ojibway of western Ontario and northern Minnesota. Additional data for both states are provided in Levi (1956) and Nicollet (1970 [1836-37]). Grant (1804 in Masson [1960]) and Keewaydinoquay (1978) are important sources for illustrating traditional Ojibway life in Michigan.

Pregnancy and First Month of Life. According to Kinietz's informant, a pregnant woman did not observe any food or sex taboos. However, Vennum (1988: 68) mentions an Ojibway belief that if a pregnant

woman ate popped rice, her baby would have difficulty breathing. It is possible that Kinietz's informant, being male, was not privy to all aspects of pregnancy. Unfortunately, Frances Densmore, a prolific source on Ojibway culture who was a female and who had many female informants, began her description of the Ojibway life cycle with birth and did not include information on practices during the pregnancy. Nicollet (1970: 181) describes a pregnant mother's preparations for the birth, including the manufacture of a crib with its linings and trimmings, and two small articles symbolizing the sex of the child–a little pair of leggings and a small skirt. Either article is attached to an arch of wood placed over the crib after the boy or girl is born, to guard over the baby's head. This practice may have been confined to the Minnesota Ojibway (see below).

An older source (Grant [1804] in Masson 1960) stated that when a woman went into labor, a temporary shelter was built for her. Kinietz' informant said that a separate house had been used for confinement of the laboring woman in old times, but indicated this was no longer in practice. Any woman who had children of her own could assist a woman in labor. Neither a midwife nor a doctor was normally used. In the case of a difficult birth, a medicine man could be called for consultation in the prescription of medicine. There were standard medicines for easing childbirth and for convalescence after a normal delivery. The medicine for easing delivery has several ingredients and, according to Kinietz's source (1947: 112-114), if the medicine did not bring the child, it was assured that it was not a boy, or else it would have worked. In such a case, another herb or root was added and the medicine was readministered. Keewaydinoquay (1978: 26) details a childbirth pain reliever and birthing aid made from corn fungus. This aid can only be used when there are no open wounds on the mother, as it doubles as an anti-coagulant. In all cases, the child arrived soon afterwards. Kinietz says the birthing tea is pleasant and is drunk by women who are not pregnant without any adverse affects.

When the baby was born, it was wiped but not washed for about ten days (but see Nicollet 1970: 182). The cord was cut and hung in the woods along with the placenta so that it would not be disturbed. There were no sanctions if this practice is not followed (Kinietz 1947: 114). The mother took an unnamed medicine four times a day for four days after delivery to alleviate sickness and soreness. The mother did not eat meat until she began moving around because it would cause her to produce milk too fast for the baby. During this time wild rice and broth or soup were considered ideal sustenance for the mother (Kinietz 1947: 115). A number of these practices, particularly the consumption of special diets, are still observed.

The cradleboard (*dikana'gon)* was made after about four days of constant contact with the mother to determine that the child was healthy. Making a cradleboard earlier was thought to be a bad omen. Kinietz (1947: 114) cites the story of a couple which prepared a cradleboard for their child before the child was born and consequently the child died. The cradleboard could be used on successive babies with no ill consequences, however. The purposes of using a cradleboard were for the convenience of the mother in caring for the child while going about her chores and for straightening of the child's legs. It was a mother's individual decision whether or not to use one. Traditional cradleboards are not used any more; however, they remain a priceless heirloom in modern Ojibway homes.

The acquisition of a name is an important point in the life of an Ojibway individual. Densmore (1979: 52), categorized names given to Ojibway individuals in six general classes–the dream name, given ceremonially by a "namer"; a dream name acquired for himself by the individual; "namesake name" given by parents; common name or nickname; name of gens; and a euphonious name without any significance.Cameron, who recorded information on Ojibway in Quebec in 1908, described the naming ceremony as follows: the parents give a feast when a child is to be named. The father selects the person of his choice to act as "minister". A group of friends and relatives are invited to the feast by silently presenting each invitee with a quill. Each person brings a dish or plate of their own and, when entering the wigwam,

sets the dish in front of them and returns the quill to the person who gave it to them. Ritual gift-giving to the child often takes place during the naming ceremony (cited in Landes 1938: 2). The food is distributed by the parents, while the person acting as "minister" says a prayer. This person sings and beats the drum throughout the feast, singing the child?s name and wishing it a long life (Kinietz 1947: 116). Naming does not always take place in the first months of life. Naming remains a critical aspect of an individual's life; naming ceremonies are carried out by families in special places near the study area. A godparent may give a child a second name later in childhood; this name reflects his or her temperament and disposition (see Nicollet 1970: 184).

Infancy. According to Densmore (1979: 48-51), traditional Ojibway families usually had two or three children. Infants stayed with their mother at all times and the bonds between mother and child were very strong. In old times, an infant wore little or no clothing but, while in the cradle board, it was surrounded by moss, which had been dried over the fire to kill insects, then rubbed and pulled apart, until it was soft. In cold weather the baby's feet were wrapped in rabbit skin with the fur side against the baby's skin, or in cattail fluff. A child wore a close fitting hood made of soft deer hide since early age. A sick child was held up to the fire for warmth and its body rubbed with grease, usually goose oil. Sometimes a powder was made from rotten oak, which had been rubbed very fine, and applied to the skin.

Different types of objects are often hung from the cradleboard with differing purposes. Among these are charms, pouches, name-tokens, and objects for the amusement of the child. Spider web or dream catcher charms were said to "catch everything evil as a spider's web catches and holds everything that comes in contact with it" (Densmore 1979: 52; Landes 1938: 3). They are made of wooden hoops about three inches in diameter. The web was made of nettle-stalk twine colored red with the juice of bloodroot and the inner bark of wild plum. Nowadays it is made with colored and sometimes beaded thread.

Childhood. In the old days the playthings of Ojibway children were made from the natural resources in the environment in which they lived. For example, while still very young a child might be given a small animal skin filled with maple sugar and sewn in such a way that when the child put it to its mouth, it would taste a little sugar. Small animals were stuffed, sometimes with dried wild rice, and given as playthings to children. Leaves of the pitcher plant (*Sarracenia purpurea*) were filled with berries or sand and used as toys. Little girls were taught to make smaller versions of the rush mats, birch bark utensils, and birch bark rolls made by their mothers. Boys were given toy bows and arrows as soon as they had the dexterity to hold such things in their hands. Children made clay animals (Densmore 1979: 65; Nicollet 1970: 189). Dolls were made from various materials including pine needles, basswood leaves, bulrushes, the inner bark of slippery elm, and many other naturally occurring media.

Guidance of Children

Landes (1938: 130) notes that the responsibility of rearing the children fell upon the women of the household. Densmore states that in the upbringing of children among the Ojibway, the overriding elements were of gentleness and tact, and concern for the well being of the child. She goes on to say, "Fear was often used to induce obedience, but not to an extent which injured the child" (Densmore 1979: 58). Several devices were made and employed by adults to have a frightening effect on children. These often incorporated instruction in or reinforcement of knowledge of forces in the natural world, which were to be feared or respected for the child's safety. For example, in old times, mothers would tell their children that a bear paw would get them if they misbehaved. According to tradition, a woman once told this to her children, and then a bear reached in the wigwam and carried away a child. Thereafter, the figure used in the story was an owl (Densmore 1979: 59).

A "ghost leg," or "bear paw," was made of an old moccasin packed with straw and fastened to the end of a stick. A mother would call out loud for the bear paw if her child was unruly and the old moccasin

would slowly be pushed through the door of the wigwam by an adult on the outside (Densmore 1979: 59). On summer evenings when children were unwilling to come inside from playing, a man called "the frightener" would go out among them. He wore a fearsome mask of birch bark, sometimes with a stick protruding as a nose. Children were expected not to make noise when they saw the frightener, but to go home quietly to bed. As with the other scaring tactics used with children to modify behavior, Densmore observed that an underlying training to keep still and quiet when frightened or startled was being instilled. These traits could save the lives of the children and the rest of the group in the event of attack by a real enemy (1979: 59). Children of both sexes were also encouraged to strive to achieve mastery in competitive games involving intense physical activity, such as foot racing, lacrosse, and field hockey (Landes 1938: 22).

Puberty. A young girl at her first menses was required to isolate herself for four days and nights. Her mother would build a small wigwam far away from the lodge and the girl would stay there without any food (Densmore 1979: 70; Landes 1938: 5-10). In more recent times, an older sister or other relative might bring her some food during the period of isolation. After this time was up, a feast would be given for her. Both Densmore and Kinietz describe a custom wherein the first food the girl eats after her fast is held to her lips and withdrawn four times by a Mide priest before she is finally allowed to swallow it. Kinietz relates that the girl must swallow the first bite without chewing it (Densmore 1979: 71, Kinietz 1947: 125). Typically, girls gathered strawberries to be the first food they consumed for this ritual.

At about the age of puberty, a boy was expected to go off by himself to fast in order to receive a dream or vision that would guide him throughout his lifetime. The boy blackened his face with charcoal and often spent the time far away from the lodge, sometimes in a dwelling prepared by his father. When a boy killed his first game, a feast would be held. Densmore (1979: 72) includes a poignant story told to her by one of her informants:

> .the first game he killed was a wild canary. He hung it up to wait until he had enough food to give a feast in honor of the event but it was so long before he had enough that the little bird dried up.

In times when tribal customs were more strictly observed, the boy would have provided a simple meal, and invited six or seven older men to eat. The men would have "talked to the manito and made petitions concerning the boy and his family" (Densmore 1979: 72). Landes (1938: 11-15) also discusses in detail the complexities of training an adolescent boy to become a successful household provider, which can occur early in a boy's life. By age twelve, a boy had been taught by his parents to hunt, fish, and trap. Religious and honorific feasts that encouraged adolescents to pursue a productive life in the community always honored success in these endeavors. A boy's life was marked by constant and increasingly intense public recognition, the acquisition of which began with the mastering of traditional resource procurement activities.

Courtship and Marriage. If a young man had serious intentions for a girl, he would kill a deer or other animal and bring it to the girl's parents. Densmore says this was to show that he planned to provide well for his family (1979: 72). If the parents accepted the young man, he was invited to share the feast with them. It was then understood that the couple was planning to marry. A young couple either began life together with the girl's parents or went straight to a lodge of their own. If a couple living in their own lodge began to have conflict, the wife went back to her family and "the man could do as he liked" (Densmore 1979: 73). After a period of time, the wife might return to her husband, although if she chose not to, the marriage was effectively dissolved (see also Landes 1938, part 2). Keewaydinoquay (1978: 36) relates a legend of a "wicked sorcerer" named Jossakeed (perhaps referring to the Jessakid medicine people) who used the *Amanita muscaria*, a deadly, hallucinatory mushroom, to convince women to act as his wives even

though “he never applied to the council to make them his wives, for he never intended to support them, he just took whomever he wanted whenever he wanted.” According to this story he would hook the unsuspecting young women by showing them “colored lights” and “beautiful music”. Eventually they would die from prolonged use of this drug. This story serves as a warning to young women about supposed “love charms” and the benefits of an approved marriage.

Death, Burial, and Mourning. According to Keewaydinoquay (1978: 13), shortly before a person died, he/she would have a give-away party:

> At this time he emptied his home of all personal belongings and presented them, one by one, to the persons he wished to have them. It was a type of public will witnessed by the whole village. After the party was over, the recipient carried the item back into the house and the owner continued to use it until his death. In this way there were never any violent disputes over the ownership of valued items.

When a person died, he was washed, his hair was braided, and he was dressed in his best clothing. The face, moccasins, and blanket were painted with brown fungus and vermilion. Densmore (1979: 74) mentions that members of the Grand Medicine Society were buried with their Mide bag. All the necessary items needed for a short journey and a few things that had been particularly valued in life were placed along with the body. The body with the accompanying items was wrapped in very heavy birch bark and tied with basswood cord, then buried in a shallow grave. In winter, a fire was made to thaw the ground for the grave. Food was placed beside the grave and a fire was kept burning for four days and nights. In the old days, sheets of birch bark or rush mats were placed over the grave and held down with stones at the edges.

In more recent times birch bark and rush mats were replaced with white cotton cloth coverings. The usual custom in old days was to build low “spirit” houses over the graves. Originally birch bark was used, later replaced by lumber. Grave houses were built with a small, window-like opening, which had a ledge outside it. On this ledge, relatives of the deceased placed food, attractively arranged in birch bark wrappings. The food was offered to friends or relatives. Passing travelers noted the marker at the grave that had the inverted totem of the deceased, and if it were of the same totem as his own, he would leave some food at the grave. Permanent villages had a burial ground.

One of the customs of mourning was to keep a “spirit bundle”. Soon after the death, relatives would cut a lock of hair from the back of the dead person’s head and wrap it in birch bark. A mother created the spirit bundle for a dead child and carried it on her back as she would the child. Another custom was to put the clothes of the child in its cradleboard and carry it for a year. The “spirit bundle” was carried by a widow for a year, during which time she added to it items of value such as cloth and beadwork which she had made. After a year she went to the lodge of her husband’s relatives and asked for her freedom. If she had been “frivolous or indiscreet” she could be made to carry the pack longer. If she was released, a large feast was given during which the “spirit bundle” was unrolled and the items within it were distributed to the husband’s relatives. The relatives reciprocated with new clothes and other articles for the widow. She was then free to marry again (Densmore 1979: 77-78). A husband’s spirit bundle was much smaller and if he had two wives, he was not required to follow this custom. Instead the woman’s mother carried the bundle and mourned her daughter, although the widower supplied the goods for the bundle. A memorial giveaway feast is given after a year of the death of a close family member of relative.

Ceremonial Activities

In addition to those ceremonies associated with seasonal and life cycles, there are a number of other ceremonies practiced among traditional Ojibway bands. Barrett (1911) classified them into four broad categories: dream dance or drum circle, which was adopted in part from the Dakota Sioux; the medicine lodge or Mide dance; ceremonial games; and ceremonial feasts and activity-specific rituals. The latter include medicine bag blessings, medicine hunts, war ceremonies, sweat baths, funeral memorials (Barrett 1911: 255 and *passim;* see also Nicollet 1970: 154-224).

Of these ceremonies, the *Midewiwin* is the oldest community-wide ceremony that is still practiced today. Nicollet (1970: 199) provided a detailed description of a Grand Medicine Society initiation ceremony in the mid 1800s. Hoffman gathered information about the Midewiwin from Ojibway Mide priests at Red Lake and White Earth reservations in Minnesota, during the years 1887, 1888, and 1889; his study is comprehensive. Benton-Banai (1988) relates the origin story of the Midewiwin and its relationship with the Anishnabe migration tradition. Hickerson (1970) provides alternative hypotheses about the origin of the Grand Medicine Society.

The Midewiwin. Since at least protohistoric times, among the Ojibway, as among many other Algonquian tribes, there existed an exclusive society called the *Midewiwin* (Hoffman 1891: 151), a name which has been translated as "mystic doings" or the Mide, meaning "mystic," Society (Landes 1968: 4; Clifton, Cornell, and McClurken 1986: 87). The members of the Midewiwin, also referred to (erroneously, according to Hoffman) in documents as the "Grand Medicine Society" (Hoffman 1891: 160), are specially trained to enlist the help of supernaturals (manidos or manitos) in healing all forms of illness of mind and body which occurred among their people. This training includes a comprehensive education in the healing properties of plants and instruction in the use of plants for healing. The preservation of knowledge about the power and medicinal properties in plants was and still is one of the core functions of the Midewiwin (Johnston 1990: 82).

Membership in the Midewiwin is a calling, sometimes conferred as early as infancy. Although the dedication of an infant boy to the Midewiwin by a Mide priest who had had a vision concerning the boy's vocation is one form of entrance to the society (Hoffman 1891: 274), there are several other means of achieving "priesthood" within the Midewiwin. Adolescent boys who have had a vision or dream of a powerful manito during their first fast might seek membership in the Midewiwin (Hoffman 1891: 163). Hoffman (1891: 160) also stated that if a boy was chosen at birth to be a member of the Midewiwin and he died before his initiation, his mother or father might be accepted as a replacement.

The society is not exclusive of women, although interpretations of the role of women vary between ethnographic sources (Hoffman 1891: 151, 223; Landes 1968: 46). The Grand Island Ojibway elder Jacques LePique narrated a story that suggests women brought vermilion paint to secure their entrance into the Society (Bourgeois 1994: 52-54). If a man or woman in adulthood felt a calling to membership in the Midewiwin, he or she might petition the members of the society for entrance. Regardless of which route a person took to become a member of the Mide, the costs were very high for both themselves and their families. When an infant boy was dedicated to the society, his parents at once began to stockpile goods such as blankets and other supplies to be paid as fees when he took his initiation at puberty.

A separate but related function of the Midewiwin is to preserve the traditions of the Indian genesis and cosmogony (Hoffman 1891: 151; Benton-Banai 1988: Chapter 9). Experienced members of the society achieved this through the confidential instruction of initiates in songs, chants, and stories. Described with pictography on birch bark scrolls, the content of this instruction was carefully guarded from the general population. Through a series of initiations, members of the Midewiwin advanced to higher levels or degrees

of knowledge and power, the highest attainable being the fourth degree. Considerable power was conferred upon attainment of the higher degrees of the Midewiwin. Hoffman (1891: 274) described the influence of the Mide, especially those of the fourth degree, as "beyond belief".

Hoffman delineated three additional classes of what he called "shamans" among the Ojibway: the Wabeno and the Jessakkid. In addition, he mentioned one lesser group called the Mashkikikewinini, who are defined as "herbalists" and whose calling was simply to know the curing properties of plants and how to administer them for healing (Hoffman 1891: 156). The Wabeno and Jessakkid were seen as lower forms of the Mide. The Wabeno was sought for purposes of making charms, such as "hunting medicine" and love charms. However, he was dreaded because of his power to inflict injury, cause misfortune, etc. (Hoffman 1891: 275). The Jessakkid were described as seers or prophets. Their powers came from Animiki, the Thunder God, who is the greatest of the malignant manitos (see also Burgeois 1994).

Traditional Resource Uses

The information on traditional resource use and inventory of plant, animal, and mineral resources has been compiled in an *activity/resource complex* format, where the sequences of activities targeting procurement and different uses of each resource are discussed in as much detail as is allowed by the information at hand. Those ethnographic sources that contained a systematic description of Ojibway traditional resources, such as Densmore (1979) and Vennum (1988), are used as the basis for outlining each activity/ resource complex. Additional information is then added to the resulting outline.

The Meaning of Plants in Ojibway Culture

One of the predominant and often noted characteristics of Native Americans is their intimate knowledge of and relationship to the natural world around them. Nowhere is this more evident than in the interaction between Indian and the plant world: plants can live without humans and animals but neither can live without plants. Thus the plant world has primacy over all others (Johnston 1990: 43). Two ethnographers working among the Ojibway in the early 1900's described this relationship:

[Chippewa] Indians respect plants as creatures possessing the mysterious and sacred attribute of life. They take them for use at need, for either food or healing or other purposes, religiously acknowledging their gratitude to the plant and to the Source of Life for the gift. This sense of debt is often expressed by a spoken prayer or by a token of sacrifice deposited at the place from which the plant is taken (Gilmore 1933: 120).

> Children received their first lessons in the value of plants by being encouraged to gather every flower they saw in the fields. These blossoms were dried, pulverized, and used in the making of a beverage, but at the same time the child learned that some plants had a medicinal value, while all were placed on the earth for the good of mankind (Densmore 1979: 61).

Although Ojibway people were already living very differently from the ways of their ancestors at the time these statements were made, the importance of foods such as wild rice and the medicinal value of plants has not lost their importance to the culture. The extraordinary importance of plants for the traditional Ojibway is such that preservation of knowledge about their power and medicinal properties is at the core of the Midewiwin Medicine Society functions (see sections on medicinal plants and Medicine Society).

Wild Plant Use Complexes

The Southwest Ojibway in the Western Great Lakes Region have relied heavily on the harvesting of naturally occurring plants to supplement and at times substitute for animal sources of food. Some bands also

cultivated non-native plants, such as corn and squash, introduced to the Great Lakes Indians by tribes from the south. In some parts of the Ojibway territory, garden-grown foods, such as corn and potatoes, were staples or major components of the diet (see section on cultivation), but more often they served as a secondary source of food. Among the wild plants used by the Ojibway, maple sugar, wild rice, and berries were the most important (Densmore 1928: 308; Landes 1938: 127).

Besides the plants eaten for subsistence, botanical products formed the basis of most implements used in all phases of food procurement and processing. Much of the Ojibway territory is woodland, so most of the plant products used in food gathering and processing are made of tree-based materials. Birch bark, as an example, was ubiquitous in traditional Ojibway life. It was virtually indispensable in food gathering activities–for everything from the transportation used to collect food (canoes) to storage and cooking containers (*makuks*) and utensils, to the dwellings used while at a seasonal camp.

Subsistence in this context does not consist of just the food and food gathering implements, but also encompasses shelter, clothing, utilitarian and ornamental arts, and all of that which makes up the Ojibway material culture. There was a time when the Ojibway relied on plants for the material to construct or create almost all their material culture. Finally, the use of medicinal and ceremonial plants was also essential for the well being of the individual and the community.

Wild Rice Complex

Wild Rice (*Zizania aquatica*) plays an integral part in Southwestern Ojibway culture. As a grain staple in the Ojibway diet, traditionally it had no equal (Vennum 1988: 12; Densmore 1928: 313; Jenks 1900). Besides its food value, wild rice permeates most aspects of Ojibway life (Vennum 1988: 2). Wild rice is gathered and processed to an edible form through a series of stages, all of which utilize a complex of plants. Preparations for wild rice gathering took place in late summer when an extended family or group of families moved to a ricing camp near a body of water. Before the establishment of reservations, seasonal movement to the rice camp was part of the annual cycle of the Ojibway in the Great Lakes Region (Levi 1956: 228-234).

Harvesting Techniques. The earliest description of wild rice harvesting was written by Radisson in 1661 during his Lake Superior voyage. He observed:

We had there a kind of rice, much like oats; it grows in the water in three or four foot deep. There is a God that shows himself in every country, almighty, full of goodness, and the Preservator of those poor people who knoweth Him not. They have a particular way to gather up that grain; two takes a boat and two sticks by which they get the ear down and get the corn out of it; their boat being full, they bring it to a fit place to dry it, and that is their food for the most part of the winter, and do dress it then. For each man a handful of that they put in the pot; that swells so much it can suffice a man (Radisson 1961: 139).

Densmore's ethnographic work among the Ojibway of White Earth, Red Lake, Cass Lake, Leech Lake, and Mille Lacs Reservations in Minnesota, and Lac Court Oreilles Reservation in Wisconsin during the first two decades of the twentieth century, documented the methods of harvesting, processing, and storing of wild rice which were still being used at that time. She also gathered information on the "old days"–practices that informants remembered or had been told of by elders, but which were no longer widely in use. At the end of summer, several families moved from the summer camp to a camp along a water source, usually a lake or slow moving stream. Part of the rice field was allocated to each family or group of families. This section would be marked off by stakes and in some cases, sheaves of rice would be tied off with a distinctive piece of basswood fiber. Traditionally the canoes used for gathering rice were made of birch bark (Vennum 1988: 93). In later times, boats made of pine lumber replaced the birch bark canoe (Vennum 1988:

95) (see Non-Food Complexes for details on canoe construction). But the essential harvesting techniques have not changed drastically over the centuries.

Besides the canoe, the tools of ricing include a wooden pole with one forked end, used for propelling the canoe or boat. This pole is usually made of two pieces of wood, one with a natural fork, usually a hardwood such as ash, maple, or hickory for strength, inserted in and attached to a pole made from flexible balsam. The forked end is used to push against the mud or rice stalks to propel the boat through the water, while causing minimal damage to the root system of the plants (Vennum 1988: 98). Usually, while one person poles the boat, another person uses two "ricing sticks" made of light wood (white cedar) to knock the rice into the boat (Vennum 1988: 99; Densmore 1928: 314). With one stick, the rice is bent over the boat, then the other stick is used to give the stalks a blow which caused the ripe kernels to fall from the stem and into the boat.

Processing Stages. Once the rice is collected in the boat it is moved ashore for the first stage of processing. Again birch, especially the bark, plays an important role in wild rice procurement. Winnowing trays or pails (*makakoon*) made of birch or elm bark (*aniib*) is used to empty rice out of the boat (Vennum 1988: 104). The rice is then spread on sheets of birch bark to dry in the sun (Densmore 1928: 315). While spread out, the rice is picked over to remove unwanted parts and other debris (Vennum 1988: 113). After this initial drying, the rice either is parched or fire dried. The most common method is to parch rice in a kettle or metal tub over a slow fire. The rice is stirred with a paddle made of maple wood, resulting in the loosening of the husk. In an older process, the rice is dried over a fire using a frame covered with a layer of hay, which is covered by about three inches of rice. The frame is placed over a slow fire and the result of this process is "hard rice", which takes longer to cook than the rice parched in the previous manner, but which requires no further processing and which can be stored indefinitely, a characteristic which makes it integral to survival during times when fresh food is scarce.

The next processing stage is pounding of the rice to remove the husk. This is done by placing the rice in a barrel or wooden mortar with sloping sides and "pounding" with five-and-a-half foot long wooden pestles with either pointed or blunt ends. The rice is not actually pounded, but more accurately the pestles are allowed to drop from their own weight which removes the husks with the least damage done to the kernels. After pounding, the rice is winnowed in birch bark winnowing trays. Ideally, winnowing is done so that the wind assists in blowing the chaff away (Densmore 1928: 316; Vennum 1988: 133).

Finally, the rice is treaded in a hulling vessel (Densmore 1928: 316) which was made of cedar slats placed in a hole in the ground so that they almost converge at the bottom.A disk of cedar comprised the inner base of the vessel. Through time, other vessel types were used for huling, including clay jars and deerskin-lined pits, and even 50-gallon metal drums (NPS 2000). Grass lines the bottom of the vessel and a willow branch bent in a circle is placed on top of the grass to hold it down (Vennum 1988: 126-127). Two wooden poles on either side, set in one of a variety of possible configurations, give support so that the person treading steps lightly on the rice in a sort of dancing motion, an action which gently removes the last of the husk from the kernel. Depending on the source, the rice is then winnowed a final time (Vennum 1988: 123-134). Among the bands with which Densmore worked, winnowing is done after pounding and before treading, the chaff from treading being collected and cooked as a delicacy.

Cooking. Before cooking, rice is washed several times to remove dirt and the last of the chaff. Birch bark pails were used for cooking rice before metal kettles became available (Vennum 1988: 45). Birch bark does not burn if it contains liquid and if the moist, inner side of the bark is against the fire (Densmore 1979: 41). Wild rice is sometimes cooked in water, but more often it is cooked in broth or as part of a soup.

Storage. Rice is stored in a variety of cedar, basswood (Densmore 1928: 314) and elm bark bags, sewn together with basswood fiber. Pine tar is used as a sealant for the seams of the bark containers (Vennum 1988: 141). Rice and other foodstuffs were cached for the winter in deep pits lined with birch bark. Rice was placed in bags or *makuks* and placed in the pit. The spaces in between were filled with hay. When nearly full, the food was covered with birch bark or hay, a layer of wood beams, and topped with a mound of dirt (Densmore 1979: 40).

Maple Sugar Complex

Along with wild rice, the sap of the sugar maple tree and its by-products are important seasonal plant staples in the Ojibway diet; it was once used instead of salt. In addition to the sap and its direct products, the processing of sap is another activity that requires the use of a variety of plants by the Ojibway people.

Sugar Camp. The Ojibway traveled to seasonal camps in the spring to gather maple sap and to make maple sugar. Families were each allocated a section of the "sugar bush" from which they would gather a share of the sap. A family or group of families returned to the same sugar camp each spring where they used (and reused) special structures. These were the birch-bark lodge where supplies were stored during the year and the lodge in which the sugar was made, only the frame of which was left intact when not in use. Both structures were made of wooden pole frames covered with sheets of elm, cedar, or birch bark. Inside the sugar-making lodge, large kettles were hung for heating the syrup. In earlier times, kettles were hung with strips of green bark. Smaller kettles also hung from hooks made of ironwood. Cedar boughs covered with mats made from rushes were spread on the floor of this lodge. The lodge also served as living quarters during the maple sugar season (Densmore 1928: 308-309).

Traditionally, all dishes, containers, and utensils used in sugar making were made from bark or other tree products. Some utensils such as spoons used for dipping sap, paddles used to stir syrup, and granulating ladles for working syrup into sugar were made from maple wood. Balsam gum was used as a sealant in repairing bark dishes and utensils (Densmore 1928: 310). To collect the maple sap, a tap constructed of slippery elm wood was driven into the tree. Birch bark dishes were placed below each tap and left to fill with the flowing sap. From these dishes the sap was poured into birch bark buckets to be taken back to the lodge. Troughs made from basswood logs were placed outside the lodge to hold sap from the sugar bush. Birch bark lids over the troughs kept out debris.

Maple Sugar Processing. Some of the maple sap was put aside and left to ferment, resulting in a vinegar-like product used as a condiment and preservative. Most of the sap was cooked to produce maple sugar. The process began with boiling the sap in kettles throughout the night. A spruce branch was used to stir the froth when a kettle began to boil too fast. After the syrup had thickened, it was strained using a mat woven of narrow strips of basswood bark. Between this straining and the next heating of the syrup, the kettles were scrubbed using stiff rushes gathered near the sugar bush. After a second boiling, most of the final product was granulated maple sugar. However, some of the syrup was customarily poured off during the second boiling and molded in birch bark containers of different shapes. Basswood bark was used to hold these little containers together and these were considered treats for children. Soft wood was also made into molds in a variety of shapes, which were filled with the thickened syrup. Gum sugar, another product made before the final granulation stage, was also stored in birch bark containers tied together with basswood bark (Densmore 1928: 311-312).

Other Edible Plants

In addition to the staples, many other wild plants were used for food.

Vegetables. The Ojibway utilized a great variety of plants, often using several different plant parts for different purposes. In a general category of "vegetables," are all the plants, which were gathered from the wild and used in the diet to supplement and fill out the basic staples. These include not only what are considered "greens", such as dandelion leaves, but a whole range of flora from trees, such as oak, to moss and lichens. The many plant parts utilized include roots, tubers, nuts, seeds, sprouts, flowers, and cambium material.

Plants or plant parts were processed when necessary to render them digestible or more pleasant tasting. From ethnographic work among the Ojibway of northern Minnesota and Wisconsin, Huron Smith described the process by which they removed the bitter tasting tannin of certain species of acorns. The acorns were soaked in hot lye made from wood ashes, which neutralized the tannic acid. They were then washed again to remove the lye and thus were made palatable (Smith 1932: 402). The acorns were then stored and when needed, ground into a coarse flour used to thicken soups or made into a type of cereal.

Many other plants were simply gathered and used fresh, either cooked or raw, or dried and stored for use in winter. In addition, some Ojibway groups relied on gardening to varying extents, depending on the geography and climate of the region they inhabited. Cultivated plant use is addressed later in this section.

Berries and Fruits. Berries are abundant in the summer and as Densmore (1979: 127) put it, gathering berries "formed a summer industry of some importance" for the Ojibway. A great deal of the berries were eaten fresh when they were in season. A portion of the berries gathered were also preserved or dried to be used throughout the rest of the year. Berries were dried on a frame over a fire and, when needed, boiled, usually in broth (Densmore 1928: 321, 322; Densmore 1979: 40). In this form they served as a flavoring for a number of other foods. The thorn apple fruit was squeezed with the hands, made into cakes, dried on birch bark in the sun and stored uncooked to be cooked and eaten in the winter. Berries mixed with nuts, bear meat, and bear fat and made into cakes were a choice staple in the old times (Radisson 1961).

Mushrooms. Mushrooms are usually gathered throughout the summer and into early fall. Several mushrooms are used as food. The *Polyporus sulpherus* (Chicken-of-the-woods) is said to have the consistency of cheese once cooked and a taste similar to chicken. This mushroom is widely used and helps stretch out the rice supply. The *Trichloma saevum* and *Polyporus surpula* can be breaded and fried. Many other mushrooms are eaten raw while hunting or pickled for snacks. One edible mushroom, *Lactarius deliciosus*, has been known to double as a method to scare unknowing visiting tribes into making treaties. Once eaten, this mushroom's by-products will turn the eater's urine red, making the person believe they are bleeding. The host would then threaten that if the visiting tribe did not comply "all the blood [will wash] out of your bodies." When agreement was reached, the cook would stop putting the mushroom in the dish, and the urine quickly returned to normal (Keewaydinoquay 1978: 33).

Seasoning. Several wild plants were used as seasonings. The flowers and buds of the mountain mint are used to season meat or broth. The berries of the Bearberry are cooked with meat to give flavor to the broth (the leaves of the same plant have a medicinal value when smoked). The root of wild ginger is considered an "appetizer" (Densmore 1928: 318). It is also thought by some bands (Pillager of Bear Island) to have flavor-enhancing properties by removing the muddy taste from fish (Smith 1932: 397). The ever present maple sugar is used as an all-purpose seasoning, comparable to salt in the diet of Europeans.

Beverages. Densmore claims that, although the Ojibway drank plain water, they preferred instead to make a tea of the leaves and/or twigs of plants and herbs. These were tied in a small bundle with a strip of basswood bark and steeped in hot water. Again, maple sugar was used as a sweetener both in hot beverages during cold weather and in cool water in the summer (Densmore 1928: 317).

Cultivated Plants

The Ojibway utilized cultivated plants in their diet to varying degrees corresponding to the environment and other factors. According to Gilmore (1932: 121), none of the cultivated plants used by the Ojibway were native to the region, but were introduced through contact with other tribes. In some areas, wild rice consumption was negligible, especially along the south shore of Lake Superior and in other places where larger scale gardening was possible due to more temperate climate. In the 1830s, Sherman Hall observed prodigious gardens on Madeline Island, Wisconsin, noting that garden vegetables, including potatoes, corn, oats, barley, and peas, grew well there (Vennum 1988: 44; but see Kinietz 1947: 25). At Red Lake, Minnesota, the rice crop was unreliable and did not always grow in the same place, so the cereal staple was corn instead. Vennum (1988: 45) documents elders at Red Lake as remembering having to travel to Leech Lake for rice. Rice was also transplanted to niches where conditions would improve its growth and production; band members would then travel to that niche to collect their rice.

Cultivation and gardening. Cultivated plants included corn, beans, and squash and some European introductions such as oats and barley. Some groups relied upon corn as a staple at times when other food sources failed (Vennum 1988: 42-43). Similar to their use of wild plants, the Ojibway use of cultivated plants often yielded multiple uses for the various parts of a plant. Corn silk was used as a broth thickener and seasoning. Pumpkin flowers were also used as a seasoning and broth thickener (Densmore 1928: 318).

Processing. A number of the plants native to the region were used in the processing of cultivated plants. Sheets of birch bark were used for drying corn. Hardwood ashes were used in the making of hominy. Maple sugar was added to corn for flavor. A portion of the garden vegetables were often dried and stored for the winter. Basswood cord was used, among other things, to hang strips of pumpkin and squash over a fire for preserving (Densmore 1928: 319).

Non-food Complexes

As stated previously, plants and tree products formed the bulk of the material culture of the Ojibway in pre-contact times. Until the early part of this century, the Ojibway were still practicing many of these uses. Over time, some European and American introductions were substituted for traditional standbys. However, the original plant and its use was not forgotten or replaced in the minds of the Ojibway.

A diverse complex of utilitarian and ornamental items was constructed from materials found in the area in which the Ojibway lived. Densmore gives a representative listing of plants and trees used in the daily life of the Ojibway. As with all the complexes outlined in this chapter, neither plant nor its use was independent of others; all were interconnected in some way.

Plant Fibers. According to Densmore (1928: 378-379), "twine was one of the most important articles in the economic life of the Ojibway." A glance at the food plant complexes described above reveals some of the many uses for fibers in securing, processing, storing, and transporting food. Twine usually began as basswood or slippery elm bark. The bark was first cut from the tree in long strips, then soaked in water at the edge of a lake for a few days to separate the inner from the outer bark. The inner bark was then cut to the width desired, depending on the amount of strength that was needed. The fiber could be boiled to give it extra durability and strength if necessary. The fiber could be used as it was or twisted into twine. Twine was also made of dry stalks of false nettle. Among the uses for this twine were fishing nets and sewing thread.

Plant Dyes. The Ojibway used plant substances to make dyes, which were used, on various items from rush mats to wooden implements. Often a mineral substance was used to set the color obtained from a plant. Densmore provided several formulas for dyes in her report and included the directions for making the

dye and for dying the desired material. A favored material to be dyed was a porcupine quill, which were said to hold vegetable dyes very well and retain color for a long time. Plants used in dyes were gathered whenever they were encountered and if not needed immediately, were dried and stored for later use. These included berries, gold thread roots, bloodroots, butternut and hazelnut nut hulls, wild plum, and various barks, among others (Levi 1956: 261). Punk, because of its phosphorescence, was gathered at night. The handling of dyes apparently was restricted in some instances. For example, in the directions for making a particular red dye, Densmore (1928: 370) includes the admonition, "do not let a man or any outsider look into the dye."

Wood Uses – Canoe Making. Wood is the ubiquitous raw material for a vast range of objects traditionally used by the Ojibway, from cooking utensils to house frames. One of the most important traditional activities involving the use of wood besides what is described in the previous complexes, is the process of canoe making (McPhee 1975). Canoe making was most likely invented in archaic time (Cleland 1992: 16-17), but little archaeological evidence to confirm or deny this is available in the Great Lakes area. There are three main types of canoes. The most common in this area are those made with birch bark; next are those made from dugout trees, and those made with leather or seal skin. The Ojibway maintain that canoe making was taught to them by Menaboju (Nanabozho), who was said to have built and hung the first canoe on some six or seven rocks still found on the Apostle Islands (Kohl 1956: 34).

Birch Bark Canoe

Birch bark construction begins with Ojibway men finding and felling the largest, smoothest tree. Kohl (1956: 29) watched a birchbark canoe construction and described the commencement as follows:

> In the first place, the Indian canoe-builder appeals to the birch-tree, not exactly in the words of Hiawatha—
>
> > Lay aside your cloak, O birch-tree!
> > Lay aside your white-skin wrapper—
>
> but with a good axe and sharpe knife.

Before the adoption of European metal tools, a practical technique for felling a tree involved lighting a fire around its trunk until it was burnt and weakened, a condition that increased the effectiveness of traditional stone axes. This technique continued to be used until the introduction of the chain saw. Bark was taken in the spring from a standing tree; in some areas, the selected tree was felled (Densmore 1979: 150). Women are the main participants in preparing the birch bark. They must strip the inner bark, a process similar in technique to tanning, and prepare it for sewing. They select the longest, smoothest pieces they canfind and sew them together with the roots of tamarack and spruce or with the elastic bast of white cedar (Kohl 1956: 29).

The Ojibway men make the ribs of the canoe from the branches of cedar, peeled thin for lightness. The men then lay out the cedar frame and flatten the birch bark over it with large stones. Once the bark is malleable the women shape the sewn pieces to the cedar frame by placing stakes along side the bark and frame (Densmore 1979). One elder at a canoe exhibit at The Mille Lacs Indian Museum identified these markers as made out of ash wood. Landes (1938: 132) suggests that the entire process of framing and birch shaping is the domain of men, although she does not specify how or by whom the birch bark is sewn. Both Densmore and Kohl assign this role to women (Densmore 1979: 150; Kohl 1956: 29).

Inside the canoe frame the men lay a crosspiece of cedar between the left end of the ribs. These appear like seats but are actually for stability and support of the frame. The birch bark is now sewn by the

women to the frame and held in place by cedar. After lining the bottom of the canoe with thin cedar boards, the seams from sewing are filled in with pine or fir resin (Kohl 1956; Mille Lacs Indian Museum display). The canoe is then hung to dry from a large stake placed in the ground. Once completed, the wood projections on either end are often carved.

Although Kohl (1956: 32) states women execute the majority of birch-bark canoe making, he assigns canoe paddling as traditionally the domain of Ojibway men. He states that women have been known to assist with paddling as well as navigating only in non-hunting activities; but Landes (1938: 128) describes the Ojibway woman as "often aid[ing] her husband in his hunting" by paddling.

The Ojibway employed birch bark canoes for personal use as well as trade, while the dugout was employed in the absence of readily available bark ones, and not usually traded for goods.

Dugout Canoes

A small number of canoes among the Ojibway are classified as dugout canoes. This canoe making process may have been adopted from the Europeans but, due to the demand for the larger and more efficient birch-bark canoe, the dugout never reached the popularity of birch bark construction. Radisson's 1661 journal of explorations in the Lake Superior area documents the presence of dugout canoes in Lac Vieux Desert, suggesting that these may have been aboriginal (Radisson 1961: 128).

Dugout canoes are made mostly from pine, a few from basswood, and only rarely from poplar and cedar. Little has been written on the subject of dugout construction; Rogers (1965: 454) supplies three main methods. Some oral accounts relate that the Indians charred one side for easy removal of the wood and finished them by knife carving. Another method is the ax and chisel, where approximately a foot down and two feet across of wood are dug out. The outer bark is also carved off and the wood usually painted or covered with the animal fat from deer, bear and raccoon. The third documented method is a variation on the above but instead of a chisel, a special dugout-canoe knife is used to carve the wood.

The sizes of these canoes vary from ten to twenty feet in length, fifteen to thirty-six inches in width, and are generally a foot-to-two feet in height. The longer, slender type is found mostly in Canada and is said to be aboriginal (Rogers 1965: 457; Driver and Massey 1957: 290 [cited in Rogers 1965]). The shorter and wider variety is a facsimile of the birch bark canoe and is usually dated between 1875 and 1925. Dugout canoe construction is not very common, even though these canoes were widely used for hunting, travel, and trade. Once finished with the canoe the Ojibway would bring it to the shore and place it under Balsam boughs for winter storage (Rogers 1965: 455).

*Animal Hide Canoe***.**

The animal hide canoe is not common in the Great Lakes region and detail on its Ojibway uses is not readily documented. Only one mention in the above sources of animal hide canoes exists in Kohl's (1956) recounting. He is not specific as to whether he is speaking of boat construction in general or that Great Lakes Ojibway actually used this construction.

Medicinal Plants

More than half of the plants used by the Ojibway and listed in this study are used medicinally (see ACCESS Database). The four sacred plants, tobacco, cedar, sage, and sweetgrass, are used in practically every healing and religious ceremony. Some plants, such as birch and cedar, are also used for containers, twine, splints, and for other indirect medicinal use. Cedar saplings were used as "medicine poles" for "curing illness, bringing success in expeditions, and in protecting from harm in the manner of amulets" (Kurath and Ettawageshik 1955: 51). A vast majority of medicinal plants are used as teas and decoctions for body

ailments and injuries. Of these, most are roots, which are ground for poultices or boiled for oral or topical use. Flowers are most often directly used in teas. Some plants such as arbor vitae, balsam fir, boneset, hemlock and hepatica can be used in a variety of ways. The body ailments referred to above can consist of any pain from headache, urinary problems, colds, broken limbs and sore eyes, to life-stage related aches and pains like menstruation, menopause and arthritis. Gathering herbs and mushrooms for medicinal use can be an all day event. Herbs are hung to dry and later ground up and put in buckskin bags. When gathering plants tobacco must be offered to the plant in exchange for the use of the plant (Kurath and Ettawageshik 1955: 52).

Female Related Pains. Densmore (1928), Smith (1932), and Gilmore (1933) all refer to menstruation and menopause as "female problems" which also include amenorrhea and the process of childbirth. Heal-all, blue cohosh, rattlesnake grass, northern clitonia, lesser cat's foot, and yellow ladies' slipper are all used in teas for relief from pains associated with these four female specific passages. In addition, Keewaydinoquay (1978: 27) describes an instance in which corn fungus is used to ease childbirth, and act as an anticoagulant. Yarrow is taken by the mother to increase the production of breast milk.

Wounds. Many plants are used in poultices for wounds. Anemone and fivefinger (*Potentilla sp.)* roots are chewed up and made into a poultice to stop bleeding in open wounds or nosebleeds. Other coagulants include the mushrooms *Fomes fomentarium* and *Lycoperdon giganteum (caelatum*) which are ground, packed, and placed on the wound. If applied with heat, these are also helpful in sanitarily cauterizing a wound (Keewaydinoquay 1978: 17). Kinietz (1947: 223-224) presents an unsigned 1724 manuscript detailing a list of roots and barks from various trees as white oak, pine, sarsaparilla, and elder which can be ground and boiled for healing wounds, sores and cuts. These medicinal roots, herbs and ground bark were usually stored in the medicine man or woman's Mide bag.

Charms. Medicinal plants are sometimes put to the purpose of charming a good or bad event or feeling. Densmore (1979: 108) classifies charms into seven categories: "(a) Love charms, (b) charms to attract worldly goods, (c) charms to insure safety and success, (d) charms to influence or attract animals, (e) protective charms, (f) charms to work evil, and (g) antidotes for evil charms." More generally, charms are for good luck in the hunt, protection in war, and success in love; needless to say, evil charms are for the opposite intention.

There are a variety of resource related charms. For example, aster root is smoked with tobacco before a hunt to ensure a bountiful hunt, and dogwood and hepatica are placed in traps to attract animals. Just as important as a good luck charm on a hunt is a protective charm (Tanner 1994 [1830]: 182-184). Chewed dogbane and mugwort used at dances will keep "bad medicine" or evil charms away; dogbane can also be used with plantain as preventive medicine.

Love charms are popular and usually herbal. False gromwell is said to be "magnetic" by Densmore (1979), with the added benefit of attracting wealth. Unfortunately some love charms can double as evil charms, as in the case of Keewaydinoquay's amanita mushroom story. (See Courtship and Marriage above). Kurath and Ettawageshik (1955: 40) also describe a plant with dual properties. Flowers from the "Little Thimble" plant (unknown species) are dried and pulverized and used as a love charm for a man or woman. The root of the same plant serves as a contraceptive aid. Dorson (1952: 35; cited in Kurath and Ettawageshik 1955: 40) adds canary root and bluebell roots to the list of love charms. The male root of bluebell is used to attract women, the female root to attract men.

Herbal Medicine Practitioners

Medicinal use of plants is common in most adult stages of Ojibway life, and a majority of older Ojibway have traditionally several medicinal recipes in their possession. A select group of people has the calling to be considered medicine men or women. Various degrees and skills can be earned in the Midewiwin medicine societies. Usually the person must demonstrate a calling by their manito and be initiated into these societies (Kurath and Ettawageshik 1955: 51-52). The men and women who decide what is causing the illness and its treatment were called "jugglers" by European observers. Jugglers consist of doctors, surgeons, and apothecaries. The jugglers collectively muse over the cause of the illness, after which the doctor will consult with the surgeon and apothecary (herbal expert) as to what should be done to the patient (Kinietz 1947: 305).

Once an individual becomes ill his or her family calls for a medicine person. They then build a lodge for the sick, which will eventually be burned along with the items the person used once the person heals. Kinietz (1947: 304) cites the most common reasons for illness are "failure to give a feast" at an appropriate venture in life or coming into contact with an evil manito. The person's family summons the jugglers who come with other medicine men and women. The juggler sucks on the injuries if there is one and then the medicine people "juggle" the reason for illness and declare what manito is responsible. After the doctor juggler finishes deciding the cause, a dog is ordered killed as a sacrifice to the moon or sun. This is the stage when the doctor consults with the surgeon and apothecary as to the patient's cure. The cure can be as simple as throwing a feast or having the medicine man or woman treat the wound or illness with medicinal plants. Another method described by Kinietz (1947: 306) is having the sick person walk over hot ashes or, if unconscious, carrying him or her over a hot fire. Always, the apothecary prescribes a plant to aid in healing. While the doctor and herbal advisor consult the surgeon dances to the drums being played by the audience. He or she is decorated in animal skins and painted. Today an Ojibway will likely combine both Western and traditional medicine in the treatment of many illnesses.

Animal Resources

In a historical analysis of American Indian life during the colonial period in New France, Francis Parkman (1898: 61) captured the essence of the ancestral relationships between Algonquian peoples and the animal world:

> Men and animals are closely akin. Each species of animal has its great archetype, its progenitor or king, who is supposed to exist somewhere, prodigious in size, though in shape and nature like his subjects. A belief prevails, vague, but perfectly apparent, that men themselves owe their first parentage to beasts, birds, or reptiles,–as bears, wolves, tortoises, or cranes; and the names of the totemic clans, borrowed in nearly every case from animals, are the reflection of this idea...This belief occasionally takes a perfectly definite shape.

Still prevalent in the twentieth century, these ancient relationships permeate all aspects of Ojibway traditional lifeways. Animals have a powerful role in the creation of the world and their spirit power or *manito* is essential for the maintenance of balance between humans, nature, and the supernatural (Bourgeois 1994: 25-35). The traditional Ojibway social organization consists of six main consanguineous totemic clans–crane, catfish, bear, marten, wolf, and loon–from which at least fifteen other lineages originate. Additional clans may be found in individual Ojibway tribes (Warren 1957: 44). All these clans bear an animal totem whose origin goes back to "when the earth was new" (Warren 1957: 41).

Animal manitos accompany an Ojibway throughout his or her lifetime; at times propitious or malignant, animal manitos manifest themselves in dreams or waking experiences since childhood. A child who has seen an animal during his initiation rites will have a spirit guardian until death. Thus the aid of animal

manitos is sought for every action. Hunting, trapping, and fishing are preceded by propitiatory ceremonies; mineral, plant, and animal resources are combined to make charms for succeeding in these and other subsistence and ceremonial activities. Animals are also called upon to placate evil forces and accomplish personal goals.

In the subartic environment of the Western Great Lakes, large and small animals constitute a critical food and non-food resource for the Ojibway and other Algonquian groups. Animals were traditionally regarded as carriers of the weather forecast and particularly the winter season, which is always a matter of great concern and preparation. Levi (1956: 220-221) and Jenness (1935) provide information regarding forecast predictions. For example, if a rabbit's shoulder blades were transparent, the winter would be mild; if there were dark blotches in the bones, it would be severe. If rabbit's fur turned white after the first snowstorm, an early winter might be expected. If the rabbit's fur did not turn white, a long, mild winter could be anticipated. If muskrats gathered food and built unusually large winter houses, the winter would come early and be cold. If squirrels gathered and stored food early in the autumn or crows disappeared, winter was near at hand. Bear activities were closely watched in late September and October; if bear tracks were seen immediately after the first snowfall, it would be the sign of a mild winter.

Seasonal birds were commonly seen as a sign of weather changes. The southward migration of geese was also used for prediction; low flights indicated a long winter whereas a high flight meant a long autumn and a short winter. The drumming of partridges in October was a warning that the winter would be cold. If the birds drummed again in December, the winter would be very cold and snowy, especially during January and February. Well-filled crops of grouse or partridge signified bad weather, because these birds do not venture out for food during a storm, but provide for themselves in advance. When the flicker cried mournfully, the Ojibway expected rain, as they did when flies and mosquitoes were unusually troublesome. On the other hand, the pecking of woodpeckers on trees was seen as an unfailing sign of warm weather. If pecking occurred during sugar-making time, the people said: "the birds are locking up the sap. Sugar-making is almost over and the sap will stop running in a day or so" (Levi 1956: 221). A deer seeking shelter in a pine grove or heavy brush presaged a storm. The marks on the tree trunk where deer rubbed their antlers indicated the height of the snowfall that year.

Animal Use Complexes

The following detailed summary of activity complexes associated with animal resources illustrates their unique role in the survival of traditional Ojibway society and culture. Hunting, trapping, and fishing are the three main activities associated with the procurement of animal resources. This section summarizes the traditional procurement technologies and related processing activities and also details a broad spectrum of animal resource uses.

Hunting and Trapping

Hunting and trapping were primarily winter activities, most often carried out by the men of a hunting unit. Individuals related by blood or marriage constituted traditional hunting units; a nuclear family could be the nucleus of a hunting unit, but usually this activity involved extended families (Sharp 1977: 381). In earlier times, neither the hunting ground nor the prey was the property of a unit or individual hunter (Hickerson 1962: 41). With the introduction of the fur trade in the seventeenth century, the notion of individual ownership rights to profitable hunting territories and resources developed among the Ojibway. This notion did not replace the traditional interactions between hunters, prey, and territories but continued to exist alongside ancient practices, which prevailed as long as the resource was not exploited for profit (Leacock 1954: 2). Thus for example, a hungry person could hunt in the traditional ground of another but could not sell the fur, hide, or meat (see Landes 1968 for a detailed account of property rights of hunting territories).

The introduction of firearms in historic times modified earlier hunting techniques as well as the structure of hunting units, because firearms promoted individual rather than group hunting of large game. The adoption of European steel traps also modified trapping technology. Large trading companies also contributed to change traditional hunting because they would assign arbitrary territories to indebted Ojibway families or hunting parties who did not have spiritual or historical ties to those tracts (Martin 1978: 99; Kinietz 1947: 46). The fur trade also altered the annual cycle because people would take longer treks at greater expense to get better fur deals (Leacock 1954: 9; Tanner 1994). Nevertheless, ancestral hunting and trapping practices on Ojibway lands and exhaustive use of animal resources continued into modern times (Densmore 1979: 128). After the establishment of reservations, treaty rights resulted in the institution of tribal licenses and open hunting seasons and assignment of exclusive trap lines severely limited access to ancestral territories. Sports hunting of big game and waterfowl during official seasons has been added to subsistence hunting in the reservations (Levi 1956: 248).

Initiation and Propitiatory Ceremonies. Males were trained from early boyhood in hunting skills. According to Densmore (1979: 65):

> As soon as a boy could hold anything in his hands he was given something resembling a bow and arrow, and taught to go through the motions of shooting. A bow and arrows were first given a boy when he was 5 or 6 years of age, and with this he took his first lessons in the craft that was most necessary to a hunter or warrior in the old days.

Hunters were initiated during the puberty fasting ceremony, when the boys would seek a well-disposed manito who would guide, protect, and ensure successful hunting through life (Landes 1968: 22). Individual hunters may call upon animals in dreams. Tanner (1994: 180), for example, related how in times of scarce game or famine he would spend half of the night singing and praying, and as soon as he fell asleep he would dream of animal tracks. Upon awakening, he would follow the path until he found the animal that appeared to him in sleep. There were, however, more specialized hunting rituals.

Only the members of the Midewiwin medicine society could perform ritual hunt ceremonies by calling the Ojibway creation hero *Nanabozho*. Nanabozho was represented in a figurine carved for the ritual (but see Tanner's account of his own medicine hunt (Tanner 1994: 182-184). The supplicant sat alone in the lodge, sketched the figure of the animal wanted, called upon the manito, and then waited for a vision of the animal. After the vision came, the party proceeded to hunt (Coleman 1970: 211; Martin 1978: 79). At the beginning of a hunting season (Jenness 1935: 22) a dog was sacrificed to call and propitiate ancestral spirits. *Nanabozho,* the Great Hare, a special hunting manito, was called with a buzzer or hollow piece of wood attached to a string and swung above the head.

Cleansing hunting tools of any evil influence was also done by the medicine men during the hunting ritual, particularly if bad luck had struck the hunters. A wigwam made of cedar would be built for this purpose. Incense compounded of cedar and medicine was added to a fire built in the center of the wigwam. Guns, bows, arrows, and all articles used in the hunt were held over the resulting smoke. Medicine was sprinkled into gun barrels to insure accuracy. Braves and their clothing were also smoked to prevent game from scenting them (Levi 1956: 243). After the ceremonial smoking, only hunters were allowed to enter the wigwam or touch hunting implements. It was said that the ceremonial smoking caused animals to become stupefied. Hunters were not permitted to speak with members of their families until the hunt was over and lodged in the cedar wigwam until hunting time.

Charms were used to propitiate a successful hunt. Densmore (1979: 110), for example, tells how *Nagan'ab,* chief of the Ojibway at Fond du Lac, Minnesota, learned how to work charms for attracting

animals from an old Mide priest: he would chop the roots of hepatica (*Hepatica triloba)* along with other roots and put them in the center of a small fungus. This he placed on or near the traps set for fur-bearing animals. His rise to political power was attributed to his knowledge of, and success with, this medicine. Many other plants were used to attract game and fish (see the plant use section for more examples of hunting and fishing charms). Levi (1956: 219) comments that charms had undisputed power for Ojibway hunters. If they wished to catch deer in a hurry, they called deer with a whistle rubbed with chewed roots of boneset and milkweed. If a hunting party came across deer tracks, they smoked finely powdered root of wild aster. As they proceeded farther along the trail, they paused at intervals to smoke the charm. Finally, the deer appeared sniffing the aroma and the hunters had their quarry. Success in muskrat trapping was ensured with a charm made from dogwood. A hazel twig smeared with chewed roots of dogwood was placed in an upright position over a submerged muskrat trap. The odor of the dogwood was so enticing that muskrats would devour a trapped comrade to get a bite of the wood.

Unsuccessful hunters who thought themselves bewitched also used potions concocted by medicine men. Game that was killed while the hunter was using "medicine" was subject to many taboos. For instance, a woman was not to eat the head, liver, and kidneys of game because she would contract eczema. The meat was not to be given away, as this would destroy the efficacy of the charm (Levi 1956: 243-244). A hunter never sharpened his knife just before hunting; this action showed over-confidence and ended in frustration. An old hunter would rather give his gun away than lend it to someone, as the borrower may use bad medicine on it or reset the sights of the gun. Hunters who had killed no game during the day considered the hooting of an owl for three or four successive nights an omen of bad luck. They then would brake camp and return home.

As described by Jenness (1935: 2) and Levi (1956: 242), a skillful hunter should be able to trick, cajole, and deceive the prey. Animal shadows were constantly in watch of human shadows. If human shadows became too familiar to animals, they had to switch hunting territories. While hunting, hunters would not concentrate on the game but on examining the surroundings, such as useful trees and medicinal plants. Animals would be thus duped, particularly deer and moose which will lower their guard. Hunters covered their faces with charcoal in disguise to throw animals off-guard. According to Alexander Henry, Ojibways observed very strict rituals of consumption and disposal of the carcass. After the kill the hunter asked for forgiveness from the manito. The following morning, a ceremonial feast of atonement was held. The bear hunt ceremonial was especially strict; bear had to be consumed right away. The carcass was returned to the natural habitat to be re-fleshed by the manitos at a later time (Henry 1921: 128).

Hunting Techniques. Deer, moose, fox, and wolf are the main game animals. Deer, moose, and red, black, and silver fox were hunted at night, with pitch torches that would stun the animals. A deer call made of two conical pieces of wood and anointed with hunting medicine was used along with the torches. Timber wolf and large and small (mongrel dog) prairie wolf were chased until tired and then shot. Above all, powerful medicine was essential for a successful hunt.

In the old times, bows were made with a flat piece of ash, hickory, or ironwood trees. Bowstrings were made from heavy (buffalo neck) sinew, skins of snapping turtles, or nettle stalk fabrics (Levi 1956: 266). Deer sinew was also used, although it was not as resilient as the cord made from the neck skin of a snapping turtle (Densmore 1979: 146). Arrow shafts were made from the slender shoots of cherry or juneberry trees. Flint and bone arrows were attached to shafts, but the latter was considered fragile. Arrows were of two kinds: blunt, for stunning birds and small animals without damaging the feathers or skins, and sharp, lanceolate- and sagittate-shaped arrows. The lanceolate arrows were used in hunting when it was desirable that the arrow be removed intact, whereas the sagittate arrows were used in war so that it might rankle in the wound when the shaft was withdrawn (Levi 1956: 266). Eagle and hawk feathers, dyed black and often

marked individually, were attached to the arrow shafts. Hunting knives, traditionally made of long bones and later of metal, were always carried by the hunters. In the winter a toboggan was carried as well (Densmore 1979: 129). In historic times firearms eventually replaced the ancient bow-and-arrow technology. Deer herds were corralled and shot in great numbers.

Trapping Techniques. Bear, otter, beaver, mink, marten, fisher, and rabbit were hunted with traps. Originally, traps were made of wooden poles, which, along with dead traps, were replaced by steel traps during the height of the fur trade (Densmore 1979: 130-131).

Bears were trapped with large wooden poles and bait set along streams. The bait was made with mashed cooked fish mixed with fish oil and sugar. Traditionally, otter was trapped with nets made of nettle-fiber twine. More recently, steel otter traps were placed in the water. For trapping beaver, the Ojibway would place a poplar pole at the bottom of the lake and secure a steel trap next to it (Densmore 1979: 131). During the fur trade beaver was sometimes husbanded (Leacock 1954: 9). Mink, marten, and fisher were caught with a trap made of a wide board that the animal would release by nibbling on the bait attached to it. The board would then fall and crush the animal. Before European trappers introduced the board traps, the Ojibway would build stockades around the lodges or dens. A deadfall trap built with heavy logs and a baited spring was used in early times to catch small and large animals (Levi 1956: 253).

On occasion rabbits were hunted with small arrows made with the claw of a mud turtle attached to the arrow tip (Densmore 1979: 147). But most commonly rabbits were snared with nettle-fiber nets or trapped with small traps. Levi (1956: 255) provides a description of an old method employed in snaring rabbits that uses a spring pole. A small flexible pole was secured on the ground and the end was tied with a salted *wigub* or basswood twine to a peg in the ground. A loop made of copper wire was tied four inches from the end of the bent pole. A smaller strand of *wigub* or "lead" was tied to the salted *wigub*, run through the wire loop, and placed across the rabbit's trail. A brush fence was built around the anchor line and snare so that the rabbit following the lead to the salted twine could not go around the snare but directly into it.

Game Processing. Although game are often consumed fresh (boiled or roasted), meat drying and processing for winter storage is of great importance for securing food supplies. During the winter, deer meat would be cut in thin slices and dried in the sun only enough to keep it until the spring. In the fall the meat would be dried over a slow fire and wrapped in large packets. Dried meat would be boiled, mixed with bear grease or deer tallow, and stored in *makuks* or packing containers made of birch bark. Bear meat would be processed in similar manner; all parts would be consumed or processed. The head was considered a luxury, was singed and boiled whole. The paws were consumed in similar ways. Liver and intestines were fried and eaten as well. Rabbit meat would be roasted and pounded for immediate consumption or dried. All trapped animals except marten were eaten including their fat. Beaver was considered a delicacy (Densmore 1979: 43).

Hide and fur tanning. Deer and bear hides were used for a variety of purposes (see tables below), and especially for clothing and blankets. Deer hides were dried slowly over a smoky fire to give them a golden color. Furry hides, such as rabbit, were hung on trees until the wind blew the softer hair and left only the firmer. Strips of rabbit fur were sometimes woven to make baby blankets (Levi 1956: 255). Preparing the strong sinew thread was a related task.

Quill Processing. A unique skill of Ojibway people is the procurement, processing, and use of porcupine quills for adorning a series of hide crafts and garments. Traditionally, porcupine quills were used for embroidering but were eventually replaced with beading and ribbon stitching. Yet, up to the 1930s some women still knew how to prepare the quills and how to sew them on. Catching and killing a porcupine

requires some skill, since these animals are tough and fast and must be struck on the head repeatedly until they die (Levi 1956: 245). According to Landes (1938: 126), the quills were plucked out of a freshly killed porcupine, and steeped in hot water for several days until they become pliable. The quills, which are normally ovoid and resistant, were then easily flattened out by applying pressure with the thumbnail. They were dipped in dyes and left to dry. When used in embroidery, the quill was placed in a vertical position and each end was passed over and under a fine sinew thread loop. The old geometric designs characteristic of quill embroidery have all but disappeared with the introduction of beadwork.

Fishing

A year-round activity, fishing provided another critical food source for the traditional Ojibway society, particularly during severe game scarcity and famine. The rich fisheries found along the southern shores of Lake Superior were first described in detail by the Jesuit Father Dablon in 1670:

> It is almost everywhere so abundant in Sturgeon, Whitefish, Trout, Carp, and Herring, that a single Fisherman will catch in one night twenty large Sturgeon, or a hundred and fifty Whitefish, or eight hundred Herring, in one net... This manna begins in November, and lasts until the ice comes; and, the colder the weather becomes, the more fish one catches. These Herring are found in every part of the Lake on the South side, from Spring down to the end of the month of August; and a full list of all its fisheries would require a complete enumeration of all the coves and all the Rivers of this Lake. It is this that Providence has provided for these poor peoples, who, in default of hunting and of corn, live for the most part only on fish (JR Vol 55: 151-152).

Father Dablon's observations were very accurate, for throughout the historic period abundant fisheries (river mouths, inland lakeshores, and off-lakeshores [see Tanner 1986: Map 4]) provided a regular and storable supply of protein throughout the year and especially in winter. The Ojibway bands of northern Michigan were particularly dependent on fishing as their major food source. Thus, after 1836, treaties were signed with the US government to secure fishing rights wherever free access to fisheries was no longer possible for the bands (Doherty 1990: 10, 17). Nowadays, sports fishing has an important place in the economy of the reservations located near Lake Superior and other fisheries (Levi 1956: 252). Also greatly significant were the fisheries along the north shore of Lake Superior, and the sturgeon fisheries on Rainy Lake - Rainy River area, particularly at Grand Mound.

The organization of fishing was not much different from traditional hunting, in the sense that bands did not have exclusive ownership rights to fishing grounds but to the product of their work (but see Landes 1968). Hunting units were necessarily small because of the mobility required to track large game whereas fishing units were as large as a band. The large mild-season encampments were generally located near fisheries. Rich fisheries could be exploited by more than one band, however, fishery allotments applied when fish was less abundant (Doherty 1990: 3). Before the arrival of Europeans, a band returned to its traditional spring and fall fishing grounds year after year, as shown in archaeological excavations of fishing camps in the Western Great Lakes region (i.e., Cleland 1982: 761-784).

Fishing was a predominantly female industry, except in the coldest winter. The women would fish in spring, summer, and especially in the fall, right before the lakes froze and when the fish seemed to come closer to the shore. Densmore (1979: 125-127) and Levi (1956: 249-252) describe the fishing techniques used by the Ojibway, many of which they witnessed.

Seines. This was the general method of obtaining fish, particularly on Lake Superior, because it secured the largest results in both number and variety of fish (Levi 1956: 250). Traditional nets were made

of nettle-fiber twine, which were later replaced by manufactured twine obtained through the annuity system. Before placing the nets, a concoction made of finely ground calamus, sweet flag, and wild sarsaparilla was sprinkled on the nets as a charm to attract fish (Levi 1956: 219). The nets were secured to poles or canoe paddles and weighted with stones; they were left overnight and retrieved in the morning. After use the nets were thoroughly cleaned and dipped in a concoction of sumac leaves to remove the smell, for it was believed that smelly nets would warn the fish.

Spearing at night with a torch. The larger fish were speared and were best secured at night. The torch, fastened upright on the canoe, spread light over the water so that the occupant of the canoe could see the fish and spear them while he or she would remain invisible.

Spearing through the ice with a decoy. Decoy fish were made of wood with tails of birch bark and bodies weighted with lead. A person would cut a hole in the ice and lay flat beside it, under a small tent made of a blanket. The decoy was moved with one hand imitating life movements while the fish were speared with the other hand.

Fish traps. Traps for catching small fish were made of twigs and tree branches and placed in shallow water where the current would carry the fish into them. Large traps were used to catch sturgeon (5-6 ft. long) in Lake Superior. Mrs. Mary Warren English from White Earth, Minn., described to Densmore a traditional sturgeon trap placed at the confluence of the rivers and the lake. The trap was a framework built across the river. The framework was made by sinking heavy poles like piling not far apart. On top of these they placed heavy timber. Basswood cord was strung back and forth between the poles to form a net so that the fish could not pass. When the sturgeon came upon the net, the people sitting on the timbers would kill them with hooks and clubs.

Other Fishing Techniques. In addition to the major techniques described above, line fishing with a bait (a piece of blanket with a sinker) was used to catch bullpouts (catfish). Fishhooks were used as well; traditional fishhooks were made of deer bone. In later times fishhooks were made of wire, using them with lines of nettle-stalk fiber or basswood twine. A combination of cork and porcupine qwill was arranged as a "fishline bobber". Trolling was done by twisting a line around the wrist and then around the canoe paddle, which moved the line through the water.

Fish Processing. Fish was consumed fresh and dried. Broiling and boiling were the most common processing techniques for fresh fish. The fish heads, intestines, and eggs were also used for food production. In the winter fish was frozen without cleaning to preserve flavor. Fish would be dried on a rack over slow fire, or strung and hung in the sun. The dried fish would be packed in layers without salt and boiled when needed. Partially dried fish without bones or skin would be rubbed with maple sugar and packed in makuks (Densmore 1979: 42).

Wild Fowl Uses

In spring, abundant wild fowl could be caught at the lakeshores where fishing grounds were located. There is little information on specific fowl hunting and trapping techniques, however, wild fowl had a variety of food and nonfood uses. The species most commonly used were wild duck and geese, partridges, and pigeons. Partridges were looped with a loop and stick (Densmore 1979: 131). Fowl hunting was documented in oral history at the Nett Lake Reservation (NPS 2000). More detailed data are on the attached electronic ACCESS files.

Other Animal Uses

In addition to the main large and small game resources listed above, the Ojibway used numerous other animals for a variety of secular, medicinal, and ceremonial purposes. These are listed in the attached electronic ACCESS database tables and in the park-specific chapters.

Mineral Resources

The prehistoric use of minerals by native peoples in the New World, including North America, is known to have occurred. Prehistoric people in the Great Lakes region used a variety of metallic ores and native metals, both in their natural state and with some processing. Among the minerals used by people in the Great Lakes region were mercury sulfide, copper, silver, iron and lead ores, pigment clays, potting clays, sand, sandstone, and lakeshore cobbles (see electronic ACCESS database).

The relationship that the Ojibway have with the mineral resources in the Great Lakes region is less direct than that with the subsistence resources, but no less intrinsic to the culture. Several minerals occur in varying levels of abundance in the region, and many of these were regularly utilized in ritual and daily life by the Ojibway, both before and continuing after contact with Europeans. The archaeological record has provided clues to prehistoric use of minerals; and records kept by European missionaries, explorers, and traders document mineral uses since contact.

Ojibway use and knowledge of mineral resources in the Great Lakes region was probably first recorded by Jesuit missionaries arriving in the area in the mid-1600s. In *The Jesuit Relations and Allied Documents*, the journals of Fathers Allouez and Dablon recount the impressions of the priests as they came across Indians who regarded pieces of copper scattered across the landscape and in the water as gods or as gifts from deities. The missionaries had instructions to report on the validity of accounts that there were mines and deposits of copper in the Great Lakes region. Due to its potential for economic exploitation, copper was the mineral of most interest to Europeans among the several which were utilized by the Indians living in the area. In most cases, Europeans were led to copper deposits by Indians in the area.

Copper in Prehistory

It is known that prehistoric people in the Great Lakes region mined and used copper and other minerals to manufacture a variety of artifacts. Radiocarbon dating on charcoal taken from two pits on Isle Royale in 1953 and 1955 dated mining activity at 3800 years ago, but more recent date estimates indicate mining of this metal was even earlier (Clark 1988). Drier and DuTemple (1961: 11) state that there are an estimated 5000 prehistoric mining pits around Lake Superior, most on the Keweenaw Peninsula.

The prehistoric process of extracting copper is thought to have consisted of building a fire on a lode and heating the rock, then throwing water on the heated rock to cause it to crack. If the broken rock contained copper, stone mauls were used to break away the remaining rock and obtain the native copper (Drier and DuTemple 1961: 28).

Prehistoric copper artifacts include mining implements such as wedges (Drier and DuTemple 1961: 50), other utilitarian items such as spearheads (Drier and DuTemple 1961: 31), and a variety of ceremonial items (Halsey 1996: 11, 15). Implements were formed by heating and hammering the native copper (Halsey 1996: 24). There is no evidence of smelting or casting.

Historic Copper

A direct link between the prehistoric miners and the Indian groups living in the area during historic times has not been made. A historical outline of Lake Superior copper says,

> The Ojibways, who were found in possession of the southern shore of Lake Superior by the first white men arriving at this inland sea, were but slightly acquainted with the practical use of copper and even had no legends regarding the mining done by their predecessors (Fisher quoted in Drier & DuTemple 1961: 199).

However, there are many accounts of European explorers who came across Ojibway who had knowledge of or were in possession of copper. An early account by LaGarde published in France in 1636 says the Indians he came across worshipped Lake Superior as a divinity and that the pieces of copper which were commonly found in the water were considered divinities or gifts from water gods (Drier and DuTemple 1961: 37). A notation on Lake Superior copper in the Jesuit Relations of 1659-60 says the Ojibway had few copper implements, but that most copper in their possession was in the form of nuggets. The nuggets were said to be worshipped by the Indians as works of "Gitchie Manitou" (Drier and DuTemple 1961: 200). West (1929: 45) summarizes observations by European explorers, including Samuel Champlain, P. Esprit Radisson, Alexander Henry, and Chrysostom Veryst, about Ojibway use of copper ornaments and implements. He, however, considers that these were either heirlooms or expediently made artifacts from pieces of native copper, and further asserts that no native copper mining took place after the arrival of Europeans. West also supports the observation that copper, and metal in general, was consider a sacred gift by the Ojibway rather than a utilitarian raw material.

In the Jesuit Relations of 1666-67, Father Allouez discusses Lake Superior and the relationship the Indians had with the copper that could be found on its shores:

> One often finds at the bottom of the water pieces of pure copper, of ten and fifteen livres? weight. I have several times seen such pieces in the Savages? hands; and, since they are superstitious, they keep them as so many divinities, or as presents which the gods dwelling beneath the water have given them, and on which their welfare is to depend. For this reason they preserve these pieces of copper, wrapped up, among their most precious possessions. Some have kept them for more than fifty years; others have had them in their families from time immemorial, and cherish them as household gods [JR Vol 54 : 265-267].

Another Jesuit, Father Dablon, recounted in his journal of 1669 a legend regarding copper told to him by the Indians living near Lake Superior. The legend was told to him after inquiries were made as to the whereabouts of copper. The story tells of four Indians who landed on an island after having lost their way in the fog. In preparing themselves a meal, the Indians had used a usual method which was to heat stones red hot in a fire and add them to a birch bark container of water to bring the water to boil. The heated water was then used to cook meat. The men gathered stones from the water's edge for this purpose. With the stones were included pieces of copper which were found in abundance on the island. After the meal, the Indians hastily departed for home, being fearful of the Lynxes and Hares, which were large enough to overpower them and eat their supplies and canoe.

Before departing, the four Indians loaded the canoe with stones and slabs of copper to take home. Not far from the shore a voice called out angrily, "Who are those robbers carrying off from me my children's cradles and playthings?" The cradles were explained to be the copper slabs, because of the resemblance to the simple construction of wooden boards comprising the cradleboard. Indian children used pieces of copper as playthings. The unidentified voice terrified the already edgy Indians. Dablon recounts that some said it was the voice of Thunder, because of the frequency of storms on the lake. Others said it was a spirit named Missibizi, the god of the waters. Another explanation was *Memogovissiouis*, a people who live in the water. According to the legend, one of the four travelers died of fright soon after hearing the voice. Another two died before reaching land. The remaining Indian survived to tell of the ordeal, but died shortly afterward.

The Indians Dablon encountered had not been to the island since, fearing spirits who would kill those who approached. At the time the legend was told to Dablon, no one alive could recall anyone who had been to the island, or even sailed in its direction.

Dablon gave his interpretation of what he believed to have happened, saying that the deaths of the four Indians were probably due to their consuming water in which copper had been heated. He explained that copper when heated for the first time emits poisonous vapors, which were probably transferred to the water. The effects can take varying lengths of time to manifest in different individuals, thus explaining to him the voice heard by the Indians and the differing times of death (JR Vol 54: 153-159). Dablon also described various places and situations in which the Indians reported finding copper. Among these were several large boulders partly submerged in water. Curiously, Dablon later writes of *buying* a slab of copper from the Indians (JR Vol 54: 163).

The German traveler Johann G. Kohl, who lived among the Ojibway of Lake Superior during the mid-1800s, wrote some observations about the use of native copper at the time:

> Among the dead stuffs of nature, the dwellers on Lake Superior seem to feel the most superstitious reverence for copper, which is so often found on the surface-soil in a remarkable state of purity. They frequently carry small pieces of copper ore about with them in their medicine-bags; they are carefully wrapped up in paper, handed down from father to son, and wonderful power is ascribed to them.

Large masses of metallic copper are found at times in their forests. They lie like erratic blocks among the other rocks, and were probably, at first, regarded as common stones, until an Indian hit on the idea of trying their weight, or giving them a blow with a hammer, by which the unusual weight, firmness, and toughness of the ore were detected...thus these masses of copper began to be regarded by nearly all the Ojibeways as something highly mysterious, and were raised to the dignity of idols (Kohl 1956: 60).

According to Kohl (1956: 61), during the early nineteenth century fur traders often tried to bargain with the Indians to guide them to areas where surface copper ores were located. Occasionally, an Indian guide would remove a copper boulder, leaving an offering of tobacco in the place of the boulder. Anglo-Europeans eventually discovered the rich mineral deposits in the area.

Silver

Native silver does not occur with as much frequency as does copper in the Great Lakes region. Small amounts occur in the region of western Lake Superior, sometimes combined with native copper (Kohl 1956: 64). Halsey (1996: 5) states that prehistoric artisans rarely used silver, however there are infrequent instances of worked silver occurring in the archaeological record. A study of Hopewellian-like artifacts in Wisconsin unearthed a “silver button” among burial objects (McKern 1931: 217). Masses of native silver have been detected in prehistoric copper artifacts (Drier and DuTemple 1961: 24). No information on historic Ojibway use of native silver was found. However, European silver artifacts, particularly jewelry, became priceless objects for the Ojibway, who would add silver objects to traditional ones in just about every form of adornment. Peter Grant, for example gave the following account of silver use around 1800:

> Their intercourse with us has given them such an idea of the value of silver, that nothing in their estimation is so valuable and so becoming to set off their persons as trinkets made of that metal (Grant 1804, cited in Kinietz 1947: 36).

There is little information about the means by which silver objects were acquired, or whether Ojibway engaged in silversmithing after the European colonization. Brass wire, probably acquired along with European silver, was also used for personal adornment.

Lead

Lead's primary ore, galena (lead sulfide), was used prehistorically and historically by Native peoples in the Great Lakes region. Galena is known to have been used by prehistoric peoples ritually. Use of galena by the Mississippian peoples was restricted to certain members of society. It was used to decorate sacred objects and as body paint by warriors and priests (Halsey 1996: 18-20). Galena was scraped to produce a glittering dust, which was mixed with grease to produce paint pigment. Worked and unworked blocks of galena have been found in graves in Michigan and Wisconsin dating from the Late Archaic and Early Woodland periods (Halsey 1996: 19). Thus far, we have found no historical information on the use of galena. However, lead bars obtained from the annuities were melted for several purposes, one of which being the manufacture of lead inlays on pipe bowls, and the preparation of an alloy called "white lead" (Densmore 1979: 144). The alloy was lead melted with a harder metal, but still soft enough to allow the carving of design on pipe bowls and for shaping it into a variety of objects.

Red Pigments

Red pigments made from various minerals are known to have been used by Native peoples in the Great Lakes region. Red paint was used both prehistorically and historically to decorate faces and bodies ceremonially. Powdered mineral substances of red hue have also been sprinkled on graves. Red pigments were used widely for making pictographs (Mallery 1886: 33).

Vermilion. Vermilion or cinnabar is a rare form of mercury sulfide used by the Ojibway to make paint. Ethnohistoric sources indicate vermilion was highly prized and sought by the Ojibway at contact. Vermilion has been important in Ojibway culture since early historic times for use as a ceremonial face and body paint and as a dye for charms, Mide drums, and other ceremonial items. The mineral was obtained from lakeshores and old riverbeds. The Sault Ste. Marie trader John Johnston reported the location of a cinnabar deposit at Vermilion Point near the mouth of the Two Hearted River in upper Michigan (Masson 1960: 151). The Ojibway skimmed the material from the surface of the water and scooped it from the bottom of waterbeds. Then they boiled it. The resultant dye was either a vermilion color, *wunamon* or a yellow ocher *ozanamon*. This substance was used either as a dye or fixative, but other vegetable and mineral ingredients were added to produce different shades and blends (Levi 1956: 261).

Sometime between 1893 and 1895 Jacques LePique, an Ojibway gentleman, narrated to H.H. Kidder a legend of the origin of the use of vermilion paint. According to the tale, an orphan girl who was abused by her foster parents decided to run away and die in the woods. She walked all night and at sunrise fell asleep next to a lake. When she woke, she found a woman standing before her. The woman told her she was not to die there. Instead, the woman fed her and said, "We have something you must do for us." The girl was given instructions to go to the woman's lodge where she would find an old woman that would tell her what to do. The girl rode on the head of a huge serpent across the lake to the lodge where she found an old woman. The girl sat down next to the old woman.

The old woman said: "We have sent for you, my child, because we wish to teach you to be a Mide, so that you may go back to your people and teach others to be Midewug." The story took place in the time before Midewug. The old woman then told the girl: "We will begin when my sons return. But first I will give you vermilion paint for the ceremony. I am the Old Vermilion Grandmother. Under this mat you will find a tomahawk. You must cut off the top of my head and take out the vermilion paint." The girl did as she was told and when she was finished, she replaced the piece of the old woman's head. The old woman then said:

"My granddaughter, I have given you my vermilion to use in years to come. You must always paint yourself with it whenever you are to perform the ceremonies that we shall teach you."

The old woman and her sons went on to teach the young girl for seven days all the knowledge and secrets of the Mide. The girl then went back to her village to teach others. This was how the Midewiwin began and how vermilion paint came to be used in the Medicine society (Bourgeois 1994: 52-54). This story also tells how the first Mide was a woman, thus illustrating the importance of women in the Medicine society.

After European contact, vermilion came to be regarded as a trade item, and red aniline dyes imported from the Old World became available. Among other goods, Europeans traded vermilion "..In small, flat packages-much valued by Indians for face and body paint"?for rice supplied by the Ojibway (Vennum 1988: 208). Vermilion was one of the principal trade articles and one which was imperative for every official transaction (Kinietz 1947: 38). According to Leackock (1954: 2), during the height of the fur trade vermilion paint was obtained from a certain location on a Mistassini Indian's lands. Any Indian from the Mistassini or another band could enter the territory and take what he needed without payment or permission, although it was agreed that he could not take an additional amount for trade.

Iron ore. "Red ocher" represents a wide variety of what are basically red paints, most produced from a form of iron oxide. Deep mines located at iron oxide deposits indicate prehistoric people in the Great Lakes region sought the oxide. In an article by Ritzenthaler and Quimby (1962), entitled "The Red Ocher Culture of the Western Great Lakes and Adjacent Areas," hematite (also known as red ocher) has been found to have been regularly spread over burials during the Late Archaic and Early Woodland periods of Great Lakes culture.

In historic times, Densmore described a process used by the Ojibway of gathering the "reddish substance" found at the surface of certain springs, drying and baking it in a fire. The then hard object was powdered and the red powder mixed with grease to make paint. The paint was used on arrows and to paint faces and bodies (Densmore 1979: 370). Hematite, the most abundant of iron ores, was used ritually as body paint (Halsey 1996: 23). Grant (cited in Kinietz 1947: 38) and Kohl (1956: 14) observed that body paint was an essential part of festive and ritual dressing, and without them any individual would be considered *en deshabillé.*

Other Iron. Prehistoric people used taconite, an iron silicate, in many of its forms for utilitarian and ceremonial purposes. Taconite was chipped and flaked into projectile points (Halsey 1996:20). The Middle Woodland Hopewellian peoples made use of rare meteoric iron in constructing artifacts. From their mounds archaeologists have taken a wide variety of artifacts made entirely or partly of iron silicate (Halsey 1996: 21). There is no information about its use in historic times.

Natural Dyes

There is little detailed information about the nature and composition of natural mineral dyes. Densmore (1979) briefly refers to plant dyes prepared traditionally (see plant section). Kinietz (1947: 38) observes that the native dyes yielded pastel shades that were very attractive to the Europeans but apparently considered inferior by the Indians to the brilliant scarlets, greens, yellows, blues, and purples introduced from Europe. Red aniline eventually replaced native red dyes.

Clays

White and blue clays were used in body painting (Kinietz 1947: 38) as well as for dyeing certain objects used in races and games. Red and black clays were usually found near springs. Items to be dyed, such as rushes, were buried in the clay for several days until a satisfactory color was obtained. Black clay

was also used as a coloring ingredient with other substances. Reddish earth was collected, dried, and baked in fire until it became hard as stone. The reddish bricks were pounded into a fine powder, which was used as a dye, and for painting the face. Grindstone dust was a mineral commonly used as a fixative (Levi 1956: 261). The use of clay to make pottery is known archaeologically, both in late prehistoric and historic occupations around Lake Superior (Wright 1965). Densmore's informants recalled that in earlier times people would bake pottery in the fire; that pottery was "made of clay and sand, mixed with a little glue." (Densmore 1979: 162). Pottery was placed as a burial offering perhaps until the nineteenth century (Densmore 1979: 163).

Pipe Stones

Catlinite and other soft stones were carved to make calumet pipe bowls. Catlinite quarries associated with totemic pictographs are known in Minnesota (Mallery 1886: 33). The Ojibway have two kinds of pipes, one for ordinary and one for ceremonial uses. The bowl of the ceremonial pipe was made of red catlinite taken from the sacred quarries mentioned above, even though this material occurred in other areas of Minnesota and Canada. The bowl of the ordinary pipe was made of clay, limestone, pipestone, rocks, or bone (Levi 1956: 264). Black pipestone or steatite was obtained from quarries in central Wisconsin (Densmore 1979: 144) and had a wide distribution that reached Rainy Lake (see Zedeno and Basaldu (2000) for a detailed discussion of pipestones).

Use of Landscape Features

One aspect of resource use yet unexplored in any systematic fashion is the selective use of features of the natural landscape for a variety of activities. Information on Ojibway geography is scattered throughout the numerous accounts of exploration and missionization in the Western Great Lakes region. The degree of detail and quality of each observation found in this literature depends on the individual's personal interests and mission, his priorities in terms of what he recorded, and his ability to transfer to journals what he observed. More recent ethnographic and ethnohistoric analyses of Ojibway culture and society (e.g., Hickerson 1970, 1974; Densmore 1928, 1979; Landes 1938; Kinietz 1947; Levi 1956; Tanner 1986) have focused on its structure and function and the history of its political developments and thus do not take into account the specifics of landscape use.

The lack of detailed information on landscape use is a greater loss when one takes into account that archaeological remains left by the Ojibway bands are scarce across the region and may mislead a reader into thinking that no occupation took place in a particular area. What little data, that one can recover from the historic period literature provide a framework for understanding Ojibway land and resource use, expands the data furnished by archaeology. As Nicollet (1970: 149) pointed out during his 1836-37 voyage into the upper Mississippi basin, Ojibway geography is far richer in description and content than conventional geography; their place and topographic names often refer to experiences and events lived at certain locations, thus providing a glimpse at their land use history.

Based on ethnographic fieldwork, this study has developed a classification of landscape features for which there are data on specific use(s) (see park-specific chapters for contemporary uses). Here we provide a brief summary of historical information found thus far on Ojibway use of landscape features.

A Classification of Landscape Features

Landscape features used historically or ethnographically by Ojibway people may be subsumed under three main classes: water forms, shoreline forms, and inland forms. Each of these classes, in turn, has a number of feature types:

Water Forms
great lakes
inland lakes
river mouths
waterfalls/rapids
springs

Shoreline Forms
sandy beaches
coves and sheltered bays
cliffs/rock ledges/promontories
shoreline caves
trees growing on rocks

Inland Forms
high points and hills
dunes
passes
portages
stands of old growth
wet and dry flats

Water Forms. Ojibway culture and society is centered on a water-based ecosystem. Water forms figure in the origin stories, beginning with the Atlantic Ocean, where the Megis shell appeared to the people and told them to begin their westward migration, and the St. Laurence River, which was their main waterway into the Great Lakes region (Benton-Banai 1988: 1). Nanabozho's journey to find his father is full of water form allegories, including the Niagara Falls (*Kitchi-ka'-be-kong),* seen as a source of great power to give and take life, and the Mississippi River (M*ichi-zee-bee),* described as the greatest of rivers and the center of all waterways (Benton-Banai 1988: 37-38).

The Ojibway migration tradition also mentions water forms such as riverways, waterfalls, river confluences, and lakes which the people used as landmarks and paths to their destination place: Madeline Island in Lake Superior. Inland lakes and spring-fed waterholes also figure in oral history as the abodes of good and evil manitos (Kane 1986 [1897]). Origin stories place the canoe as the first of human creations that allowed Nanabozho to cross the great water, hence becoming the main mode of transportation across the waterways (Benton-Banai 1988: 12). Ojibway maps etched on bark scrolls used the waterways as reference points to record historical events in which traveling individuals, families, and bands participated (Densmore 1979; Nicollet 1970).

Since the seventeenth century, missionaries and explorers made observations on the use of waterways and water resources by the Ojibway. For example, during his voyage to Pictured Rocks Radisson (1961: 190) described how the Indians revered the spirits of lakes and waterfalls, offering pieces of copper and other sacred objects to its waters (see also Carver 1956 [1766]: 382). More abundant are observations about the use of the water forms for subsistence activities. The Sault Ste. Marie rapids (*bawating),* for example, were known for their rich fisheries. Fishing along Lake Superior and Lake Michigan shores, and on rivers and river mouths has been described in detail (Dablon's 1670 relation, JR 54: 129-131; see also Blackbird 1887: 11 for Lake Michigan; Carver 1956: 142). Inland lakes were a source of fish for groups living in the interior regions, and some derived their name from this activity; for example, the Ojibway name

for Lac du Flambeau is *Wausswaugunning* or "The Place of Torch Fishing" (Johnston 1990: 8). As we describe in the following chapters, water forms constitute not only a primary source of food but also the guiding principle of Ojibway cultural geography.

Shoreline Forms. Little has been recorded of Ojibway use of shoreline forms in historic times. Yet, geographical descriptions of Lake Superior, Lake Michigan, and Rainy Lake shorelines, and of the St. Croix River and Mississippi River banks, indicate that these landscape features afforded numerous useful places for subsistence, habitation, and religious activities (eg., Radisson 1961; Gilman 1836; Nicollet 1970; Carver 1956). Furthermore, many of these shoreline forms were useful locational markers where Indian people often left messages for traveling parties. As Graham (1998: 17) notes, the Ojibway have lived on shorelines for so long that almost every promontory and every bay has an origin story or historical event connected to it.

Sandy beaches and coves or sheltered bays, such as those found intermittently along the southern shore of Lake Superior (e.g., Miners beach, Grand Marais; Raspberry Beach, Sand Point), were choice camping places for Ojibway parties traveling by canoe. These features offered dry ground and protection from the elements; fishing and hunting in the immediate higher grounds also afforded subsistence means for campers (Gilman 1836; Graham 1998). Southern-facing sandy beaches made good wintering grounds (e.g., Garden Peninsula), particularly if these were located near forested areas that promised bountiful game (Bourgeois 1994: 16).

Cliffs, rock ledges, and promontories were crucial landmarks for fishermen and traveling parties, because of their visibility from the lake waters. Schoolcraft (1992 [1821]: 107) described some of these features in Lake Superior, noting that from a distance they present "a terrible array of dilapidated battlements and desolate towers." Miners Castle, for example, can be seen from Grand Island. Oral history of the Grand Island band mentions that rock ledges that project horizontally above the beach, as those seen in Miners Beach, were customary places for women's coming of age fasting and seclusion (Graham 1998: 46). Along the rocky shores, scoured pits on sandstone were used as cooking pits for feasting occasions (Graham 1998: 17). Caves on or near rocky coasts were also looked upon as refuges or hiding places (Conway and Conway 1990: 67); at least one such cave in Mackinaw Island is known to have contained a grave (Gilman 1836: 107).

Rocky river banks, river/lake confluences, and narrows, are places where pictographs may be found, provided that there are rock faces where painting is feasible. For example, Miners Castle is marked with a red-painted cupule where it is said that, in 1669, Father Marquette planted a cross and celebrated mass to convert the local Indians (Hanscom-Castle 1987 [1906]: 9). Pictographs on rocky banks are found at the confluence of the Moose River and Namakan Lake, on Namakan Narrows, on Surveyors Island on Rainy Lake, and in Quentico Provincial Park and superior National Forest (Conway 1993). Pictographs are also found on the middle St. Croix River, on a river bend. The Agawa Rock, on eastern Lake Superior 60 miles north of the Sault St. Marie, is located on a narrow between the lakeshore and a group of rocky islands that hide the rock face. Such places were loci of multiple activities, from writing commemorative messages about specific events (Nicollet 1970: 51-52) to performing Midewiwin initiation rites (Conway and Conway 1990: 55, 61).

Sacred islands or islands containing special sacred resources (like spring lakes) abound in the great lakes and inland lakes alike. Examples include Madeline Island and Isle Royale in Lake Superior, and North Manitou Island in Lake Michigan. A particular island in Nett Lake, Minnesota, is of special interest because of its landscape characteristics and cultural resources. "Picture Island" is a low rocky formation in Nett Lake that contains several pictographs of human beings, dance scenes, and outlines of animal and spirit beings (Reagan 1958: 8). Picture Island itself is unique in its topography: the island surface has a hollow sound

when tapped or stepped on, and the Ojibway call it "Drum Island," a place where spirits reside. The island receives offerings of tobacco, clothing, and food. Picture Island figures in the Bois Forte Ojibway migration tradition that speaks of them moving to Nett Lake from Vermilion Lake. On their journey they came upon Picture Island and saw a multitude of beings that were half sea lion and half fish. The party was pursued and fled, but eventually the men were pulled down to the lake bottom and disappeared "as if they had been caught in a net." For this reason the lake is call *Netor as-sab-a-co-na* or "the lake with a net." People came back searching for them and when they came upon the island found the pictographs left by the half lion, half fish beings (Reagan 1958: 10). To this day, the Ojibway do not visit most islands in certain lakes, such as Kabetogama Lake, because they considered them taboo.

Ojibways could recognize individual trees by their unique growth marks, shape, and association with other features. This is the reason for including shoreline trees as landscape features, because they were frequently used as landmarks. Such is the case, for example, of the *Arbre Croche,* French words meaning "crooked tree." Blackbird (1887: 10) tells that, when the Ottawa Indians first came to the northeast shore of Lake Michigan, a great pine with a very crooked top stood by the shore where the first village in Little Traverse Bay was built. The party called the tree *Waw-gaw-naw-ke-zee* or crooked top of the tree. The tree eventually became a shoreline landmark for Ottawa and Ojibway canoe parties and its name the name of a stretch of shore, from Middle Village to Cross Village. The "Witch Tree" at the Grand Portage Reservation is an old cedar and a centuries-old Ojibway shrine, where they left offerings to appease the storm spirits of Lake Superior (Danzinger 1979: 45). Trail-marker trees, such as that found at the head of a trail in Stockton Island (APIS), Wisconsin, were intentionally modified to acquire a specific angular shape. A sapling would be bent and tied to a stake buried in the ground; alternatively, the sapling would be broken. The tree would then grow with a horizontal angular bent in its trunk, the angle pointing in one direction or another (Ritzenthaler 1965: 183).

Inland Forms. In the open areas of the interior, particularly the forest-prairie ecotones, high points and hills served similar functions as locational markers and viewpoints as those attributed to shoreline cliffs and promontories. Radisson (1961: 136), for example, described a hill between two lakes and rivers in Minnesota that was chosen for an intertribal spring rendezvous because it could be seen from afar. Hills and high points were preferred observation places during war. High ground near water was also selected for cemeteries (Hinsdale 1931). Dunes located either along the shoreline (e.g., Sleeping Bear Dunes, Au Sable Dunes) or inland (dune fields near St. Croix Valley) had multiple uses. In addition to being locational markers, burial grounds, and observation places, they were also used as individual vision quest sites. Gilman (1836: 19-22) relates that in his excursion to Au Sable Dunes his party came across a spirit house and, a short distance from it, a dream lodge, or one-person camp used during fasting and vision quests. Dunes were also used for burying sacred objects, such as old drums, as indicated by recent NAGPRA consultation at SLBE.

Stands of old growth, containing giant trees (*Ween-di-goo'-mi-tig')* or "Grandfather trees" may be seen as landscape features in their own right, as they mark places where ancestral spirits lived. Grandfather trees figure in origin stories as the place where *Bug-way-ji-nini,* or the ancestral caretaker of the forests and mountains appeared to Nanabozho, the place where he met thunder, lightening, and wind, and the place where it was revealed to him the power of flintstone quarries (Benton-Banai 1988: 44-48). In modern times, the symbolic significance of old growth has increased in direct proportion to its scarcity.

Finally, flats, particularly wet flats or sloughs, are important as places where rice grows. They appear in origin and migration stories. Their western migration destination was described by the Third Prophet to the ancient Ojibways as "the land where food grow on water" (Benton-Banai 1988: 89). Wet flats are sources of important craft woods, such as black ash (Quackenbush 1995), and unique medicinal plants.

CHAPTER SIX

FROM HISTORICAL VIEWS TO CONTEMPORARY CONCERNS: THE OJIBWAY PERSPECTIVE

The purpose of this chapter is to make a transition from past to contemporary views of Ojibway natural and cultural resource use in the Western Great Lakes. Up to this point in the report we have viewed the Ojibway people though travelers' accounts, previously published reports, and Ojibway statements made in earlier times. This chapter uses the contemporary voices of the Ojibway people to explain the extent to which they continue to perceive as culturally significant the ethnographic resources of the Western Great Lakes.

Highlighted in this chapter is evidence of specific Ojibway cultural continuities from the past to the present, the influence of contemporary Ojibway statements on the study data collection instruments, and a brief introduction to the remainder of the report.

Contemporary Ojibway Self Voicing

Perhaps the most telling indication that the Ojibway people continue to view the Western Great Lakes region as being culturally important is their interest and active participation in this study. From the first moment they were contacted, most of the tribal governments who are currently participating in this study were enthusiastic about sharing their views of this region with the National Park Service. Some tribes held back slightly until they received more information about the purpose of the study and its potential usefulness to Indian people. Generally, all the tribes participated because they wished to have their story told in the parks and have their resources better protected.

During the summer of 1997 when UofA team members visited with many of the Ojibway tribal governments it became obvious that the tribes were actively telling their story and preparing materials designed to convey the general message *This land is ours and we care about it*. These materials ranged in scale and level of effort from inexpensive one-page local histories to tribal museum exhibits. The small publications are used to stimulate initial interest in Ojibway culture. When a visitor desires more information there are a number of options the tribes provide. Among these (but certainly not limited to this list) are more extensive leaflets, videos, museums, libraries-archives, and even formal ethnohistories and other publications of the tribe.

Leaflets

One tribe provides a small (less than a page) paper leaflet that is given to all tourists who visit the Boise Forte Hotel in northern Minnesota. Under the title *Area Tribe History* the leaflet says,

> The land around Lake Vermilion has been home to Native Americans for many centuries. Before the miners, before the fur traders, before the explorers, the Ojibwe—commonly referred to as the Chippewa—found a land rich with fish and game. They call the great lake Sah-Ga-Ea-Gum-Wah-Ma-Mah-Nee, or "lake-of-the-sunset-glow." Today, hundreds of years later, many of their direct descendants remain right here on tribal land. We are the Bois Forte Band of Chippewa. We welcome you and are proud to be your hosts.

Another tribe has a casino restaurant menu that proclaims on the cover, *We welcome you to Restaurant Katikitegoning in the Chippewa village of Lac Vieux Desert*. Inside the front cover of this menu, which is designed to be taken away by the visitor, it provides the following local history,

Katikitegoning is the Chippewa name for the beautiful lake now known as Lac Vieux Desert. The Lake Superior Chippewa Indians have cared for this land since at least 1791. They are a nation of wise and intelligent leaders, non-obtrusive, talkative and happy people.

The tribe originally lived on South Island in Lac Vieux Desert until they moved to the south shore of the lake around 1880. Fishing, hunting and gathering natural foods has sustained the members of the Lac Vieux Desert Band for years.

After the treaty of 1854, a large portion of the Lac Vieux Desert Band returned to this village from the established reservation at L'Anse. When the ceded Indian lands were placed on public sale, the Indians of Katikitegon pooled part of the yield of their winter hunting and took the furs to the Public Land Office in Marquette to purchase the land they were living on.

Welcome to Katikitegon!

This menu, like so many other paper leaflets currently being produced by Ojibway tribes, is designed to educate rather than sell. It reflects the observation that most of what has been said or written about the Ojibway people has been by someone other than a tribal member – often someone who benefited by denigrating Ojibway culture. Today, the Ojibway people are using what power they have to counter past images provided by others with images that reflect how they view themselves. The menu ends with the seal of the Lac Vieux Desert Band of Lake Superior Chippewa Indians and a short text entitled "The Lesson."

The Great Spirit called men to himself from the four corners of the Earth.

He gave the child the medicine of sweet grass, blessed him with the virtue of trust and sent him to the East with the Eagle to protect the air.

He gave the young man the virtue of love and the gift of cedar and sent him to the south to care for the waters with the help of the muskrat who brought earth back up to man after the great flood.

The warrior he sent to the west with the bear and blessed him with strength and the medicine of sage to guard the land.

He gave the elder wisdom and the gift of tobacco and sent him to the north with the deer to watch over everyone.

And the drum he gave them to hold the songs of the community and bring them together. On the drum is the path of the sun from East to West between the land and the sky. This the path we all must travel – from trust to love to strength and finally to wisdom before our lives are done.

In this small menu provided for free in a casino restaurant is the central message of this report. Although the message becomes much more complex when elders are given hours to talk and tape recorders document all they have to say, the message remains crystal clear. It is *this is our land, we are directly connected to the plants and animals of the land, and we are still here*.

Small handouts or leaflets exist for most Ojibway tribes and these serve as an intellectual stimulus for visitors to Indian facilities to ask for more detailed information. Other written media may include newsletters and newspapers, such as the *News from the Sloughs*, the Bad River's monthly newspaper, and the Sault St. Marie tribal newspaper *Win Awenen Nisitotung*. Newspaper such as these two examples reach a broad regional audience.

Video and Radio

Most tribes are producing videos. Sometimes the content is about a specific activity, other times it is an attempt to clarify historical events. One such video, produced by the Mille Lacs Band Government, is entitled "Woodland: the Story of the Mille Lacs Ojibwe." On the cover the tribe describes the video as

> Our story tells of a People who have held on to dignity and cultural identity in spite of many hardships during the past 100 years—and we are proud to share it though *The Woodland – The Story of the Mille Lacs Ojibwe.*
>
> This film reveals the tragedies and triumphs of our past. So we dedicate it to all Mille Lacs Anishinabe – especially to those who have bravely carried our culture and traditions forward for the future of our People.

These tribal videos are easily understood and are generally effective at illustrating the places and topics under discussion. When visitors want more detailed information and contact with living Ojibway people they go to museums and interpretive centers.

Some tribes also have their own radio programs, which include educational programs and emphasize native language uses.

Museums and Interpretive or Visitor Centers

Tribal people regularly participate in interpretative programs. The Mille Lacs Band, for example, sponsors a group of elders who work at the tribal museum that is jointly operated by Minnesota Historical Society and the tribe. This group is a critical part of the museum; elders serve both as advisors and interpreters. They produce traditional crafts in the museum while accomplishing their other task. Red Lake tribal elders have worked in Itasca State Park in northern Minnesota as part of an on-going interpretation program. Most tribes sponsor talks by elders in local schools. The Red Cliff tribal elders have an oral history project running during the summer in high school summer youth camps; elders also teach Ojibway history and traditions in regional community colleges. The Rainy River First Nations manage the Nah-Chik-Wah-Nung Historical Centre in Ontario.

Libraries and Archives

Libraries and archives are places where these tribes place materials that reflect their current cultural interests as well as desire to learn about other peoples, places, and things. Most tribal libraries are modest in size and tend to be located in tribal schools. As such they will emphasize the reading needs of K-12 students and not be attached with archives. When there is a formal tribal library it tends to be focussed on adult users and may have an active archive. Together these two knowledge repositories often function to stimulate as well as preserve culture.

The Red Lake library functions very much in this way and has its own brochure that is distributed by the Tribal Informational Center. That brochure describes the archives and library resources that include photographs, music, maps, oral history tapes, genealogical materials, artwork, and artifacts. In addition, it states the tribe's philosophy behind the archives and library,

> We are the Ancestors of those who are yet unborn. Our Ancestors had a very rich culture with much tradition. The greatest of these traditions was the importance of teaching the culture and heritage to the next generation. Now it is up to us! We must make sure that our history is passed on to future generations and never forgotten. Come Learn and Be Proud.

Ethnohistories

Each Ojibway tribe visited in the summer of 1997 was asked if there were books that generally represent how the people see themselves, their history, and their attachments to the land. In most cases tribes had both a book and an academic scholar with whom they identify, such as Warren (1984) or Blackbird (1887). In modern cases the scholar may be a tribal member (Dr. Rick St. Germaine), a noted anthropologist such as Cleland (1992) and Graham (1998), or a writer and scholar who can translate a tribe's view into a book produced completely with tribal funding and design (Weeks 1992).

These academic works voice the Ojibway people, telling their stories in ways they believe is true. For example, Dr. St. Germaine is an educator and tribal historian. He has written a book on his tribe [Red Lake] and wants to give the publishing rights to the tribe. According to a phone conversation with Dr. St. Germaine (July 25, 1997), "Our people have significant places all over, for example, pipestone sources and burials. We try to protect these by purchasing them back whenever possible." Weeks (1992: vi) notes in the Preface to his book that,

> The folly of trying to explain in non-Indian ways was taken to heart in the preparation of this Tribal History Project for the Grand Traverse Band of Ottawa and Chippewa Indians [GTB]. For the most part, the steps leading to federal recognition, and what happened in the subsequent decade, are told by GTB members themselves.
>
> Of necessity, some early history is summarized from the only sources who recorded it, mostly non-Indian sources. Nonetheless, *even this material is presented from the Indian perspective* (emphasis added).
>
> The GTB Tribal Council asked for a Tribal History to be written exclusively for Tribal members. To a large extent, because this book relies extensively on quotes of those who have lived it, this is a history for GTB members told by GTB members.

It is critically important to read and use self-voicing materials when trying to understand contemporary issues from an Ojibway perspective. Today, tribes are investing in research that brings their cultural and natural resource perspectives to the local, regional, national, and international publics; the ultimate goal is to balance Western historical perspectives of Native Americans with their own.

When the range of self-voicing sources are reviewed, it is clear that the Ojibway people have deep and broad ethnographic resource interests in the Western Great Lakes. Cultural changes have occurred for these Indian people just as they have for all people over the past few hundred years. Nonetheless, Ojibway people are culturally attached to places, things, and historic events even though the nature of this attachment today may be different from what it was a hundred years ago. Wild rice for example, was once central in the Ojibway diet, a centrality that it does not have today. On the other hand, wild rice was once central in their

ceremonial life and today it retains this ceremonial centrality. Some places, things, and events have assumed new meanings today as the Ojibway reassess who they are at the beginning of the twenty-first century. What once may have been viewed as common Indian knowledge about moose or trout, can be understood today as the critical teachings that laid the intellectual and experiential foundations for regional environmentalist pioneers such Ernest Oberholtzer. So like all humans, Ojibway people take natural, cultural, and historic experiences from their past and apply them to their present and future.

Yet another media to consider is the World Wide Web, which provides tribes with the opportunity to communicate with and educate the public in an affordable and far-reaching manner.

Range of Contemporary Ojibway Resources

A central question for this study is "how many and what kinds of natural and cultural resources in the Western Great Lakes are currently culturally significant to the Ojibway people?"

The Ojibway people themselves are interested in this question and have funded their own studies of contemporary plant uses both on and off-reserved lands. One example is a study conducted as part of the *Integrated Natural Resource Management Plan for the Red Lake Reservation* (Red Lake Tribe 1996). This study collected open-ended and survey data regarding this topic having questions on (1) fisheries, (2) clearcutting, (3) herbicides and pesticides, (4) wildlife management, (5) forest management, (6) traditional uses, (7) wetlands, (8) water resources, (9) forest reserves, and (10) other related topics. The attached electronic ACCESS database files contain hundreds of plants, animals, and other resources of contemporary interest to Red Lake tribal members. This study was conducted by the Red Lake Natural Resource Management and Cultural Resource specialists for the tribe. The aim was have tribal member perspectives on how to address a broad range of management issues relating to the thousands of square miles that are currently managed by the tribe.

During visits to the tribal governments in the summer of 1997, the UofA team met briefly with groups of tribal elders. The following list of resources was compiled from those interviews. It is important to note that the following list provides categories of resources. This list is not an attempt to inventory all ethnographic resources that are currently used by the Ojibway people. Nor is it an attempt to inventory all ethnographic resources that are covered by treaty or may exist within the Great Lake region national parks. The following lists provide examples of ethnographic resources currently used by the Ojibway; most of these actually occur in the parks under study. The resources are organized by general type of resource; resources mentioned by tribal representatives as park-specific are listed on the chapters that follow. These categories reflect how the resources were discussed by them and do not respond to academic taxonomic systems. Instead, the categories reflect how the Indian people place resources together.

Each resource is further listed by a common name, which is followed by a brief use description and what the people said they wanted to do with the resource. Note these resource recommendations are very much preliminary having been suggested by the person who mentioned the resources. None of these recommendations have the standing of being made by the official tribal government. Official recommendations are summarized in Chapter Twelve.

Berries

*Blueberries - annually used for food, trade, and medicine - need access and preservation
*Blackberries - annually used for food, trade, and medicine - need access and preservation
*Raspberries - annually used for food, trade, and medicine - need access and preservation
*Wild cherries - annually used for food, trade, and medicine - need access and preservation
*Crab apple - annually used for food, trade, medicine - need access and preservation

*Cranberries - annually used for food, trade, and medicine - need access and preservation
*Juneberries - annually used for food, trade, and medicine - need access and preservation
*Strawberries - annually used for food, trade, and medicine - need access and preservation
*Bunchberry - annually used for food, trade, medicine - need access and preservation

Trees
*Birch - used large birch trees as set asides for multi generational use through traditional bark removal (called "live tree use") - need access and preservation
*Basswood - used large trees for traditional bark removal (live tree use) - need access and preservation
*Cedar - Cedar is one of 4 symbolic plants, boughs are used inside long house during annual Grand Medicine Lodge ceremony (live tree use) - need access and preservation
*Maple - used for food and ceremony (live tree use) - need access and preservation
*Ash - used for ceremony, trade (live tree use) - need access and preservation
*Willow - used for medicine (live tree use) - need access and preservation
*Stands of virgin timber - used as a natural landscape for traditional activities - need access and preservation
*Oval glades in forests (especially with central boulders) - these are deliberate products of Indian burning and are locations of Indian ceremony - need access and preservation
*Chief trees - largest tree in a stand was considered chief and received special tobacco offerings when stand was used - need access and preservation
*Virgin forest underwater logs - logs cut from virgin stands of forests sank during transportation to the sawmills - need preservation

Grasses
*Sweet grass - used in medicine and many ceremonies, one of the 4 symbolic plants - need access and preservation
*Wild rice - used annually as a food and for culturally central ceremonial exchanges - need access and preservation
*Bulrush - used for construction - need access and preservation
*Peat bogs - used for wildlife habitat, medicine plants, filtering poisons out of water - need access, preservation, and restoration
Other Plants
*Traditionally the Ojibway people used an estimated 800 plants. Many of these were small herbs. Approximately two-dozen of these were mentioned during the tribal visits. Most are still used a medicine - need access and protection.
*Sage - one of four symbolic plants - need access and protection
*Tobacco - one of four symbolic plants - need access and protection
*Rose bush - annually used for medicine - need access

Animals
*Beaver - annually used for food, trade, medicine - need access and protection
*Bear - used for food, trade, ceremony, and medicine - need access and protection
*Deer - annually used for food, trade, and medicine - need access and protection
*Fish - annually used for food, trade - need access and protection
*Eagles - annually used for ceremony and medicine- feathers should come directly from the bird normally by gathering below the nest - need access and protection
*Hawks - annually used for ceremony and medicine - feathers should come directly from the bird, normally by gathering below the nest - need access and protection

*Porcupine - quills used for trade, funerals, ceremonies - need access and protection
*Megis shell - ceremony (megis is a cowry-like shell that is of salt water origin and thus symbolizes the origin of the Ojibway near the ocean) - needs unclear at this time

Minerals
*Salt - used in some ceremonies - need access to source and preservation
*Ocher - red paint used in many ceremonies and medicine - need access and preservation
*Copper - used for ceremony, spiritual recovery of land, and trade - both in situ deposits are needed and one especially large and cultural significant copper boulder should be returned to his sacred place
*Clay - used for production of traditional pottery - need access
*Sand - use pure sand for ceremonial purposes - sand that has not been walked on is available in major dunes along lake shores - need access
*Pipestone quarry - used for ceremony - need access and preservation

Land forms & Water forms
*Junction of streams and lakes - location of intensive use areas, traditional camps, and ceremony - need access and preservation
*Bays - traditional use camps and ceremony - need access and preservation
*Islands - traditional use camps and ceremony - need access and preservation
*Prominent lakeshore rocks - location of ceremony, landmarks used for oral maps - need access and preservation
*Waterfalls - location of ceremony - need access and preservation
*Rapids - location of ceremony and traditional use camps - need access and preservation
*Isolated promontories - used for vision quest sites - need access and preservation
*Isolated beach - used for ritual bathing - once before ice is gone and once before it snows - need access and preservation

Traditional Use Areas
*Camps - used to teach youth - each camp has a purpose and a "personality" - need preservation
*Garden areas - used to teach youth - each area is associated with ceremony, trade, and large built storage areas - need access and preservation
*Historic areas - during the history of the Ojibway people certain areas have become especially important because they are the location of a culturally significant event - need access and preservation
*Burial grounds - need preservation
*Canoe trails - used to teach youth, connected with migration stories, central features of traditional life, associated with traditional use areas, need preservation

*Land trails (some have built features such as log corduroy in bogs) - used to teach youth, connected with migration stories, central features of traditional life, associated with traditional use areas - need preservation.
*Rock paintings & rock peckings locations - need to teach youth, ceremony - need preservation
*Stone circles - used as compass, for chronometry, for ceremonies - need access and preservation

In addition to the specific expression of interest in a natural resource, a number of Ojibway people and tribal government department representatives expressed a desire to begin to discuss natural resource issues such as access to resources, cultural interpretations, and the possibility of using traditional management skills. In fact, precedent exists in terms of resource and land management relationships: such is the partnership between the Lac La Croix First Nation and the Quentico Provincial Park in Ontario.

Responding To Contemporary Ojibway Views

One purpose of listening to contemporary Ojibway views on natural and cultural resources in the Western Great Lakes was to adjust how the UofA team would record the thoughts of tribal representatives during the park-by-park site visits in the summer in 1998. Especially important was the development of a new instrument that we call the "Cultural Landscape" instrument. In addition, a data collection instrument that has been used in ten previous ethnographic studies was slightly modified to reflect how Ojibway people talk about specific places. This instrument is simply called a "Site-Specific" instrument.

Cultural Landscape Instrument

The UofA team began working with American Indian tribes regarding land-perception issues in the mid-1970s. At that time and continuing throughout a series of studies that involved more that 80 American Indian tribes, the tribal representatives talked about the cultural importance of landscapes. These landscapes usually extended far beyond the study area under immediate consideration, so were rarely addressed in the study itself. When the Federal government began to pass guidelines for the assessment of ecosystems it laid a foundation for the study of American Indian landscapes, especially those that extend beyond the boundary of the study area and the administrative unit funding the study.

Before beginning the Ojibway studies, the UofA team had collected landscape information on a number of projects and written three theoretical articles (Stoffle et al. 1997; Zedeno et al. 1997; Zedeno 1999) and one scientific paper on American Indian landscapes (Stoffle et al. 1998d). Each of these writings on landscapes used interview data that were derived and recorded as a part of the "Site-Specific" instrument (see next section). The challenge before the UofA team was to develop an instrument that directly addressed the concept of landscapes.

In the summer of 1998, the UofA team developed a landscape instrument. The content of this instrument was based on previous findings and the style was similar to the Site-Specific instrument. The first version of the Cultural Landscape instrument was administered as a part of an environmental assessment of traditional springs in the Las Vegas area. Ten Southern Paiute tribes participated in the interviews and a group of Indian people helped develop the instrument itself. After some modifications, the Cultural Landscape instrument was administered during another research project – an assessment of the proposed Hoover Dam Bypass bridge over the Colorado River. Again representatives from ten Southern Paiute tribes participated but this time representatives from the Hualapai tribe were a part of the study. A new location and new Indian tribe unfamiliar with the methods employed helped to test the viability of the Cultural Landscape instrument. Like in the previous study, Indian people were pleased that the interview instrument asked spatially broad questions. Both sets of interviews provided a new perspective. In the Hoover Dam study, the agency in charge of the study (Federal Highway Administration) was impressed with the usefulness of the landscape approach and used it to organize and present Indian perspectives in the Environment Impact Study. The foundation was set for landscape interviews in the Ojibway study.

The two previous studies where the Cultural Landscape instrument was used were conducted in what might be called a "highly textured" environment. The Colorado River is surrounded by steep-sided canyons and nearby high mountains. In fact, most of the cultural landscape findings used to formulate the

concept derived from places dominated by rugged topography. The UofA actually raised the question "are American Indian cultural landscapes actually stimulated by high texture topography?"

Despite our own reservations about the applicability of the concept in a relatively flat topography, the Cultural Landscape instrument was modified and made ready for the summer interviews with Ojibway elders. One motivation for continuing to develop a study design that used the Cultural Landscape instrument was the observation that the Ojibway people do talk about migration story routes, which are easily seen as story scapes (see Chapter Three for a discussion of types of landscapes). In addition, during the summer of 1997 meeting with tribal governments and elders it became clear that they held strong cultural attachments to places located hundreds of miles from current reservations. When talking about such places Indian people emphasized the ways to travel to those places, which were almost always canoe trails and the places along the way where Indian people stopped during their travel. The places along the way were more than convenient stopovers, because the travel routes seemed to be developed so that they connected a number of important places. Thus, Indian people in these meetings seemed to be talking about cultural landscapes like those the UofA team had heard about from other Indian peoples in the western and northwestern United States.

High points with a view seem to help Indian people explain their cultural landscapes. Often these landscapes extended over the horizon, so raised topographic maps were used to record where and why the landscape extend for miles from the point of the interview. In the Western Great Lakes there are high points but nothing like those available along the edge of the Colorado River where one can see for many miles in all directions. Our concern was that the Ojibway response during the landscape interviews would be somehow diminished because the high points were not high enough or would be covered with trees and the view obscured. Even though these environmental conditions did occur during the study interviews, the Indian people never seemed to be limited by the lack of a view. In fact, the cultural landscapes were often so extensive that no high point could have afforded a view. For example, in the SLBE interviews, people talked about landscapes that began there, traversed north to various islands, crossed the Upper Peninsula, extended along the south shore of Lake Superior, and arrived in the Keweenaw Peninsula. Even though such canoe trips could not have been made for generations, the trail and the important places along the trail seemed vivid in the minds of people today. Cultural landscapes clearly exist for Ojibway people today.

Site-Specific Instrument

Interviewing Indian people about places is a very familiar task for the UofA team. A set of common questions is developed so that everybody being interviewed has the same opportunity to respond to the same questions. Having such an instrument also reduces interviewer bias and provides a common set of answers.

A number of interview instruments have been developed over the past 27 years, but the Site-Specific instrument used in the Ojibway study is especially well tested. It was initially developed during a 1994 - 95 National Park Service study of Southern Paiute natural and cultural resources in Zion National Park, Utah and Pipe Spring National Monument, Arizona (Stoffle et al. 1998). A team of Indian people helped develop and pre-test an instrument that reflected the special conditions of this study. The resulting instrument is designed to quickly assess places regardless of the kinds of natural or cultural resources they contain. This was especially convenient in the Zion-Pipe Spring study because this was the first "ecosystem" study conducted by the UofA team and one of the first in the country.

Since the Zion-Pipe Spring study, the instrument has been used in a number of studies. Each new study provided more feedback from agencies and Indian people thus permitting the instrument to be further refined. The instrument was used in new areas with different topography and new American Indian ethnic

groups. Thus the content of the instrument has been expended to reflect the thoughts of Shoshone and Hualapai peoples and a wide range of natural and cultural resources.

The basic notion behind this Site-Specific instrument is that the study team is able to go where the Indian person wants to go and, once there, talk about anything. Because there are questions on all aspects of natural and cultural resources, the same questions can be asked of each person at each place where interviews occur regardless of what they want to discuss. The form is limited in that it contains only a few questions on each resource. So there is a page for plants in this form but, where we were using the UofA plant interview instrument instead, there would be ten pages of question. So, like any research methodology, this Site-Specific instrument has limitations. It was the best of the UofA forms for the interview tasks at hand.

The summer of 1997 meeting and discussions with Ojibway people suggested that the form was generally applicable to the following summer's site-specific interview in four national parks. Nonetheless, a few minor changes were made to the instrument so that it made more sense.

Introduction to the Data Chapters

The following chapters present the data and findings from the landscape and site-specific interviews conducted during the summer of 1998. Each set of interviews is focussed on the NPS unit in which the interviews were conducted. A background essay is provided for each park. These essays have been designed to provide the same kinds of information for each NPS unit, but certainly there will be background questions that are not answered. To meet the further information needs of the readers, the background essays reference extensive biotic and abiotic literature for each park. See earlier sections of the report for answers to other background questions.

It will be left to the NPS and Ojibway readers to evaluate how effective these interviews were in expressing the Ojibway point of view on the natural and cultural resources of the Western Great Lakes region and these parks. It is our evaluation, however, that the findings reveal deep understandings and extensive concerns that span the entire region. It is also our opinion that the data gathering instruments seemed to bring information together in ways that made sense to the Ojibway people who participated in the study.

CHAPTER SEVEN

SLEEPING BEAR DUNES NATIONAL LAKESHORE

Sleeping Bear Dunes National Lakeshore (SLBE) is located in the northwestern shore of the lower peninsula of Michigan. The park consists of approximately 71,188 acres of land and water, including 64 miles of undeveloped shoreline, 31 of which are on the mainland and 33 on North and South Manitou Islands, all within Benzie and Leelanau Counties (Figure 7.1). The park was established by a Congressional Act on October 21, 1970 (Public Law 91-479), after a decade-long negotiation between legislators who wanted to preserve portions of the lakeshore for public recreation, research, and resource conservation, and private stakeholders who owned real estate on or in the immediate vicinity of the park (Kalt 1994; Weeks 1990: xiii).

The Park and its Resources

The park's resources include: (1) Lake Michigan coast, massive sand dunes, sandy beaches, forested hills, rivers and inland lakes; (2) relict features of the natural history of continental glaciation, such as interlobate moraines, end moraines, ice-block lakes, kettle-and-kame features, and a record of postglacial changes that have produced the landscape; and (3) a record of prehistoric and historic land use, settlement, early commerce, and maritime navigation (Statement for Management [SFM] 1993: 9). A great diversity of vegetative types and associated fauna exists in the park. The unique environmental niches found within its boundaries have been considered for wilderness designation by the National Park Service (NPS 1974). The islands are active nesting sites for a variety of native waterfowl, including gulls, upland plover, and piping plover. There is a respectable beaver population still active at the park, in spite of the negative effects that human entrenchment has had on the species's natural habitat (SFM 1993: 12).

Archaeological survey and excavation has been conducted in the park in compliance with Sections 106 and 110 of the Historic Preservation Act. Until 1993, a total of 113 prehistoric and historic sites were identified in the mainland and in the islands. The park's museum collection includes 30,477 items, most of which (27,831) are from archaeological excavations at the Platte River Campground. The remaining items are historical (1,546) and archival (1,100), and come from a single site (20BZ16). These items include remains of shipwrecks, nineteenth century farming and settlement, logging era equipment, and commercial fishing gear (SFM 1993: 10). The collection of Great Lakes small craft is also of regional significance. In the following sections we provide a background description of natural and cultural resources that are or may be significant for the preservation of traditional cultural practices among Native Americans who are affiliated with the park.

Physiography and Geological History

The park contains diverse physiographic features, most of which are the result of glacial activity over the last 20,000 years. Postglacial depositional and erosional processes have also shaped the local landscape, creating distinctive landforms such as the eponymous Sleeping Bear Dune complex. In fact, the park constitutes an ideal locale for the geological interpretation of postglacial shore modification on the Great Lakes (Hambacher and Branstner 1995).

Figure 7.1 Sleeping Bear National Lakeshore

Geographically, the park is bounded west and north by Lake Michigan, south by a range of forested hills, and east by the dissected edge of a plateau (Waterman 1926: 351). The region can be described as a horseshoe-shaped depression with its opening toward the north. At the center of the depression is Glen Lake. Sand ridges and a swale terrain border the shore along Glen Haven; to the west, a plateau or bluff consisting partly of gravel and partly of blown sand contains the Sleeping Bear Dune field. The bluff slopes gently toward Lake Michigan in a series of receding terraces and lake beaches of glacial origin. Glen Lake is surrounded on the east and south by moraines (Waterman 1926: 351).

The regional physiography is the product of the waning stages of the Wisconsian glaciation. Around 12,500 years ago, the ice sheets began to retreat from the Port Huron Moraine in the lower peninsula of Michigan. After the Two Creeks Interval, the ice readvanced around 11,850 BP (Two Rivers or Valders stage) to the limits of the Manistee moraine (Evenson et al. 1976). At this time the topography was created, including end moraines, outwash channels, ground moraines and drumlin fields, finger-like interior lakes, and islands including the Manitou, Fox, and Beaver chains (Hambacher and Branstner 1995:5).

The shoreline originally formed part of a complex system of glacial lakes associated with the evolution of lake Algonquin in the Michigan and Huron basins at about 11,000 BP. At this time, the waters of Lake Algonquin inundated lowland coastal areas and created small embayments that now form the current inland lakes such as Glen Lake (Lovis et al. 1976). Climatic changes during the next seven thousand years resulted in dramatic lake fluctuations, deposition of offshore sediments, and eolian and uplift forces that turned embayments into inland lakes. Fluctuations in water level after 4,200 BP, particularly a decrease in level after the opening of the Mackinac Strait, left behind gravel terraces and old shoreline deposits, which can be seen in a series of ridges and swales parallel to the shoreline along Platte, Sleeping Bear, and Good Harbor bays (SFM 1993: 10). Stabilization around modern conditions occurred around 3,500 BP, when modern biotic communities emerged.

The uplands and ridges of the region, including the bluff where Sleeping Bear Dunes are located, form part of the Manistee Moraine that dates to the Lake Algonquin glacial stage (ca. 11,000 BP). The morainic deposit consists of windblown sand loosely cemented with a mixture of pebbles and boulders. Although the cementing materials of the dune fields and bluffs have laid there for thousands of years, sand deposits keep blowing and moving position slowly. In modern times the blown sand deposits have advanced toward Glen Lake as far as six feet per year, covering farm lands and forests in their progress (Waterman 1926: 352-355; Bucker 1979). This and other bluffs in the region are capped by 5,000 acres of sand dunes along the shoreline. Aside from the Sleeping Bear Dunes complex, there are the Nordhouse Dunes in the northern portion of the park and a south dune field along the coast of Manistee National Forest (Yarnell 1964).

The northern portion of the park, located in Leelanau County, is a sandy littoral zone with extensive drumlin fields and ground moraines, moderate to steep slopes, and long narrow deep lakes. To the northeast, bog deposits and swamps have developed around the Glen Lake outlet, creating a unique econiche. The southern portion of the park is located in Benzie County, between the Muskegon River and the south end of Leelanau County (Albert et al. 1986: 21). This area is characterized by an end moraine and a low, wet sand lake plain with draughty ridges along the coast of Lake Michigan, and a densely forested hill range to the east of the coastal plain.

Vegetative Communities

Unusual climatic, physiographic and hydrological conditions have combined to generate a great diversity of plant communities in a relatively restricted area (Boyle and Hoefs 1993). General descriptions of the regional vegetation were provided at the turn of the century by Cowles (1899), Hill (1900), Whiteford (1901), and Coulter (1904). The first systematic description was done by Waterman (1922, 1926), who

classified plant communities according with the region's main topographic features: (1) upland forest, (2) sand ridge region, (3) Sleeping Bear Dune region, (4) fixed dune fields, and (5) swamps. More recent botanical studies and plant inventories have expanded and updated Waterman's work. Hazlett (1991), for example, has classified the park's flora in five geographic units: (1) Platte River, (2) Sleeping Bear Dune, (3) Good Harbor Bay, (4) Bow Lakes, and (5) Manitou Islands. Additionally, Hazlett has constructed flora inventories by plant type and by plant associations (Hazlett and Vande Koppler 1983; Hazlett 1988). Additional inventories include mushroom species (Weber 1989), wild flowers (Lund 1978), and aquatic vegetation (Hazlett 1988). This section provides a brief description of the main characteristics of plant communities in the Great Lakes region as defined by the GLICFW (1993) and integrates Waterman's and Hazlett's geographic classification for the park.

Upland Forests. Also called climax forests by Waterman (1922: 12), northern mesic forests by Meeker et al. (GLIFWC 1993: 5), and northern hardwoods by Hazlett (1991). These forests originally had a beech-maple-hemlock association with lesser numbers of white pine and yellow birch, but suffered heavy deforestation during the height of the lumbering era. More recently, the local sawmills carried out some reforestation in the northwest portion of Glen Lake. Although reforestation has restored the original species, the structure of modern forests has changed; they now include fewer numbers of white pine and yellow birch than before logging. In addition to the original species now there is an occasional stand of moosewood or mountain maple. Understory species commonly include brushy plants such as sarsaparilla, witch hazel, berries, and a great variety of herbs (see Hazlett 1991: 151) and saplings of predominant canopy species.

Upland forests occur in several areas within the Platte River Unit (Hazlett 1991: 143), with such northern hardwoods as white birch, black cherry, white ash, and basswood. In the Empire bluffs forests, there is also ironwood. In the Sleeping Bear Dune Unit, forests occur on the moraines south of Glen Lake and are largely composed of sugar maple, beech, and white ash. Other common canopy and subcanopy species include basswood, hemlock, and ironwood. The moraine south of Glen Lake also supports numerous red oaks, some of which are large specimens. Concentrations of these species are found in the drier forests on Alligator Hill and the Good Harbor Bay moraines (Hazlett 1991: 154-155). The latter locality includes red pine and red oak. On the south and west-facing slopes of the moraines the forest is dominated by bigtooth aspen and red oak with secondary associations of red maple, beech, and white pine. In the Bow Lakes Unit, mesic forests also contain American elm and ironwood (Hazlett 1991: 160). The predominant species in North and South Manitou Islands are sugar maple, beech, white ash, basswood, and hemlock. Black cherry is rare in South Manitou Island.

Coastal Forests. Also called pine forests (GLIFWC 1993: 5). Coastal forests occur in dry, sandy soils around dune fields and sand ridges. These forests are dominated by a pine-oak association, with red maple occurring rarely (Waterman 1926: 357). Different varieties of pine and oak occur in different proportions depending on the xerophytic conditions of each sand ridge locality. In the extreme west, the original coastal forests are almost nonexistent; there is upright juniper, red pine, and relict jack pine. Secondary associations may include aspen, birch, and balsam poplar. The understory growth consists of small thickets of shrubs (panicled dogwood among others), creeping juniper, chokecherry, witch hazel, several berries, and herbs.

Coastal forests may be found in the Platte bay region, between highway M-22 and the dune ridges of Lake Michigan as well as on the coastal dunes south of Platte River (Hazlett 1991: 144). To the north of Platte River the coastal forests are drier than those to the south. Pine-oak forests are very well developed in the Aral Dunes, with occasional cedar in the upperstory in moist and dense stands (Hazlett 1991: 149). Common juniper, sand cherry, red osier, buffaloberry, grape, and cottonwood are the established woody species on the Sleeping Bear Plateau forests (Hazlett 1991: 153). Pine-oak forests also occur in the Crystal

River area, interspersed with swales and cedar swamps. At Good Harbor Bay sand ridges, oak, birch, red maple, and aspen are more predominant than pine. Coastal forests occur on the concentric ridges on the east side of South Manitou Island and along a sandy lake plain on North Manitou Island's east side (Hazlett 1991: 161, 164).

Swamp Forests. Swamp or bog forests exist in numerous areas in and around the park. These forests are characterized by a white cedar-black ash or tamarack association. American elm, bog willow, and bog birch are also frequent (GLIFWC 1993: 6). Black spruce, white birch, silky dogwood, red osier, swamp loosestrife, sweet gale, and swamp rose may be found scattered across the sedge mat and around its outer edges (Waterman 1922: 14). Understory species include pitcher plant, sundew, cranberry, lady slipper orchid, and shrubs such as cassandra, bog rosemary, swamp blueberry, and labrador tea. A large number of aquatic species, submerged and floating, occur in association with swamp forests (see Hazlett 1991: 143).

Swamp forests are common in the Round Lake Area and around ponds and wales of the Platte Bay and Platte River regions. These forests also include alder and Michigan holly, with white cedar in the areas farthest from Lake Michigan (Hazlett 1991: 144-148). Cedar swamps grow in numerous localities along the course of Otter Creek, the most important of which is Marl Springs. Unique marsh species, such as *Chara* and white water crowfoot are found in this area. This is perhaps the richest swamp forest locality in the park. Balsam fir and white pine are found intermixed with white cedar on the west side of Otter Creek. Here, wet-habitat herbs, ferns, shrubs, and woody species are most varied (Hazlett 1991: 150). Swamp forests are also found on the bends along Crystal River, and are particularly well developed south of Pyramid Point and along Shalda Creek in the Good Harbor Bay area. Swamp trees grow by some small ponds in the mainland Bow Lakes, around Lake Florence in South Manitou Island, and around Tamarack Lake and Lake Manitou in North Manitou Island (Hazlett 1991).

Boreal Forests. Boreal or northern conifer forests are found only on South Manitou Island. A small band of dense growth of white cedar, balsam fir, and white birch with an occasional white spruce occur on the steep, dune-exposed slopes bordering the east edge of the open perched dunes. This is the only locality where naturally occurring white spruce grows in the park. Understory species include yew, elderberry, and mountain maple, among others (Hazlett 1991: 163).

Dune Fields. Dune fields are open habitats lacking well-developed soils (GLIFWC 1993: 4). Dune tops are usually plantless. On the lee slopes the dune grass is the pioneer plant, and sometimes extends to form grass meadows. Common plant associations are wormwood, dunewort, sand thistle, yellow pucoon, goldenrod, bearberry, and a variety of xerophytic grasses and herbs. Scattered stands of sand cherry, arbor vitae (mostly dead), common juniper, bearberry, buffaloberry, red osier, and willow are established in perched dune fields (Hazlett 1991: 153; Waterman 1926: 360; Waterman 1922: 14). Most of these dune field plants also grow in open stands on the gravel plains. At the bottom of the protected valleys between sand ridges and dunes there are stable soil conditions and sometimes mesophytic soils. On these valleys there are close stands and more luxuriant vegetation than on lee slopes. Bunch grass, *Calamovilfa,* and *Artemisia* species make up the bulk of the vegetation. Where unusually mesophytic conditions occur, there are groves of cottonwood surrounding beach sweet-pea.

Dune field vegetation is found on all dune fields in the park, from north to south in Nordhouse fields, Sleeping Bear Dune complex and plateau, and the dune fields in the Platte River Unit. Red osier and creeping juniper are more common in the northern dunes. Large forested dunes with basswood as the dominant upperstory species occur in Empire Bluffs, associated with yew grass; open dune fields are also found in this area, as well as in Good Harbor Bay and South Manitou Island. Perched dune vegetation exists in

Pyramid Point dune fields and on the west side of South Manitou Island (Hazlett 1991: 152-156; 163). Active dunes are a minor feature along the coast of North Manitou Island (Hazlett 1991: 164).

Old Fields. Old field communities developed through succession on areas that were once extensively logged, then farmed for a short period of time, and subsequently left fallow. Many of these species are naturalized, introduced into these open habitats since the time of logging (GLIFWC 1993: 4). Old fields are common in Port Oneida, the uplands above and north of the Platte Bay area, Empire Bluffs area, South Manitou Island and, to a lesser extent, North Manitou Island. Common species growing in the old fields include goldenrod, milkweed, yellow rocket, sulfur cinquefoil, common St. John's-wort, moonworts, wild leeks and, in the boundaries of the forests, saplings of canopy trees (Hazlett 1991: 151). In South Manitou Island, common and trailing juniper, pin cherry, chokecherry, white birch, and quaking aspen are the dominant invading species (Hazlett 1991: 163).

Grass and Sedge Meadows. Grass meadows may develop into sedge meadows if they are subject to seasonal or permanent flooding. These areas have water-saturated soils that border aquatic habitats on the upland side (FLIFWC 1993: 5). Flooded meadows occur along the Platte River floodplain. Old air photographs published by Waterman (1922: 28) indicate that grass meadows once extended on both sides of the Platte River nearing its mouth. In more recent photographs (Calver 1946: 56) these meadows were submerged, indicating that either the photos were taken during the dry season or that the floodplain expanded over previously dry grasslands (Hazlett 1991: 148).

The floodplain meadows are characterized by densely developed grasses and sedges. Vegetation here is similar to that found near Marl Springs in the Otter Creek area and south of Round Lake. The main feature of these flooded meadows is that water prevents trees and large shrubs from encroaching. The open vegetation is dominated by loosestrifes, blue flag iris, marsh marigold, spike rushes, royal fern, reed, marsh cinquefoil, hardstem bulrush, and march fern, among others (Hazlett 1991: 148).

Submerged Habitats. This habitat includes areas that are either in shallow water or in well-saturated soils throughout the growing season. Typical plants of this habitat include cattail, wild rice, water lilies, water milfoil, rushes, Joe-pye weed, and pondweeds, among others (GLIFWC 1993: 4). This habitat occurs in Round Lake, Plat River, Otter Creek, and in the Good Harbor Bay unit (Tucker, Narada, Shell, School, Bass Lakes, Shalda Creek, and Crystal River) (Hazlett 1991: 150-155). Otter Creek has a large *Chara* floating mat. This alga is common in calcareous waters. Orchid species are common in the submerged habitats of Lake Florence in South Manitou Island, along with creeping spearwort and swamp candle. This habitat is poorly developed in Tamarack Lake and Lake Manitou in North Manitou Island.

***Sphagnum* Bogs.** Sphagnum bogs are characterized by a unique set of plants that are adapted to the stresses of this nutrient-poor, acidic habitat. Typical species include pitcher plants, cranberries, leatherleaf shrubs, and several types of hollies (GLIFWC 1993: 4). Sphagnum bogs occur in the Crystal River area, Pyramid Point area near Port Oneida, Bow Lakes, and Tamarack Lake in North Manitou Island.

Associated Fauna

There are no detailed inventories of fauna associated with each of the vegetative communities just described. However, a number of manuscripts and publications both general to the Great Lakes region and specific to northwest Lower Michigan and to Sleeping Bear Dunes National Lakeshore have been consulted to produce a summary of the wildlife for this study. These include: Daniel and Sullivan (1981), Bailey (1975), Kelly and Price (1979), and Case and Scharf (1985).

Forest Animals. These include species that are dependent on foodstuffs available in wooded regions, such as the park. Animals of the northern woods may be classified as seedeaters, browsers, insect eaters, larger carnivores, and omnivores. Each of these broad consumer categories in turn includes mammals, birds, reptiles, and amphibians (Daniel and Sullivan 1981: 303-384).

Seed-eating herbivores present in forested areas at the park include small rodents such as muskrat, red and gray fox, Thirteen-lined ground and southern flying squirrels, eastern chipmunk, and several species of mice and vole (Bailey 1975). Seedeater grasshopper, vesper, and clay-colored sparrows are present as well (Case and Scharf 1985: 22)

Treetop, brush, and ground browsers are also found among herbivore species in the park (Case and Scharf 1985; Bailey 1975). Typical treetop browsers are the climber porcupine and the beaver. The latter feeds treetop leaves of felled trees. Both species prefer aspen. Whitetail deer, on the other hand, is a brush browser who feeds on yew, hemlock, white cedar, yellow birch, and maple or fir in times of starvation. A common ground browser is the Snowshoe Hare, generally found near conifer swamps. Browsers prefer young forests where there is enough light to maintain a rich crop of shrubs and small trees (Daniel and Sullivan 1981: 312-322).

Insect eaters include a large variety of carnivore species. The most numerous insect eaters are birds. These include: wood warblers (family *Parulidae)*, redheaded woodpecker, acadian, least, willow and great-crested flycatchers, and other species such as northern mockingbird, cedar waxwing, Philadelphia vireo, and eastern kingbird (Case and Scharf 1985: 24-25). Among the forest/swamp reptiles that feed on insects, frogs, toads, and some mice, are the garter and ribbon snakes, the red-bellied snake, and the massasauga rattler. The most common amphibians are the American toad, The northern spring peeper, and the leopard and wood frogs (Bailey 1975). Insect-eating mammals include the eastern and star-nosed moles, and the masked and short-tailed shrews.

Large carnivores are common to the park's forests as well. Among them are raptors (eagles, hawks, falcons, and owls); fur bearers (marten, mink, otter, and fisher) and other mustelids such as weasels; bobcat; and canines (coyote, red fox, and gray fox). Other common carnivores include raccoon, badger, and woodchuck. Finally, the most common forest omnivores are the red, hoary, big brown, silver-hair, keen, and little brown bats, common crow, and striped skunk (Daniel and Sullivan 1981: 333-347; Bailey 1975; Case and Scharf 1985). Black bears are now rare, but in the past they were probably very common.

Open Inland Fauna. Animals commonly found around old fields and settled areas are the cottontail rabbit, house rat, mourning dove, and different varieties of mice and small seed-eaters that dwell near agricultural fields. Geese and wild turkey prefer shrubby areas. Sandpipers and piping plovers are found in dune fields and near the beach, particularly in the Manitou Islands.

Aquatic/Coastal Fauna. In addition to forest species associated with swamps, streams, and bogs, waterfowl includes lakeshore fish-eaters such as common loon, herons, double-crested cormorant, herring gull, and several species of ducks. Carnivore amphibians are the green, mink, and bullfrogs, as well as the omnivore snapping turtle and the painted turtle. The most common aquatic reptile is the northern water snake. Abundant fish is found in the park's main water sources, including dozens of native and introduced species; a detailed report on the occurrence and abundance of fish in the park is provided by Kelly and Price (1979).

Mineral Resources

With the exception of gravel and sand used in construction, there are no known mineral ores in the park (REF). Fine, pure dune sand available along the lakeshore has been mentioned as a resource traditionally used by the Ottawa and Chippewa people of the Grand Traverse Band for ceremonial purposes (Stoffle 1997: 9).

Archaeological Resources

Important archaeological sites in the park and its immediate vicinity have been known since the beginning of this century. In the 1920s, Wilbert Hinsdale compiled the first systematic survey of prehistoric and historic sites associated with Native American occupation in Michigan (Hindsdale 1925, 1931). In his *Archaeological Atlas of Michigan,* Hinsdale described the archaeology of the Sleeping Bear Dune area:

A survey of both sides of Lake Leelanau, for a distance of twenty-five miles, shows that every prominent point commanding a view of the open water, if not swampy or otherwise unapproachable for canoes, was the site of an Indian camp or village. Sleeping Bear Point, upon which is an immense sand dune, has many traditions, mostly legendary. It has been a fertile field for relic hunters. No doubt it was an inviting lookout for Indians. The exposure of human bones by shifting winds indicates that bodies were buried in the sands of the dune. Tradition has it that the "Bear" was the scene of a terrific battle "in the long ago." Other points of archaeological interest are indicated upon the map (Hinsdale 1931: 26).

This traditional account accords with F. J. Littlejohn's narrative of a two-day battle between the Ottawa and an invading party of Sauk and Fox tribes of Wisconsin and Chippewa from the Upper Peninsula in 1803, of which no archaeological evidence other than Hinsdale's reference to buried bones at Sleeping Bear Dune has been found (Weeks 1990: 20). Hinsdale also identified five villages and three burying grounds in Leelanau County, and one village, one burying ground, and one mound in Benzie County. About the latter he wrote:

There are legends and mythical lore connected with Crystal Lake and Betsey River, but not many facts for the archaeological cartographer. The topography of the county suggests that a survey would have been rewarded by more of a tangible nature than has been discovered or reported. An Indian burying ground and mound were located near Honor. A mound stood near the center of Inland Township and a village upon the north side of the west end of Crystal Lake (Hinsdale 1931: 16). One of the main contributions of this early survey was the identification and historical documentation of a network of trails that likely were used since late prehistoric times for communication and trade. Later these trails guided French explorers deep into the northern woodlands. At least two main trails traversed the Sleeping Bear Dune area:

A trail extended along the west shore of Grand Traverse Bay; another trail ran from the point of the peninsula to the old village at Leland and probably around Glen Lake to Crystal Lake and the mouth of Betsey River, in Benzie county.

Traces of a trail along the south shore of the western lobe of Glen Lake were distinctly discernible seventy-five years ago. There was a village upon this trail a few rods west of the south end of the bridge that now spans the narrows. Large quantities of pottery were found upon a half-acre at this point, which, sad to say, have been scattered. A similar find was made across the lake about sixty rods northeast of the north end of the bridge (Hinsdale 1931: 26; map 13).

The trails identified by Hinsdale, in turn, connected Grand Traverse Bay with other regions of the Lower and Upper peninsulas, including Lake Huron, Grand River, Saginaw Bay, the Mackinac Strait, Green Bay, and Lake Superior. For an experienced canoer, only fifty miles of water-and-portage trail separated

Lake Superior from Lake Michigan–barely one day of easy travel (Secretary of War [1820], cited in Hinsdale 1931: 7; see also Weeks 1990: 33). To this day, Indian elders living in the Grand Traverse Bay area recall some of these trails as significant cultural resources (Stoffle 1997: 10). A segment of the Old Indian Trail that Indians used early on to move along the coast is found inside the park.

Many other feature types were also recognized during the early surveys but were not mapped. Some of these were stepping stones, rock rings, dance circles, workshops, enclosures and embankments, sugar camps, battlefields, rock carvings and drawings, and storage pits or "caches" (Hinsdale 1925, 1931).

More recent archaeological surveys of the park, such as those conducted by Cleland (1967), Lovis (1984; Lovis et al. 1976), and Richner (1991, 1992), have confirmed earlier findings and added numerous other sites to those originally recorded by Hinsdale. As Lovis et al. (1976: 26) observed, the great variability in topography, vegetation, and wildlife, combined with a climate favorably influenced by Lake Michigan and a 140-day growing season, to produce an attractive settlement and foraging area since early post-glacial times. Documentary and field research conducted by Lovis et al. (1976: 26) indicated that there are four zones of high potential for prehistoric habitation:

Hydrologic features. A large number of known sites are located adjacent to prehistoric or modern water bodies, such as fossil lakes and embayments, running streams, and modern inland lakes. Clusters of sites occur on Glen Harbor, Glen Haven, and Glen Lake, Crystal Lake, and the Platte River drainage. Other sites are also found along the margins of smaller lakes, such as School Lake and Mud Lake.

Diverse vegetational associations. Lovis (1973) and Fitting (1966) propose that maximum site density is proportionally related to environmental diversity. Preferred settlement locations, therefore, are close to ecotone areas, where a larger number of plant and animal species may be found.

Sandy, well-drained soils. Most, if not all, known sites in the Leelanau-Benzie County area occur on well-drained sands. A recent survey by Richner (1992) also indicated that a large percentage of sites occur in dune and swale topographic settings flanking streams and inland lakes, where soils are well-drained. These are small, but well preserved, Middle and Late Woodland sites.

Coastal features adjacent to offshore shoals. Cleland (1966, 1967) states that access to fishing grounds was of great importance to prehistoric Great Lakes people. Coastal areas such as the Manitou Islands and the Beaver Island chain contain abundant evidence of occupation that could have been associated with fishing activities. Fitting (1970: 196; also Hinsdale 1932: 33-34) suggests that aboriginal hunting activities also took place along the Lake Michigan dune areas; this hunting season was devoted to obtaining meat to supplement fishing and gardening.

Modern archaeological research at the park indeed has uncovered abundant evidence of prehistoric occupation in high potential zones. The earliest sites date to the Late Archaic period (3000 BC - 50 BC). Lovis et al. (1976) reported a cache of Late Archaic Pomranky points in the Glen Arbor township (site 20LU64). Another occupation dating to this period was recorded in North Manitou Island (site 20LU38); a large copper awl was found there as well. Evidence of a hunting, fishing, and plant collecting economy including wild rice comes from sites 20LU21 and 20LU22 (Ford and Brose 1975). Burial activities dating to this period also come from the Dunn Farm Site or 20LU22, where cremated human bones associated with artifacts made from exotic materials deriving from across the Midwest and Great Lakes were found (Lovis 1984: 7). In spite of the evidence for broad regional networks at this early period, the bulk of raw materials, technologies, and styles used by the archaic people were local, indicating a local indigenous occupation of the park (Lovis 1984: 8).

Both the mainland and the island portions of the park contain evidence of seasonal use throughout the Middle and Late Woodland Period (600 AD - AD 1620), represented by what is called Laurel, or the local Woodland tradition. This evidence ranges from isolated artifact scatters to substantial remains of campsites, villages, and burial mounds (Hinsdale 1931; Lovis et al. 1976; Lovis 1984; Richner 1991). Large sites include dense concentrations of pottery, chipped stone, fire features, and occasionally structural remains (e.g., sites 20BZ53; 20BZ3; 20BZ5; 20BZ11). The earliest of the Woodland occupations in the park's vicinity is represented at site 20LU21 or Fisher Lake site (Brose 1975); it dates to the Middle Woodland period and has pottery dating between AD 200 and AD 600. The largest Middle Woodland site is 20BZ16, located in the park's Platte River Campground. This site was extensively excavated by Richner (1991), who uncovered a dense concentration of ceramics, lithics, and other materials dating to the Middle Woodland period. The site also contains Late Woodland materials.

Even though there is evidence of agriculture starting at about AD 900-1000 in other parts of southern Michigan, there is no such evidence in the park proper, nor is there evidence of extensive fall fisheries that characterized the Late Woodland period in the north (Cleland 1982). Rather, the settlements at the park at this time appear as short-term, temporary camps probably used for seasonal hunting and inland summer fishing (Lovis 1984: 10).

An apparent hiatus in the aboriginal occupation of the area occurs from the early historic period to the early American period. State-wide archaeological surveys (e.g., Fitting 1970; Hinsdale 1931) and historical accounts (e.g., Tanner 1986; White 1991), indicate that the Lower Peninsula of Michigan was vacated as a result of the Iroquois War (1641-1701), and was not resettled until at least the mid-eighteenth century. Greenman (1961: 24-25) calls attention to the fact that there are no accounts or archaeological evidence of Indian populations in Michigan south of Michilimackinac until 1675, and no Ottawa or Ojibway settlers until perhaps the 1750s. Fitting (1970: 236) and Weeks (1992: 3) describe the Lower peninsula as a no-man's-land during the late prehistoric and Early Historic periods. It was a buffer zone used for sporadic hunting activities, separating the Iroquoian tribes of the east from the Algonquin groups of the west. Only few ephemeral occupations dating to this period have been found, as for example in site 20LU22.

According to White (1991: 185) the earliest historic Indian settlement in Grand Traverse Bay may have occurred after 1741, when the Ottawa, seeing their lands at Michilimackinac exhausted, petitioned the French to let them build a new village in the area. L'Arbre Croche in Little Traverse Bay was their first village. Thereafter, seasonal and permanent villages inhabited by Ottawa and Ojibway from the Mackinac Strait flourished along the northwest shore of Lake Michigan. Remains of these historic villages still exist (Hinsdale 1931: map 2; Blackbird 1887). Within the park there are remains of Indian homesteads dating to the logging era, and as well as an account of uses of the park area for pigeon hunting and wood gathering (Smith papers 1850-54). Most notable among these sites is the Westman site (site 20LU112), that was inhabited during the 1880-1920s (Richner's 1991 survey records). Prehistoric sites were also reoccupied in historic times (e.g., site 20BZ16, in Beulah, Benzie County; Lovis et al. 1976). As Indian elders have pointed out (Stoffle 1997), both prehistoric and historic sites are culturally significant because they contain information of activities and events that occurred there.

To summarize, Sleeping Bear Dunes National Lakeshore contains a vast number of natural and cultural resources. Topographically and ecologically diverse, the park had all the elements necessary for attracting and supporting aboriginal populations. Plant and animal species found in the park were traditionally used by American Indians for a variety of purposes, including food, shelter, clothing, hunting and fishing equipment, medicine, adornment, trade, and ritual. Topographic features, such as the Sleeping Bear Dune itself, trails, water-and-portage ways, and other places, contain information about the history of the

Indian tribes who inhabited the park and its vicinity at different points in time. The following section contains a synopsis of the oral and written history of settlement of the Ojibway and Ottawa Indians of the Grand Traverse Band in the Sleeping Bear Dune area and vicinity.

Aboriginal Settlement in the Sleeping Bear Region and Vicinity

In 1887, the tribal historian Andrew J. Blackbird (Chief Mack-e-te-be-nessy "Black Hawk" of the Little Traverse Bay Band of Ottawas), gave the following account of how the Ojibway (Chippewa) came to settle in the Grand Traverse Bay area:

> ...there was one account in our old tradition where a murder had been committed, a young Ottawa having stabbed a young Chippewa, while in dispute over their nets when they were fishing for herrings on the Straits of Mackinac. This nearly caused a terrible bloody war between the two powerful tribes of Indians (as they were numerous then) so closely related. The tradition says that they had council after council upon this subject, and many speeches were delivered on both sides. The Chippewas proposed war to settle the question of murder, while the Ottawas proposed compromise and restitution for the murder. Finally the Ottawas succeeded in settling the difficulty by ceding part of their country to the Chippewa nation, which is now known and distinguished as the Grand Traverse Region. A strip of land which I believe to have extended from a point near Sleeping Bear, down to the eastern shore of the Grand Traverse Bay, Some thirty or forty miles wide, thence between two parallel lines running southeasterly until they strike the head waters of Muskegon river... They were also allowed access to all the rivers and streams in the Lower Peninsula of Michigan, to trap the beavers, minks, otters and muskrats... This is the reason that to this day the Odjebwes (Chippewas) are found in that section of the country (Blackbird 1887: 15).

According to Blackbird (1887: 92) the Ottawas themselves came to settle the Lower Peninsula from Mackinac Strait after a series of successful campaigns against the local Mascoutens ("Mush-co-desh" or Prairie People), which were forced to retreat south toward the St. Joseph River. Schoolcraft, for his part, had observed in the 1850s that,

Ishqua-gonabi, chief of the Chippewas on Grand Traverse Bay, and a man knowing traditions, denotes the war against Muskod men or dwellers on Little Prairie or Plains, to have been carried on by the Chippewas and Ottawas, and in this manner he accounts for the fact that villages of Chippewas and Ottawas alternate at this day on the eastern shores of Lake Michigan (cited in Weeks 1990: 19)

The Ottawas used this area as a seasonal hunting ground until the mid-eighteenth century. According to Weeks (1990: 19), the Ottawas did not hunt in the same region or planted in the same fields every year; Glen Lake, for example, was visited once every three years. While the Sleeping Bear region was a favorite seasonal hunting ground, it was not the first to be settled. As stated above, historic accounts place Ottawa settlement in the area sometime between 1720 and 1761, or what is known as the French Era (White 1991: 185; Magnaghi 1984; Weeks 1992: 4; Tanner 1986: map 33). McClurken (1991: 4) describes the founding of their first village as follows:

In 1742, the Odawa moved their largest village from the area near Fort Michilimackinac to Wawgawnawkezee proper (Good Hart, also known as Middle Village). Wawgawnawkezee, meaning "it is bent," was so named because an ancient pine tree that bent outward toward Lake Michigan marked the landing at the town. The Odawa believed that Nenawbozhoo, creator of the Anishnabek, hit the tree in a fit of anger causing it to curve toward the water. Although Wawgawnawkezee referred to the location of the

village, the French and British applied the name *L'Arbre Croche,* or Crooked Tree, to the entire coastline region between Mackinac and the southern shore of Little Traverse Bay.

In subsequent migrations northeast-southwestward, they expanded from their mother villages of L'Arbre Croche and Cross Village in the Little Traverse Bay to the Grand Traverse Bay. Weeks (1992: 7) and White (nd: 5) state that the Ojibway bands came to this region no later than 1800. By 1830 there were at least six bands living in the immediate vicinity of Grand Traverse Bay–four Ottawa and two Ojibway. As both tradition and history would have it, therefore, the Ottawa and the Ojibway settled permanently in the Traverse Bay region at least two centuries ago, and used it as a hunting and fishing buffer zone for much longer.

Village Life and Demography in Traverse Bay Region

Throughout the first century of settlement in the Traverse Bay region (1742-1838), the bands were fairly isolated; at times, however, they lent their aid to other tribes that were struggling to spare their lands from Euroamerican settlement and colonization. But in 1818 the sales of public lands began at Detroit, thus opening immigration from the East (Weeks 1992:8). While several treaties affecting directly the tribes of Michigan had been signed after the American Revolution, the Treaty of Washington, signed by Henry Rowe Schoolcraft on March 28, 1836, ceded the northwestern section of the Lower Peninsula. This included what is now the service area of the Grand Traverse Bands of Ojibway and Ottawa Indians, as well as the Upper peninsula to the east of what is now Marquette. The treaty led to statehood for Michigan and loss of lands for the bands that, for the purpose of the treaty, agreed to act in concert. This is how the artificial Ottawa and Chippewa Tribe came into existence, but only for a short time (White nd: ii). Although the Treaty of Washington called for removal of aboriginal populations, most Indian groups in the Great Lakes managed to avoid forceful relocation and instead retained reservation land rights, if only under government sufferance.

Soon after the signing of the Treaty of Washington, missions were established on or near the reservation lands in the Grand Traverse Bay region and in Beaver Island (Kalchik 1982). The first descriptions of Indian life in the region appeared, having been written by three pioneer missionaries: Peter Dougherty, of the Presbyterian Church, George Smith, a Congregationalist, and Fray Baraga, a Catholic priest (Vogel 1963; White nd; Dougherty 1952; Craker 1979). Detailed accounts of Indian-White relations and Indian traditions were also recorded by government agents, most notably Schoolcraft (1992) and others who left records of every-day transactions (see White nd). These accounts and records are extremely important for developing a picture of the Grand Traverse bands during the first three decades of contact with White settlers (1838-1870) and before the boom of the logging industry.

Ojibways and Ottawas had long been closely related, spoke very similar languages, had long intermarried, and were associated, along with the Potawatomi, in the loose defensive confederation known as the *Council of the Three Fires* (Jennes 1967: 277). The six Grand Traverse bands had very similar social and economic organization; the greatest difference between the Ojibway and the Ottawa was the latter's emphasis on agriculture. Both ethnic groups were semi-sedentary and had a broad-spectrum subsistence economy (White nd: 5-6). Spring and summer activities took place around Lake Michigan; in the fall, the bands would disperse to the south, to the Manistee forests and even farther in that direction, where their hunting and trapping grounds were located (Vogel 1963: 192). Winter hunting and trapping, and spring sugar-making took place in the forest camps. According to White's ethnohistoric research (nd: 6-10), at Grand Traverse each band had its own summer village:

> The largest Ojibway band was that of Aish-quay-go-nay-be, whose village was at Elk Rapids, with 250-300 people in 1838.

Across from Elk Rapids was a second smaller Ojibway band under Ah-go-sa, who lived at Mission Harbor, the site of Dougherty's first Presbyterian mission, or Old Mission.

The Ottawa bands lived along the Leelanau Peninsula on the opposite side of the bay from the Chippewas. Shwab-wah-sun's band had a village on New Mission Point on Sutton's Bay and was probably the oldest village on the bay. In 1850, Shwab-wah-sun's band had 10 families (Smith's journal, 1850).

A second band, perhaps the Nagonabe band listed as part of the Northport mission by G. Smith in 1851, had a village on Cathead Point on the north end of the Leelanau Peninsula. The band consisted of 22 families (Smith's journal, 1850).

The third Ottawa village, Onumunese, may have been adjacent to Cathead village; Onumunese perhaps comprised part of the Carp River band whose chief was O-naw-mo-neece.

The main portion of the Carp River Band lived on the west end of the peninsula near present-day Leland; there may have been a second band living there as well.

The main Ottawa settlement near Leland was known as Che-ma-go-bing, supposedly a white rendering of Mishi-mi-go-bing, meaning "the place where the Indian canoes run up the river because there was no harbor."

The final Ottawa band connected with Grand Traverse lived off the peninsula near Glen Arbor, in close proximity to current park boundaries.

Southward migrations continued throughout the mid-1800s. Under the advice and encouragement the missionary George Smith, in 1849 an estimated 40 to 50 families of the Black River Band of Chief Peter Waukazoo moved from near Holland, Michigan, to "Waukazooville," a settlement just south of present-day Northport. In the same year, Ke-wa-quis-kum and his band from Manistee settled on Stoney Point (Kalchik 1982: 16); Kagwatosa and his people moved to Omena. The Ottawa band of Chief Peshawbe moved from Cross Village to Leelanau in 1852, and established the village of Eagletown, now known as Peshawbetown (Weeks 1992: 11; Kalchik 1982). After being baptized by Smith, Shwab-wah-sun's people moved to Waukazooville.

In response to pressure from the missionaries, who disliked the winter hunts that took men away from their villages and disrupted educational efforts, the Ojibway increasingly became involved in agricultural activities; many Indians also realized the importance of education as a survival tool and changed their seasonal rounds accordingly (McClurken 1991). The destruction of the southern hunting grounds by White settlers, and the overcrowding of the northern hunting grounds also forced the bands to devote more time and attention to farming, fishing, and other profitable activities they could carry out at the villages. Indeed, both Ottawa and Ojibway villagers became skilled blacksmith and carpenters. By 1855 they had established a minor shipbuilding center for the Great Lakes in the bay area (White nd: 14). According to White, all these changes did not so much occur at the expense of traditional lifeways but within them. Changes in subsistence patterns notwithstanding, winter hunting and trapping continued alongside agriculture, fishing, and craft production for as long as there was a market for fur.

The hunter-fishermen Ojibway eventually became excellent farmers and began to ask the missionaries for land grants to cultivate. They had been saving money from the annuities to purchase lands; however, the government had not opened for sale the reservation lands around Old Mission. By 1848, the Indi-

ans were refusing to go ahead with their improvements until they were guaranteed permanent title to the lands. Since this was not possible, Ojibway villagers eventually moved across the bay where public lands were available for sale, that is, to the Leelanau Peninsula where the Ottawa villages were located. Paradoxically, the dedication and success of Ojibway farmers contributed to the demise of Dougherty's Old Mission. As White (nd: 17) comments, It was typical of these bands' social organization that the move was initiated by the villagers, leaving the chiefs and missionaries the choice of following or loosing their influence.

The enticement of obtaining permanent title was so great that the chiefs, fearing that the villages would break up entirely, consulted with the missionaries and both decided to move as well. In 1852, Chief Aghosa moved his village to Ahgosatown, near modern Omena, and purchased lands that had come on the market there (White nd: 13-16; Weeks 1992: 11). The New Mission and Indian Boarding School was established near Shwab-wah-sun's village on what became New Mission Point and is known now as New Mission Bay. The departing villagers sold their rights of possession to their houses and farms to White settlers who were beginning to enter the area in 1853.

The massive immigration of Grand Traverse Bay bands to the Leelanau Peninsula had two important immediate effects: first, the Indians were able to purchase extensive tracts or arable lands and hence obtain permanent and legal title; and second, the more disperse and less village-bound settlement pattern of the new farmers contributed to unify both ethnic groups. By 1855, Ottawa and Ojibway were not only geographically closer, but also politically closer (White nd: 19). This emerging political identity of the Grand Traverse Bay bands proved essential during the negotiation of the last treaty signed with the United States.

Indian Citizenship: The Treaty of Detroit, 1855

The Treaty of Detroit, 1855, marks the end of the aboriginal settlement period in the Grand Traverse Bay area and the beginning of a long period of struggle to preserve the land, funds, and resource access rights that the United States had granted the Ottawa and Ojibway bands of Michigan first in 1836 and then in 1855 (Cleland 1992; Cornell 1986; McClurken 1991; Quackenbush 1995; Weeks 1992; White nd). The Treaty of 1855, signed in Detroit between the United States and several Ottawa and Ojibway bands, was originally aimed at assimilating the Indian population of Lower Michigan into mainstream America by eliminating their tribal status, and thus set up the mechanisms for furthering acculturation through education and technical aid. At the same time, the treaty was to protect the rights of Indian people to land that was being encroached by White settlers. Without protection, the Indians would eventually be left landless and destitute, turning to the State for financial assistance.

Negotiations leading to the signing of this treaty went on for at least two preceding years; the consequences of the treaty lasted until recently. White (nd: 24-57) provides a detailed account of the process by which the provisions of the Treaty of Detroit were brought up, negotiated, and put in paper, and implemented. Here we highlight a few of the most important points of the treaty that affected theretofore land and resource use in the Grand Traverse Bay Area.

The Treaty of Washington of 1836 had (1) ceded aboriginal territories in Michigan and set aside compensation funds, (2) created an artificial entity called "the Ottawa and Chippewa Tribe" to facilitate negotiations and avoid territorial conflicts between bands, (3) established reservations under sufferance through a series of Senate amendments to the original treaty, (4) initiated a system of federal annuities, and (5) provided for access rights to hunting and fishing areas in the ceded territories. The new treaty abolished these four provisions but kept the access rights in place.

First, the Treaty of Detroit dissolved the "Ottawa and Chippewa Tribe;" instead, the treaty was signed by each band in the name of one of five regional confederacies of bands: the Sault Ste. Mary bands (Ojibway), the Makinac bands (Ottawa and Ojibway), the Grand Traverse bands (Ottawa and Ojibway), the Little Traverse bands (Ottawa), and the Grand River bands (largely Ottawa). Article 5 of the treaty established that future negotiations would be conducted with the bands (White nd: 50).

Second, the Treaty established new reservations under severalty; the 148,000 acre Leelanau reserve would not be held in common but allotted by family (80 acres) or by individual (40 acres). Eligible land owners would have until 1861 to choose and register a parcel within reserved areas designated by the treaty. When the selection period ended, they would have another five years of exclusive right to purchase reserved lands at standard government prices; thereafter the land would be open to purchase by Whites (Article 1; White nd: 48-49).

Third, the Treaty provided for the distribution of $538,400 to the Indians. These funds, which had been calculated after lengthy negotiations in which the Indian speakers asked American officials for compensation due to them since 1836. Part of these funds were for technical aid and education, specifically schools, teachers, agricultural implements, and blacksmiths, and part for distribution among the bands (Article 2; White nd: 49). American officials refused to assume the Indians' debts to the traders, however, leaving them open to threats and legal action. This problem was solved with a later amendment.

Fourth, the Treaty abolished perpetual annuities, even though the bands objected to this release clause. American officials believed that the elimination of annuity payment to the Indians would accelerate the assimilation process by making them more like any other American. All parties thought that after the expiration of the annuities from the 1855 treaty they would be able to negotiate a new treaty agreement; no one knew then that this would be the last treaty the Traverse Bay bands would make with the United States (White nd: 50).

In theory, the Treaty of Detroit secured land titles, renewed payment of compensation, promised technical aid, eliminated rumors of removal, and assured an independent status to the bands; thus, the bands were initially satisfied with the agreements. Soon, however, they would find the poorly conceived provisions impracticable. Portions of the reserved lands were not available or had been already settled by White families; parcels chosen by the Indians were not registered properly or were lost to trespassing, document fraud, taxation, and blatant theft (Cornell 1986: 96; McClurken 1991: 80; Weeks 1992: 12). Without the annuities, Indians could not purchase lands and the payments due to them were not made in full until a law suit forced the government into compliance a half a century later. Having eliminated the "tribe" but retained the "band" status, the Indians were left in a citizenship *limbo,* where neither the rights and benefits enjoyed by White US citizens nor the government aid specifically reserved to Indian tribes could reach them. In other words, the treaty had disastrous consequences for the Grand Traverse bands.

The passing of the Homestead Act in 1862 accelerated White settlement in Michigan and spurred interest in the Leelanau reserve, even though the 10 years of exclusive right to selection and purchase by the Indians had not yet expired. When lands were restored to the market, the Indians retained their exclusive rights to select and purchase land in the Leelanau Reserve; however, land officials in Traverse City required proof of settlement and cultivation as requirement to comply with the Homestead Act. Many parcels not occupied during seasonal rounds or periods of temporary work elsewhere were declared abandoned. In 1875, the General Land office explicitly ruled that the Indians were not entitled to the benefit of homestead laws (White nd: 74). A series of amendments passed during the 1870s attempted to remedy the land situation for the Indians and complete the patent process, but hardly solved the problems created by the 1855 treaty (White nd: 115).

With the passing of the Dawes General Allotment Act of 1887, the reservation lands still in the hands of the bands were divided among individuals. This tenure system had the effect of hastening acculturation and ending individual ties to their bands and traditional lifestyle (Weeks 1992: 12-13). As White (nd: 53, 75) states, eventually even the continued existence of the various bands would be challenged by the federal government on the grounds of achieved citizenship. However, the Ottawa-Ojibway band members were not citizens of the United States until at least 1887 and, given their band status, probably not until 1924.

The Traverse Bay Bands During the Logging Era

In 1870, the Indian population in Michigan numbered 9,000. Although there are no census numbers for the Grand Traverse Bay region, it appears that by the early 1870s the number of bands at Grand Traverse had increased, either by factional splits or through migration. In the tribal roll compiled in 1870, the government divided the people of Grand Traverse into nine separate bands and seven known chiefs: (1) Ah-go-sa and Mission Harbor Band, (2) Elk Rapids Band, (3) Shawb-wah-sun's band at New Mission Point, (4) Waw-ka-zoo and the Black River Band, (5) Nagonabe or Cathead Point Band, (6) Carp River or Onumunense Band near Leland, (7) Peshawbe and the Eagletown or Peshawbetown Band, (8) Glen Arbor Band, and (9) Lewis Mick-saw-by and the Pine River Band at Charlevoix, which sometimes was included in the Grand Traverse roll and sometimes in the Little Traverse roll (White nd: 124).

Although some of the lands where these villages were located had been bought before 1855, very few individuals had received land patents by 1872. The villages, nonetheless, continued to exist but amidst increasing poverty. According to the government investigator E.J. Brooks, the allotment in severalty had been a tragic mistake; however, no action was ever taken to restore the reserved lands to the Indians (Brooks 1878, cited in White nd: 120). In White's view, the loss of land was a heavy blow to the Grand Traverse bands, but not in the way Americans had imagined. Total acculturation did not occur; instead, cultural adaptation to changing conditions worked to preserve cultural and ethnic distinctiveness. Brooks's investigation of 1878 found that the subsistence patterns had remained intact all over Michigan. He captured precisely the Indian view of what a "homestead" or "allotment" meant for native economy–not a permanent farm, but rather:

a place on which to make sugar in the spring, raise a few potatoes and sufficient corn to supply their bread during the year, and to have a home upon which they may at any time return (cited in White nd: 121).

Such adaptive ability was not limited to subsistence activities but also to religious indoctrination. For example, Ojibway and Ottawa preachers founded their own, uniquely Indian, churches. The Ojibway preacher Peter Greensky, for example, eventually split from Dougherty's old mission and took his followers across Grand Traverse Bay to Charlevoix County. A permanent church in "Greensky Hill" was dedicated in 1877 and with Indian clergy held summer camp meetings (Quackenbush 1995: 31; McClurken 1991: 26).

The Grand Traverse bands continued for a time to have a strong economic, as well as political, function. The fluid and changeable composition of bands and their leadership, particularly during periods of active population movement, may have been the most critical factor contributing to survival through adaptation. White (nd: 128-131) suggests that the persistence of the band seems to have been inextricably linked to hunting and fishing activities. By 1880, hunting and trapping had decreased drastically, in great part due to the near extinction of fur-bearing animals and the destruction of vast tracts of forest. Fishing for subsistence and cash, on the other hand, remained dependable until catches declined due to competition with Euro-American commercial fisheries. It was during this time that the bands weakened, opening the way to a new form of organization, identity, and leadership centered in the more sedentary, but demographically

heterogeneous village. Beyond the village, a new awareness of regional identity, led to the slow unification of the Grand Traverse bands into the Grand Traverse Band. By 1910 this unification was complete.

Along with the adoption of a village way of life came a mixing of White and Indian cultural traits and a strong sense of cultural identity, albeit ridden with poverty. By the 1890s, most lands were lost, together with old hunting and fishing grounds, the fur trade, and the once promissory shipyard craft. Indians then took to wage labor, particularly in the lumberyards that by then had extended across Michigan. Although at the beginning of the logging boom some Indian groups had been engaged in independent lumbering activities during the winter, soon they were unable to do so. In White's (nd: 133) view, the adaptation to lumbering seemingly was an easy and natural one, as trapping had once been. The Indians were skilled woodsmen, able to survive the worst winters in the open, and undertake dangerous tasks. Logging became the single most important economic activity in Grand Traverse Bay by the turn of the century. Other sources of seasonal wage labor for Indians were sailing, factory work, mining and blacksmithing, and construction work, supplemented by the selling of arts and crafts, particularly basketry, hide work, and snowshoe making (Cornell 1986: 97; Quackenbush 1995; McClurken 1991). These labor opportunities contributed little to relieve their abject poverty.

A critical factor in the survival of traditional knowledge, language, and skills during this period was centered in the marginalization of Indian women, first from the acculturation and indoctrination efforts of the missionaries, and later from the main sources of wage labor, except domestic service such as laundering and cleaning and, occasionally, berry picking. Women were not relentlessly pursued as men were by preachers, nor did they have to leave their families for extended periods of time during seasonal wage labor. On the contrary, in certain seasons, particularly during the winter, women and children would follow the men to the work camps; for example, about 50 Ottawa families worked at the Aral/Otter Creek sawmill during the winter seasons of 1870-1880 (Beck 1987: 12).[1]

The freedom to move about the landscape to collect plants, hunt, make sugar, and fish had been seriously impaired, but traditions prevailed (Devens 1992; Kalchik 1982; Quackenbush 1995). Women who stayed in the villages for most of the year remained close to their children, particularly if they went to day school. Even though by the turn of the century many women and children had been exposed to formal education and other forms of acculturation, they preserved their traditional knowledge of plants, animals, and craft production, and were able to transmit such knowledge to their children in their native language. Nonetheless, the new knowledge acquired in boarding and day school, including gardening, animal husbandry, house-keeping, nursing, and even teaching, flourished alongside tradition, eventually opening new work opportunities for women as well (Cornell 1986; McClurken 1991: 41). The preservation of native and adaptation to foreign practices, combined with fluency in both native and English languages, made the turn-of-the-century generation of Indian women and men even more able to survive in both worlds than they had been before.

By 1910, the lumber industry had begun to decay after decades of what Cornell (1986: 98) characterizes as "the plunder of the land." Millions of acres were cut clear of forest, causing irreparable harm to the inland fisheries by extensive cutting which led to soil erosion and the clogging of streams with silt. With the destruction of the forests, numerous other plant and animal species disappeared. At the same time, commercial hunters and fishermen were overexploiting the once rich reserves of Michigan. The mass netting and selling of passenger pigeon in the Grand Traverse region that led to the extinction of this bird stands as an example of the effects of plundering upon the native ecosystem.

The Road to Federal Acknowledgement

In 1910, The Durant Roll, a census conducted by Special Indian Agent Horace B. Durant, was approved. It provided a "base roll" for the Grand Traverse Band membership and helped lead to federal recognition by documenting the process by which several tribes had become a single political entity (Weeks 1990: 13). Additionally, the Snyder Act of 1921 and the Act of June 2, 1924 were supposed to grant federal relief funding and citizenship to the Indians, respectively. The Merriam Report of 1921, a study of Indian policy, programs, and conditions, had outraged the public, forcing the Bureau of Indian Affairs to make some drastic policy changes (McClurken 1991: 105). However, neither act helped the bands cope with the worse hardship yet to come.

Throughout the years preceding the Great Depression, the Grand Traverse Indians barely survived as transient workers in the few remaining lumbering camps, supplementing their economy with hunting, fishing, berry picking, and basket making. Few still had gardens and fields. Others moved temporarily to cities but maintained ties with Grand Traverse. This situation worsened during the depression, as the Indian communities in Michigan did not receive sufficient federal relief (Cornell 1986; McClurken 1991; White nd). Practically all families had to support themselves with the basket sales in those years (Dobson 1978: 7). The 1933 closing of Mount Pleasant Indian School in Isabella County, which had been operating since 1893 and served the Grand Traverse region counties as well, marked the darkest day of this period and the end of government-funded education for Indian children in Michigan (Weeks 1992).

In 1934, 286 Indians of Leelanau County signed a petition under the leadership of Ben Peshaba to get federal recognition. The petition was unsuccessful. In that same year, the Indian Reorganization Act, also known as the Wheeler-Howard Act, was specifically designed to provide congressional sanction for tribal self-government and rehabilitate Indian economy by providing opportunities that had been denied in the past centuries. The Johnson-O'Malley Act, signed that same year, authorized the Secretary of Interior to engage the cooperation of each state or territory in the development of relief programs and services for the Indians (Weeks 1990: 15). In the following years, the state of Michigan attempted to find solution to the problem of Indian lands that had reverted to the state because of taxation. In 1943, a second federal recognition petition was signed by the Indians of Leelanau County, which sought the restoration of reservation status and land purchase, was denied. The process of land restoration, however, began that year (Weeks 1990: 15).

Throughout the next 4 decades, the Grand Traverse Indians slowly recovered lands and treaty rights and obtained new funding grants and services (see Cleland 1992; McClurken 1991; White nd). The acknowledgement process for federal recognition was formalized in 1978, when the Bureau of Indian Affairs promulgated uniform regulations specifying the contents and documentation required in petitions. The Grand Traverse Band of Ottawa and Chippewa Indians was the first tribe in the United States to successfully petition for federal recognition under the 1978 regulations. On May 27, 1980, federal recognition for the tribe was finally achieved. As Weeks (1990: 21) details, four years later, 12.5 acres of land that had been purchased by the tribe in Peshawbetown in 1982 were proclaimed a reservation, thus enabling the Grand Traverse Band to be formally organized under the Indian Reorganization Act of 1934.

Contemporary Land and Resource Use at the Park

Five American Indian representatives from Grand Traverse Bay Band (Ottawa), Bay Mills Community (Ojibway), and the Sault St. Marie Tribe (Ojibway) visited four places within the park: the Platte River mouth and beach, Bass Lake, North Manitou Island, and Pyramid Point. Place-specific interviews were conducted at the first three places, whereas landscape interviews were conducted at Pyramid Point because of its elevation and panoramic view of the area (see Chapter Eleven). The following sections contain a brief description of the site in question and a summary of resource use responses. Please note that not all repre-

sentatives provided qualitative commentary for each question; therefore, some questions have fewer responses than others. Those representatives who had not been at a particular site before but knew the local and regional environment interpreted the site or resource by comparison with similar sites and resources.

Platte River

The section of the Platte River in the park extends from Platte Lake through Loon Lake and then to its mouth at the shore of Lake Michigan. This area is characterized primarily by ridge and swale topography that supports coastal or pine forests and oak groves. Flooded meadows covered with grasses and sedges occur along the Platte River floodplain (Hazlett 1991: 148) (Figure 7.2).

Ethnic Group Use History. Five interviews were conducted on the beach at the mouth of the river (Figure 7.3). Native American consultants felt that this is an important point because of the spiritual and physical connection between two different sources of water and its strategic location for traveling into the interior. The place is culturally significant for Ojibway, Potawatomie, and Ottawa people who have used it on a continuous basis since their arrival into the area[2]. The abundance of a variety of natural resources made this particular spot attractive for living, camping, and as a stopping place along travel and trading routes. Its significance also derives from its proximity to the spawning area in the Platte Bay, the view of the dunes it affords, and its use for ceremonial purposes.

Seasonality. Native American consultants perceived that the Platte River basin could have hosted a considerable number of camp along the river and on the smaller interior lakes[3]. They asserted that the place may have been used and occupied during different seasons depending on the resources available. In the spring, when waters are shallow, Indian people would have come to this location to set up weirs. During other periods of the year, Indian communities would have been attracted to this place because of the abundance of plant resources used for food, medicine, and ceremonial purposes.

Resources and Regional Connections. The Platte River has been interpreted as connected to all other places within the ancestral homeland, including the Manistique area, the Badinack River, and the Kaskanawa River. Tributaries to the Platte River also connected the river and other areas. The Platte River was an important trading route from the lakeshore to the interior. In addition, kinship relations and spiritual ties connect the different places and resources found therein. It would not surprising, therefore, to find abundant archaeological remains in the area given that people used it intensively in prehistoric times.

Water

The interviews with Native American consultants point to the fact that the properties of a specific body of water are intrinsically interconnected with specific places and locations. In this particular instance, the water at the junction between a river and Lake Michigan was considered sacred because of the connections between two types of water. Although the level of sacredness of the water *per se* is independent from the location, at the level of cultural practices different "types" of water have been identified by Native American consultants as part of different rituals, ceremonies, and modes of curing. To illustrate this point, one Ojibway male noted that:

> *… and water, other medicines instead need spring or river water. I use medicine and water from a place – a very specific place a medicine man told me. Medicine men are very specific about the source of water. Water can be part of the medicine and it is sacred. A medicine man may have a specific water source he would use in his medicine. He has a dream that tells him what water is to be used for. Some cases require Lake Michigan water.*

Native American consultants often referred to the water as being sacred, one of the strongest medicines, and one of the four basic elements in nature together with sky, fire, and earth. The complex body of

Figure 7.2 The Platte River Basin

Figure 7.3 Ethnographer and American Indian Consultants at the Platte River Mouth and Beach

water at this place, which includes the river-water, the swamp-water, and the lake-water, has also been interpreted as home to a number of spirits and animals species which reside in it.

In addition to the spiritual and curative value of water, the junction of the Platte River and Lake Michigan has been interpreted by the Native American consultants as important for subsistence activities and especially fishing and drinking.

Plants

A number of plants found in the Platte River basin were used historically and are still used today by the Native American consultants interviewed. Among these are the following trees: cedar, maple, white pine, oak, beech, birch, and basswood. Other plant species found in the Platte River area were also part of Native American use-complexes, among which the consultant mentioned: blueberries, raspberries, mint, wintergreen, cattails, hemp, reeds, and mosses. Furthermore, all four Ojibway ceremonial plants (sage, tobacco, sweet grass, and cedar) grow in this particular area of the park.

A male consultant asserted that historically specific people in the tribe dedicated large portions of their lives to the study of specific plants and their properties. Among the Ojibways these individuals were generally associated with the Grand Medicine Society, and they operated in close "partnership" with those plants.

One Native American consultant asserted that in this area there are plants with curative properties for health problems concerning bone structure, throat, sinus, lungs, cancer, liver, blood, arthritis and emetics. Among the plants utilized in medicinal practice, Native American consultants have identified the following: white pine, oak, maple, and beech-at least the first three are present in SLBE. When asked how the plants at this place were used, the answers offered were, in order of frequency:

As food
As medicine
To make things and tools
For ceremonies

Although many plants (e.g., cedar, birch, sage) have multiple uses, consultants tended to emphasize ceremonial and medicinal uses over utilitarian or household uses. This is not surprising, given that traditional utilitarian and household items have been replaced by modern material culture. Yet, religious and medicinal plants remain an important component of modern Ojibway culture. Below is a summary of the associated uses of particular plants or parts thereof that were mentioned in the interviews:

Cedar	Ceremonial covering for the drummer. Used also in ceremonial lodge and in/as medicine. Cedar leaves to make cedar pillows: warmed and used against back-soreness and in naming ceremonies.
Pine needles	Prevention and cure of colds
Echinacea	Strengthens immune system before the cold season
Maple	Make syrup
Berries and nuts	Food source and berries to make dyes
Bark from white pine	Dried up and used against colds
Bitter roots	For sore throat and for general medicine
Birch	For ceremonial lodges

Mint	Used in sweat lodge mixed with water and by the Grand Medicine Society
Unspecified trees	To make boats, housing, clothing
Reeds	To make mats
Cat tails and hemp	To make ropes
Basswood	To make fabrics and ropes
White cedar	To make clothing items
Moss and cattail down	Used as diapers in babies' cradle-boards

Animals

Responses elicited through the interviews at Platte River point stressed the interrelationship between humans, plants, and animals. In this triangle the animals have played historically and spiritually the fundamental role of mediators between humans and the vegetative world. One comment about bears by a male Ojibway consultant illustrates this tripartite relationship:

Bears, when they hibernate, they have a strong spiritual power. When they sleep they do spirit travel with doctors too. They *[the bears]* know about plants, they teach people and talk to them about plants, and give them the rights to use the plants.

From a resource-use point of view, one male consultant interpreted this area as a "good area for wild turkey, rabbits, and deer." When asked how the animals at this place were used, the answers offered were, in order of frequency:

As food
As medicine
For ceremonies
For clothing
To make tools
For exchange and/or trade purposes

Below is a summary of the associated uses of animals or parts thereof:

Elk and deer horns	Used on the sweat lodge and to tie and hang things
Eagle wing bones	To make whistle
Femur bones	To make pipes
Back sinews	To make chords and bow strings
Deer tongue	Mixed with pigments to make paints

Fish

Similarly to what expressed in respect to the relationships between humans and animals, fish has been interpreted by the Native American consultants as an important connection with the natural world. Ojibway and Ottawa consultants maintained that fish has played a fundamental role in structuring both societies through the clan system and in choosing personal names. Native American consultants also pointed out the decline in functional importance of the clan system today, but its retention as marker of identity. In the past, one could not consume the animal or fish of one's clan totem. To do so would be cannibalism.

Among the fish species identified by the Native American consultants, are the following: trout, sucker and walleye which were running in the spring in this area, while other fish species from Lake Michi-

gan would come to the reefs close to the shore and to the shallow lakes. When asked how the animals at this place were used, the answers offered were, in order of frequency:

For food
For ceremonies
For exchange and/or trade
For medicine
To make tools

Fish has been interpreted by the Native American consultants as having a central place in the ceremonial life of the people, especially by providing spiritual help to the people. At this location, however, fish played a fundamental role also in the economic life of the local communities who were to a large extent depending on fish as a major food crop during the entire year. Fish was either consumed fresh or smoked and/or dried and preserved. Fish was also a central item of exchange for foreign items obtained from other tribes and from Euro-American traders and settlers. More recently, one Ojibwa male reported that the Sault St. Marie tribe has had a contract with the Department of Natural Resources that allows them to set fish weir along the river. While fish eggs have been used for stocking and sold commercially, fish is usually sold fresh or canned.

Below is a summary of the associated uses of animals or parts thereof mentioned by the Native American consultants interviewed at this site:

Fish (unspecified)	Smoked and dried and preserved for food and exchanged
	Used in ceremonies
Sturgeon sinew	To make strings
Fish bones and cartilage	Boiled to make glue and paint
Inner parts of fish	For medicine

Archeology

The Native American consultants interviewed at the site did not have the opportunity to encounter remains of ancestral material culture. One Ojibway male respondent, however, stressed the fact that the area along the Platte River could potentially provide significant numbers of artifacts. Concern was expressed by one consultant in respect to the treatment of unexpected discoveries on the part of private people.

Native American consultants have interpreted this location as a particularly powerful spot that contains ancestral spirits. Historically, the place has been identified as an important place to come and gather medicines, fast, and make offerings to the lake. When asked what uses did the archaeological remains found along the Platte River had, the answers offered were, in order of frequency:

For hunting
For gathering
For ceremonies/power
For living
For camping
For exchange and/or trade

Topography

The Native American consultants interviewed at Platte River Point responded to questions eliciting information about geological features of the area by focusing on the cultural importance of the adjacent

dunes. One Ojibway consultant has interpreted the dunes as locational markers, lookout points, and boundaries of land. Sand from the dunes has been historically utilized in ceremonies and in pottery making. Dunes have been also interpreted as a ceremonial site used for fasting and especially for puberty rites both for male and female initiates. The following passage extracted from an interview with a male Ojibway informant illustrates the practice of fasting:

Dunes were often used to fast. Fasting is a total commitment, an offering of your life so that the things around you can continue to survive and live. It is a commitment to dying, a confrontation with death. You sacrifice food, water, medicine, lodging so that your relations and the world as we know it, can continue to live… People still fast here and also at Pictured Rocks.

As evidenced in this passage, fasting is still practiced by members of the Native American communities that participated in the study. Moreover, access to the dunes for religious purposes is a concern expressed by the informants interviewed.

Bass Lake

Bass Lake is located one mile south of Good Harbor Bay and south of Shalda Creek Bass Lake is a spring-fed lake connected to School Lake by an isthmus; the western side of these lakes consists of a very steep upland moraine. Bass Lake contains a mixture of swamp forest ecology predominant south of the Pyramid Point area, and coastal forest ecology (Figure 7.4). The wetlands surrounding the lake have tamarack, white cedar, white birch, beech, maple, and red pine. At the time of the visits there were active beaver lodges (Figure 7.5).

Ethnic Group Use History. A total of five interviews were conducted at this site with American Indian consultants from the Bay Mills Community (Ojibway), the Sault St. Marie Tribe (Ojibway), and Grand Traverse Bay Band (Ottawa). The researchers and consultants followed a short trail to the lake, and then stopped at various locations along the lakeshore to inspect the local flora and fauna.

Native American consultants' interpretations of Bass Lake are not unanimous. Although all people interviewed agreed on historical use of the area by Ojibway and Ottawa people, their understanding of how the place was used range from year-round occupancy to seasonal use (especially winter camps), to a simple camping site on a trap-line or hunting trail. All informants, however, pointed out that Bass Lake has been and is still used to pick peculiar medicinal plants that can be found only in marshy areas. A variety of plants for medicinal and ceremonial purposes, including some species of mushrooms and berries were identified by consultants at this location.

Seasonality. Native American consultants' interpretations of the site and the respective patterns of occupation depend largely on the abundance of resources that each informant identified during the interviews. One male consultant emphasized Bass Lake's suitability for winter activities, whereas other two males consultants focused their attention on medicinal plants that can be found at the site, believing that not enough resources would be available to sustain a village and that the major residence was rather at the Platte River.

Resources and Regional Connections. Consultants consider Bass Lake to be part of a larger system of interconnected places. Particular connections were identified with the Platte River and the Platte Lake, although one Ojibway male emphasized that the entire region is interconnected. Types of connections old trails and trap lines to subsistence activities.

Figure 7.4 Bass Lake

Figure 7.5 Remnants of Beaver Activity at Bass Lake

Water

Bass Lake water has been identified by the Native American consultants interviewed as a source for food, drink, medicine and ceremonial uses. No particular details regarding meanings and/or importance of water at this location have been given during the interviews.

Plants

Several plants found at Bass Lake have been identified by Native American consultants as part of their respective tribal cultural lore. When asked about the significance of plants at this location, one male consultant explained the multiplicity of meanings that Native Americans attribute to plants, and the close interrelationships between humans and the vegetal world. In the Native American scheme of things expressed by this consultant, plants are not mere resources to be used for no matter how many purposes. Plants have personality, a spirit, can interact with humans (plants can hear the songs that humans sing when picking them, and songs are necessary to maintain the balance between the two beings and their universes), and plants possess a level of consciousness that informs their role in nature and their activities. According to this view, agency is located both at the vegetal and human spectrum of the relationship, and ritual forms of interaction are necessary to avoid breaking the balance between the two realms.

Plants' curative properties and the processes related to the act of curing are of a spiritual nature according to the consultants. However, the chemical components and the biophysical properties of the plants and substances used are well known to specific individuals in the tribe. The taxonomic system of medicine classification, in fact, is complex, and the criteria for classification include various factors among which the physical properties of the plants, the spiritual power associated with it (or its parts), and the animal that has acted as intermediary between the plant and humans.

The following plants found at Bass Lake have been identified as part of Native American resource-use complexes: cedar, white pine, maple, tamarack, hemlock, birch, sarsaparilla, various types of mushrooms, berries, wintergreen, bitter root, sweet flag, and cattails.

When asked how the plants at this site were used, the answers offered were, in order of frequency:

As medicine
For food
For ceremonies
For making things

Below is a summary of the associated uses of particular plants or parts thereof identified by the consultants interviewed at Bass Lake:

Mushrooms	Eaten to stop bleeding
Lettuce	As relaxant
Nettles	To make energizing teas
Cedar	To start the sacred fire and to make canoes
Cedar juice	Smeared on body when hunting to deceive animals
Berries	For food and to make teas
Wintergreen	To make tea
Tamarack	To cure illnesses
Bitter root or Sweet flag	For sore throats and to clear throats for singing
Birch bark	For making canoes, baskets
Cattails	To make mats and lodges

Animals

Responses elicited through the interviews at Bass Lake emphasized the interrelationship between humans and animals in the consultants' worldviews. According to one male consultant animals cover a multiplicity of important roles in his culture. Communication between animals and humans occurs both in states of consciousness, and through dreams. This communication has been the basis for the interactions between the specific animal species and humans, especially when this relationship takes place within the hunting framework of action. For the Native American consultant interviewed, animals would give up their bodies to a human if they perceive the latter to be in need of food, thus redefining a new epistemology of hunting.

Animals are also perceived as helpers, givers of medicines, and brothers or sisters. One consultant interviewed asserted that, similarly to the plants, also animals possess songs, and these can be communicated to people as well – usually the song is the property of a hunter and the right to it cannot be given away. Finally, animals provide people with spiritual names. The characteristics of an animal would correspond to various aspects of the receiver's personality.

In the consultants' scheme of things, animals are themselves medicine because all food is conceived as medicine itself, and it is not so much the biochemical properties of the substance received by the patient that is responsible for the curing process, whereas the spiritual power endowed by the animal onto the receiver. In the etiology of illness presented by the people interviewed, it appears that there is a correlation between food intake and body status, and that it is in the balanced intake of foods that a healthy status is maintained.

The following animals have been identified as present at Bass Lake: otter, deer, beaver, and porcupine, all of which were used as food sources. Beaver instead was also used for medicinal purposes (in particular beaver's caster mixed with juniper and juniper berries against headaches). When asked how the animals at this place were used, the answers were, in order of frequency:

As food
For medicine
For clothing
For ceremonies
To make tools
For exchange and trade

Fish

Native American consultants interviewed at Bass Lake asserted that fishing activities at this location took place primarily in the summer (spearing and netting) and in the winter (ice fishing). Only bass and unspecified fish species that are usually found in the interior lakes have been identified at this location.

Archeology

Although one male consultant did not think that any archeological remains could be found at Bass Lake, another informant interpreted the west side of the lake as a potential area for burial grounds. According to park officials only one ephemeral archaeological site and one isolated historic artifact were found here. Also, they note that the original land surveyor depicted an Indian trail along the western side of the lake, thus indicating aboriginal use of the area.

Topography

Because the interviews focused primarily on the ecology of the lake and the surrounding flora, no specific information was elicited in regards to the topography of the place.

North Manitou Island

North Manitou Island is the larger of two islands located off the eastern coast of Lake Michigan, about 8 miles west of the town of Leland. The island encompasses an inland fresh-water lake or Lake Manitou that makes this place particularly important to Indian people because of its "lake-within-lake" geography (Figure 7.6). The predominant vegetation in North Manitou Island includes sugar maple, beech, white ash, basswood, and hemlock. A cedar grove grows by the lake. Because of the high moraine on South Manitou Island shielding North Manitou Island from strong northward winds, the latter has only developed minimal dunes, and only in areas where the wind is not blocked (Hazlet and Vande Kopple 1983). Five interviews were conducted on the shore of Lake Manitou with consultants from the Sault Ste. Marie Tribe (Ojibway), the Bay Mills Community (Ojibway), and Grand Traverse Bay Band (Ottawa). A sixth interview took place at the Frank's Farm area.

Seasonality. The island once contained resources for year-round occupation—deer, moose, fish, and various plants. However, people who used this area were primarily living in St. Ignace on the Mackinac Strait, L'Abre Croche, or Grand Traverse Bay. The place has been interpreted by the American Indian consultants as primarily a travel stop on the way to Manistique. One consultant believes that only one extended family could have been resident here. When people camped here they would divide the space on the island by clan, as they would in other places. In addition, all informants interviewed interpreted this place as a summer location, and two consultants underlined the possibility for a ceremonial use of the island. One Ojibway informant also pointed out that the island could have been possibly used as a ceremonial site, specifically as a place for purification ceremonies on the way to fasting places both in the spring and in autumn.

A possible ceremonial use of the island is supported by the morphological setting of the island that contains a "lake within a lake," a feature that endows the place with particular power according to Ojibway cosmology.

Resources and Regional Connections . According to the American Indian consultants interviewed, North Manitou Island is part of a larger regional landscape that connects the North and South Manitou Islands to other features on the mainland and to other lakes. North Manitou once contained a fairly large deer and moose population to allow for few families to continuously live there. Of particular interest to the people interviewed were the clearings at Frank's Farm with scattered evidence of lithic industries, the large birch trees on the trail to Lake Manitou, and the cedar grove on the lakeshore. A ring-shaped sequence of ironwoods delimits an area that might have been used for ceremonial uses at Frank Farm. In addition to this clearing, the consultants were able to see some old birches that had evidence of bark use (Figure 7.7).

In addition, interviewees pointed to the connections between the island and its surrounding regional landscape including places such as South Maintou Island, Suttons Bay, Grand Island, and Grand Traverse Bay. These places are connected through family ties, geographic similarities, similar ceremonial lore, and patterns of seasonal use and resource use. Finally, this island is situated on a route for copper exchange that went from south of Lake Michigan to as far north as the Lake of the Woods.

Water

The peculiar concentric location of a lake within a larger lake has been interpreted by Native American consultants interviewed as a feature defining potential ceremonial uses of the island and the inland lake.

One consultant in particular has drawn parallels between North Manitou Island and Grand Island, both of which share the characteristic presented above.

According to the consultants, the water at this location (Manitou Lake) has been used by Native Americans for drinking, ceremonies, and medicinal purposes. In particular, one informant reported that offerings to the lake were made when water was used to prepare food.

Plants

A fairly large number of plants have been identified by Native American consultants as significant for their respective cultures both in the past and today. Among the plants identified as part of use-complexes are the following: maple, beech, various types of fruit trees, mushrooms, cedar, raspberries, different types of mints, pine, reeds, Indian pipe, fungus on trees, birch, and ironwood. The following associated uses of plants or parts thereof were elicited through the interviews at t

Maple	Collection of sugar
Nuts and leaks	For food
Striped maple	To cure phlegm and lung diseases
Cedar	For cleansing purposes; to make canoes
Raspberries	Used by pregnant women as energizers
Bark of pines	Used against colds and pneumonia
Reeds	Used against sore throats
Bark of sugar-maple	To make sap-collecting buckets
Birch	To make covers for canoes, paddles, bows and arrows

Similarly to what stated earlier in this report, Native American consultants interviewed at this location understand the use of plants in curing practices not only in relation to the biochemical properties of the plants but as a consequence of spiritual power transfer. According to one Native American consultant, the ring of ironwood trees found near Frank's Farm and delimiting the concomitant clearing, demarcates a ceremonial site that could have been used both for ceremonial purposes and as burial ground.

Animals

Native American consultants interviewed on North Manitou Island stressed the significance of eagles' presence on the island. One consultant asserted that "eagles are important because they fly close to the creator and take prayers closer to him."

The following animals have been identified as present on North Manitou Island: mink, otter, beaver, cranes, eagles, porcupines, raccoons, muskrat, and skunks. All of these animals are part of a resource-use pattern that historically might have supported one extended family on the island. The associated uses, however, are part of the Ojibway cultural lore and are not only specific to the site under consideration. In addition, Animals were traded by the family living here for smoked fish or arrowheads.

The order of frequency with which consultants responded to the question of how animals have been used at the site, emphasizes that animals here were used principally for food, although some consultants have also reported medicinal and ceremonial uses. Below is a summary of the associated uses of particular animals or parts thereof that have been identified by the Native American consultants interviewed at North Manitou Island:

Mink	For medicine bags and decoration
Otter	For medicine bags and decoration

Figure 7.6 Lake Manitou

Figure 7.7 Tribal representative examines use scars on a birch tree

Beaver	For medicine bags, decoration, and food
Crane's feather	For ceremonies
Eagle's feather	For ceremonies
Eagle's bones	To make whistles
Crane's bones	To make whistles
Raccoon	For food
Muskrat	For food
Skunk	For food

Fish

There was general consensus among the Native American consultants interviewed at North Manitou Island, that the fish resources present at this location were a fundamental food crop for the historical populations that inhabited the area. Bass, perch, trout, clams, and generally warm water fishes have been identified by the consultants interviewed. One male consultant also pointed to the possible presence of sturgeon in the area. Another male consultants referred to the area surrounding North Manitou Island as "a lake trout sanctuary" because of its prime characteristics as a spawning ground. The associated uses of fish resources elicited through the ethnographic interviews are the following:

Clams	For decorative purposes and household utensils
Sturgeon	To make glue
Sturgeon's bones	To make necklaces

Archeology

Native American consultants were interviewed primarily on the shores of North Manitou Lake in the interior of the island, and although all consultants had the chance to walk through Frank's Farm, only one of them had the opportunity to survey the area and to analyze it more in depth. According to this consultant, Frank's Farm may have had a burial ground at the western edge of the clearing and possibly in the middle of the field itself, but offered no further explanation as to what indicated the existence of the burial ground. He interpreted the sequence of planted ironwood trees as indicating a place for ceremonial and political gatherings for Ojibway people coming from different locations. The other consultants interviewed interpreted Frank's Farm as a place where agricultural activities were conducted, although the same place might have been used as a ceremonial place in correspondence of harvesting activities.

One male consultant interpreted the embankments at Frank's Farm as evidence of turf mining for lithic raw materials and for medicine. According to a quick analysis of the lithic raw materials found on the path across Frank's Farm, the consultant believed that occupation of the area may stretch as far back as to the mid-woodland period. The same consultant also stated that North Manitou Island is located on a trading route that connected Lake Michigan to Lake of the Woods, and that people living here might have participated in such exchange. According to all consultants interviewed, the island was also used for collecting maple sugar and for collecting birch bark, as evidenced by the still visible scars on several trees along the path to North Manitou Lake.

Topography

There was general consensus among the consultants interviewed on the ceremonial historical use of North Manitou Island. The island has been interpreted also as a territorial marker on traveling routes along the coasts of Lake Michigan. One consultant, furthermore, asserted that the promontories found on North Manitou Island were used for fasting. This observation is consistent with information elicited through our ethnographic in similar locations where promontories are found.

One male consultant interpreted the topography of the place as the result of Nanabozho's activities. Nanabozho is a mythical figure who played an important role in Ojibway cosmology. His actions are often to be interpreted according to the general Native American trickster's ideology, i.e. within a liminal space between the feasible and the impossible, between the grotesque and the dramatic, between natural and supernatural existence, and between human and animal ontology. One male consultant stressed the importance of the body of oral tradition embedded in Nanabozho's stories and its role in traditional forms of education as well as in identity formation.

[1] The source of Beck's estimate of Indian families working on this sawmill is unknown.

[2] According to park officials, there is no archaeological evidence of such continued use. However, the configuration of the river mouth was significantly different in the past than it is today, as indicated by mid-twentieth century photographs.

[3] According to park officials, there is no archaeological remains fond in this area, but there are several prehistoric sites along the Platte River.

CHAPTER EIGHT

PICTURED ROCKS NATIONAL LAKESHORE

Pictured Rocks National Lakeshore (PIRO) is located on the southeast shore of Lake Superior (Figure 8.1). The park stretches along 42 miles of lakeshore from Grand Marais to Munising, Alger County, Upper Peninsula of Michigan. The lakeshore is approximately 1 mile wide for about half of its length, widening in certain areas to include inland watersheds. It comprises 33,500 acres or 52-plus square miles. An inland buffer zone of 37,850 acres, lying immediately behind the lakeshore, protects the fragile shoreline zone and its watersheds (Anderson 1988: 6; General Management Plan 1999).

PIRO was established by an Act of Congress and signed into law by President Lyndon Johnson on October 15, 1966. The purpose of this act was to "preserve for the benefit, inspiration, education, recreational use, and enjoyment of the public a significant portion of the diminishing shoreline of the United States" (Public Law 89-668). As with many other parks in the Midwest, the establishment of PIRO came about after decades of struggle and negotiation among state legislators, local land owners, land-holding companies, and national political and administrative forces, each with their own priority agenda. Yet, since its creation the park has met with public approval and support (Karamanski 1995). Most of the inland buffer zone remains in private hands but is managed under an agreement with the National Park Service (Karamanski 1995: 43).

The Park and its Resources

PIRO exhibits one of the most varied geographical and ecological settings on the Lake Superior shore. Topographically, the lakeshore may be divided in three large areas, from east to west: Pictured Rocks Cliffs, Twelvemile Beach, and Grand Sable Banks and Dunes (Anderson 1988: 6; Drexler 1975; Rawson 1867; Rosenfield et al. 1991). The inland Beaver Basin, which joins Lake Superior at Twelvemile Beach, may be considered a fourth topographic area in its own right. Each of these areas, in turn, contain unique geological and ecological features, including waterfalls, sandy beaches, sheltered coves, inland lakes, massive dune fields, and significant stands of hardwood forest. Varied vegetative communities support a diverse animal population. All these features combined to attract human groups to the region since perhaps the early Holocene. Here we present a brief summary of the park characteristics simply to give the reader a bare idea of the natural and cultural context. However, primary sources cited below should be consulted for further information.

Geological History

The most comprehensive description of the park geology may be found in Hughes (1985). The Lake Superior shoreline exposes some of the oldest geological formations within the Canadian Shield. Yet, the ancient Precambrian and Cambrian deposits that characterize the shield were mostly eroded from the park area except for the Cambrian sandstone exposures found on the west end of the park. The visible bedrock dates to the younger Paleozoic Era (about 600-270 million years). Its exposed formations, particularly the Munising Formation, are composed of sandstones originally deposited by relatively shallow epi-

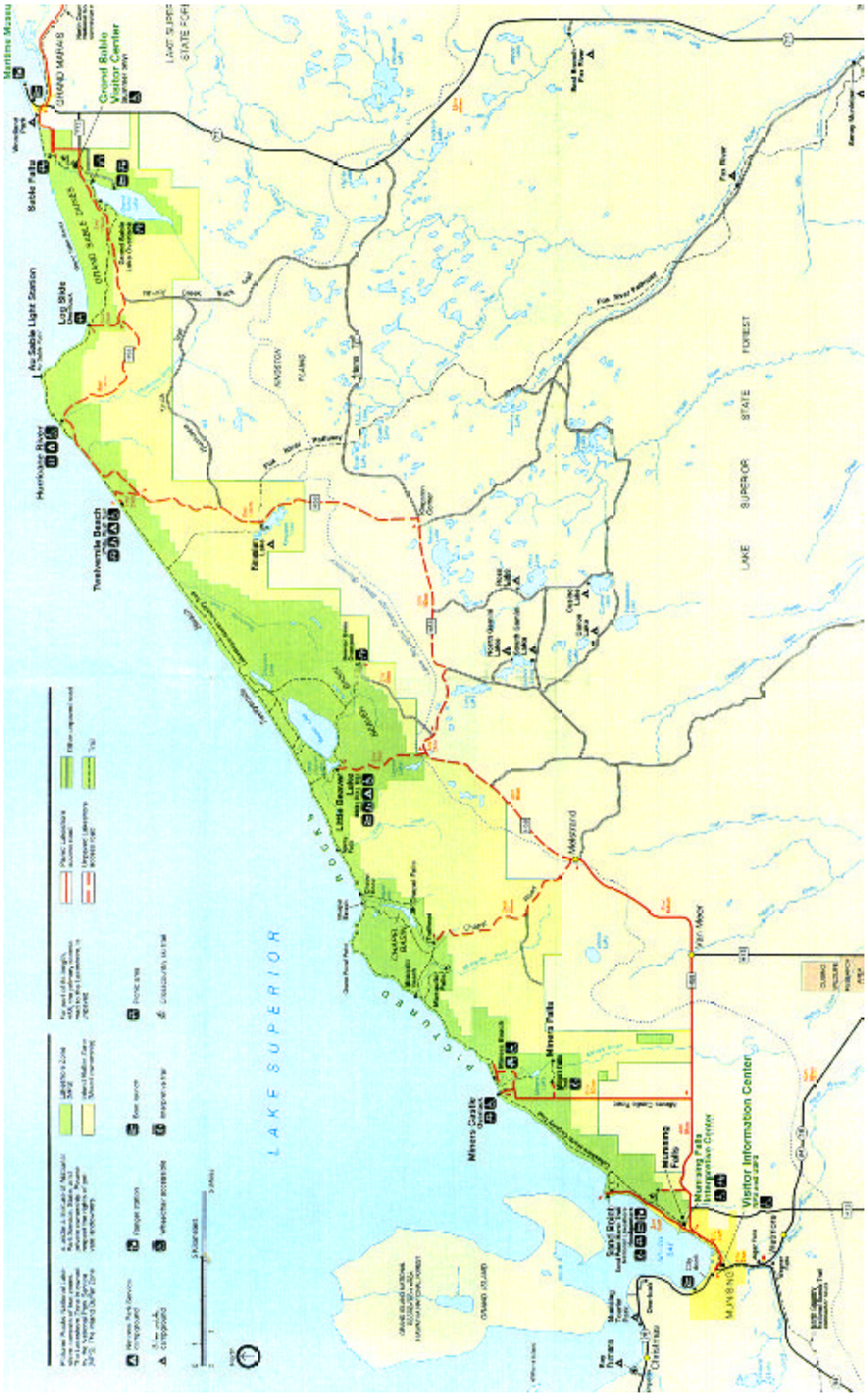


Figure 8.1 Pictured Rocks National Lakeshore

continental seas. Remnants of these sandstones, which are rich in plant and animal fossils, form the Pictured Rocks escarpment and its colorful cliffs (Michigan Technological University [MTU] nd: 7; Anderson 1988: 9).

During the Pleistocene, the region was repeatedly covered by advancing and retreating continental ice sheets that dramatically affected the Great Lakes landscape, by both scouring the land and depositing tremendous quantities of till in moraines, crevasses, and outwash plains. The last of four glaciers to move across the region, the Wisconsin, retreated about 10,000 years ago, molding the modern regional topography. The advance and retreat of the Wisconsin glaciation occurred in several stages. Surface features primarily reflect the most recent stage, Valders, that reached its maximum advance about 12,000 years ago and obliterated much of the surface evidence of previous glaciations. Subsequent glacial stadials and interstadials, isostatic rebound, and erosion, produced major and minor shifts in the park shoreline and further modified previously deposited materials (Hughes 1985; MTU nd: 12). The Grand Sable Dune banks and terrace, for example, are believed to be a thick layer of glaciofluvial and lacustrine material deposited in a large glacial crevasse, which was subsequently uplifted and reworked by wave action. Overlaying sand dunes were later deposited by aeolian activity (MTU nd: 12).

Post-glacial lakes (Nipissing substage) that preceded modern Lake Superior are responsible for yet another set of features within the park, such as the ancient shoreline visible at Grand Marais and along Beaver Creek (MTU nd: 12-13; Anderton 1993). Inland lakes and marshes, on the other hand, were the result of a combination of shoreline uplift and sand bar formation that created meltwater embayments and filled in glacial kettles (Hughes 1985). The highly dynamic, post-glacial environment also carved meltwater channels, remnants of which form at least 13 major hydrographic features in the park area between Chapel Lake and Hurricane River. These features include short but fast streams (e.g., Miners and Mosquito rivers; Sevenmile, Beaver, and Sable Creeks) and precipitous waterfalls (Jones 1993: 6: MTU nd: 17; Handy and Twenter 1985).

This complex glacial and post-glacial history contributed to the development of varied soils (US Department of Agriculture 1993). In all there are nine well-defined soil types, including the Shelldrake sand, Onota stoney fine sandy loam, Au Train loamy sand, Alger loam, Rubicon sand, Carbondale muck, Rifle peat, Hiawatha sandy loam, and Munising loam (MTU nd: 18). These soils support an equally diverse flora.

Vegetative Communities

PIRO extends inland barely three miles, yet, it contains 625 native plant species—about 30% of the native flora of Michigan—and 99 intentionally or accidentally introduced plant species. Its varied topography is home of an equally varied number of plant habitats, including forests, swamps, lakes, dunes, beaches, and cliffs (Chadde 1996: 2). While early descriptions of the park's geology abound, observations and collection of plant specimens were only sporadic and casual (e.g., Doty 1895; Schoolcraft 1857; see Guire and Voss 1963) until the 1910s, when C. K. Dodge began a systematic botanical study near the park. In the 1930s and 1940s other botanists and taxonomists explored and collected in the park area; however, this remains one of the botanically least known areas in Michigan (Read 1975: 6).

Forest Communities. PIRO lies within the "Great Lakes/Saint Lawrence" transition between eastern deciduous and boreal forests. Tracts of conifer and hardwood-dominated vegetation occur in a mosaic controlled by soils, drainage conditions, and historic land use patterns (Loope 1991: 18; Frederick et al. 1977: 433; Whiteford 1901). Climatic patterns, strongly influenced by the lake effect, also contribute to the general forest type distribution. Chadde (1996: 2) identifies three types of forest habitats currently present in the park: moist forests, wet-swamp forests, and dry forests.

Moist forests are composed of a mixture of mesic deciduous and conifer species that favor well-drained alkaline soils, with American beech, sugar maple, and yellow birch as the dominant species (Frederick et al 1977: 433). The proportion of conifer trees varies by location but groves of eastern hemlock, balsam fir and white spruce are common. These forests are found in the uplands from west to east, below the inland portions escarpment at Sand Point, and at the base of shaded cliffs and in deep short ravines fed by seeping water at Miners Basin, Chapel Basin, and near Sable Falls (Chadde 1996: 3; Read 1975: 9). The understory growth in mesic forests is rich in herbaceous and fern species. A variety of ferns grow on moist shaded cliffs and ravines; several wildflower species bloom in the late spring-early summer.

Mesic forests were affected by the logging activities of the 1940s; the greatest change involves a decrease in average tree size and some change in its composition, particularly the elimination of American elm by Dutch elm disease (Frederick et al. 1977: 440-441).

Wet-Swamp Forests grow on poorly drained soils on lowland areas adjacent to lakes and streams, and on swampy flats. The best examples of these forests are on and behind Au Sable Point on the east end of the park. Dominant wet wood species are white cedar, black spruce, tamarack, balsam fir, and black ash. Woody shrubs include tag alder, speckled alder, and a variety of berries that form the understory growth; fern, sedge, and sphagnum mosses, and wetland wildflowers cover the forest floor (Chadde 1996: 16; Loope 1991: 18; Read 1975: 11).

Lowland forests have suffered relatively little changes due to logging even though white cedar was cut extensively on both ends of the park. Tamaracks have suffered from plague but are slowly recovering (Frederick et al. 1977: 441).

Dry Forests grow on well-drained sandy soils on the uplands behind the shore escarpment, above beach embayments, and on the outwash plains. These forests are dominated by conifers, particularly red and jack pine; white pine and white spruce grow where there is more moisture. Deciduous trees mixed with conifers include paper birch and aspen. Conifers are found behind the Grand Sable Dunes escarpment, on the embayments of Miners and Chapel Basins, and along portions of Twelvemile Beach. A mesic-dry forest mosaic is present at this beach. Sand Point exhibits rich stands of very large red and white pines. Miners Basin, on the other hand, has an outstanding growth of jack pine that has remained mostly undisturbed by recent human activity (Chadde 1996: 37; Read 1975: 9). Pine forests support a characteristic understory growth, including a dozen species of berry shrubs, wild flowers, and a few ferns.

There is evidence that American Indian populations may have cleared the understory growth of pine forest with fire to promote the growth of a variety of plants and grasses, in particular blueberry patches (Loope 1991: 23; Loope and Anderton 1998). Conifer forests were heavily logged between 1880 and 1905, and thus have changed in tree size and species composition; aspen growth and invasion of prairie-type grasses, most visible on the Kingston Plain, are the result of succession after logging (Frederick et al. 1977: 443).

Wetlands. Open wetlands are restricted to bogs and marshes adjacent to inland lakes and stream floodplains. These contrast with the tree-dominated swamps in that they are predominantly shrubby or grassy. Bogs are filled-in lakebeds with a sphagnum base and ericaceous shrubs such as leatherleaf, bog rosemary, bog laurel, and cranberry. There are four major bog areas in the park: Sand Point, north east of Big Beaver Lake, Legion Lake, and at the Au Sable/Twelvemile Beach campground (Read 1975: 12).

Marshes do not have as rich an organic base. Moreover, marshes dry seasonally. Marshy areas, such as those found near Little Beaver Lake, Chapel Lake, and Miners Lake, support a grassier vegetation than the peat bogs. Sedges, bluejoint, and mannagrass are the dominant plants (Chadde 1996: 25), with several

wildflowers, including orchids. Less common but visible at Sand Point, between Arsenault and Little Beaver Lakes, and on the south side of Grand Sable Lake, are thickets of alder and willow mixed with grasses (Read 1975: 11). Occasionally, hummocky wetlands support stunted trees of tamarack and black spruce.

Lakes and Ponds. Submerged aquatic vegetation may be found in lakes and ponds. Species vary in each location depending on water depth, chemistry, and composition of the bed. Most of these species belong to the water lily, pondweed, and water-milfoil families (Chadde 1996: 34). Some of the best examples of common and rare aquatic flora grow in the sandy shallow water of Big and Little Beaver Lakes (Read 1975: 12).

Beaches and Dunes. Of special note are the plant communities growing on the extensive beaches and dune fields at PIRO. Plants of the beach strand-dune community grow along the shoreline, being well-developed on Sand Point, Miners Beach, Chapel Beach, Twelvemile Beach and the Grand Sable Dunes. This community consists mostly of grasses; however, there is a lot more variation on the dune fields than along the beachfront. Sandy slopes that accumulate behind the beach, called winter or storm beaches, may support a more substantial coverage depending on their stability. Berry shrubs and stunted trees cover the winter beach lightly to moderately. Pines, hemlock, balsam fir, and associated understory grasses grow along the beach/forest interface (Read 1975: 7). Fragile dune and beach plants, such as dune-thistle and American dune-grass, have been affected by human traffic and are thus listed as threatened or of special concern, according to the Endangered Species Act and the Michigan Natural Features Inventory, respectively (Chadde 1996: 48; Bach 1978).

Cliff Faces. A few plants characterize the vegetation growing on the crevices of the sandstone cliffs of the Pictured Rocks escarpment and on inland cliff faces at Beaver and Chapel Basins. Shadowy cliffs moistened with seepwater are dominated by ferns and wildflowers such as Mitassinni primrose and violet butterwort (Chadde 1996: 55; Read 1975: 8). Trees that grow on exposed cliff ledges are mountain alder and mountain ash; these are associated with smaller trees and shrubs. In addition to these, beaked hazelnut, gooseberry, and currant occur along the top edge of the exposed cliffs (Read 1975: 9).

Associated Fauna

The earliest observations of wildlife at PIRO and adjacent areas come from hunting records and notes made by loggers at the turn of the century. Wood (1917) conducted the first systematic survey of mammals in Alger County. Forest mammals commonly noted at that time included woodland caribou, eastern moose, Virginia whitetail deer, and timber wolf. The southeastern red squirrel, Canadian woodchuck, raccoon, northern plains skunk, northern mink, masked shrew, and the Michigan mouse were abundant as well (MTU nd: 36). Wood mentioned many other species as rare or recent arrivals (e.g., the coyote). Populations of beaver probably fluctuated due to natural and human factors, in particular logging and settlement.

More recently, McCann (1975) provided a discussion of terrestrial fauna present at the park. This is particularly diverse at PIRO because of its location on the edge of the range of many eastern and western species and subspecies that do not occur on other parts of the Upper Peninsula of Michigan. Since the creation of the park, three once common species are now rarely found—moose, caribou, and timber wolf. Populations of whitetail deer have decreased due to forest succession and concomitant decrease in browser foods that once grew abundantly in the forest (Fanter 1977). Beaver activity at the park can be observed near Hurricane River and at the headwaters of Beaver Creek. Beaver dams at the park are quite old and have contributed to the expansion of wetland flora. There are many other furbearer colonies active at the park. Among them are the marten, river otter, long-tailed weasel, red fox, raccoons, and striped skunks. These species have been detected on the hardwood and conifer forests, lowland forests, and dunes. (Daues 1991).

Coyote populations have increased over the years. Black bear populations once were controlled by hunting; however, human presence at the park normally attracts bear during the warm seasons.

In addition to forest furbearers and browsers, there are many other terrestrial mammal species. These include the ubiquitous rodents and other small animals that find cover in felled logs and thick brush. Deer mice, red squirrel, voles, chipmunks, and short-tail and masked shrews, for example, thrive in the maple/beech and mixed conifer forests. Pine forests, on the other hand, are not so rich in small animals due to the lack of covered ground habitats. Wet or damp balsam forests and alder swamps are a preferred habitat for snowshoe hare (Myers and Svendsen 1990).

There are a limited number of reptiles and amphibians in the park, which is not surprising given its northern location and the presence of active beaver colonies (Werner 1989; White Water Associates 1990). However, there are certain species including painted turtles, northern water snakes, western fox snakes, salamanders, eastern gray tree frogs, and bullfrogs that occur in the park ecotones but not elsewhere in upper Michigan (MTU nd: 36).

The park contains a large number of nesting birds. Species are distributed according to vegetation types. The most abundant bird species associated with maple/beech/balsam fir canopy are red-eyed vireo, ovenbird, black-throated green and blue warblers. Red-tailed hawk, chipping sparrow, hairy woodpecker, yellow-bellied sapsucker, and the American robin, are among the canopy species known to breed at the park. A similar range of species is found in the pine forests, where breeders also include brown creeper, night-hawk, raven, and warblers (Dow 1991).

Wetland birds most frequently sighted are the white-throated sparrow, winter wren, Nashville warbler, and swamp sparrow. Grassland birds include brown-headed cowbirds and indigo bunting in addition to several canopy species (Dow 1991: 19). Nesting birds associated with lakeshore habitats are the common loon and the sandhill crane (Anderson 1988: 14). Other species such as Canada goose appear seasonally (Dow 1991: 10).

Threatened or endangered bird species include the bald eagle and the peregrine falcon, respectively. In the late 1970s there were no active bald eagle nests in the lakeshore area and very few in other parts of upper Michigan (MTU nd: 39). However, eagles may be seen nowadays flying over the Beaver Basin.

Fish species are abundant in Lake Superior and inland lakes. The population of wild lake trout, for example, has grown steadily, surpassing that of the planted lake trout (Hansen et al. 1994: 17). Spawning runs of steelhead trout have been detected in Lake Superior tributaries throughout Michigan. Herring is also recovering along the upper Michigan shore, particularly on the west end of the park (Selgeby et al. 1994: 57). Whitefish stocks have fluctuated historically but are nonetheless abundant, particularly on the east end of the park (McCallum et al. 1994: 66). In addition, brook trout, northern pike, smallmouth bass, walleye, and the endangered sturgeon, may be caught along the lakeshore (NPS-Information Base nd).

The numerous streams that join Lake Superior on the lakeshore provide ideal conditions for spawning, particularly Hurricane River, Mosquito River, Beaver Creek, and Miners River. Most of the species mentioned above may be found in inland lakes, with white sucker, smallmouth bass, yellow perch, and northern pike as the most prevalent. Beaver Lake exhibits the greatest variety of fish of all the inland lakes (NPS-Information Base nd; White Water Associates, Inc. 1992).

Mineral Resources

Mineral resources that potentially could have been used by native populations include sandstone, pigment clays interbedded with the sandstone, dune sand, and cobbles of various origins and properties that have been deposited on the beach by wave action. Additionally, there is one historic reference to the presence of open sky copper deposits near the park. In the mid-1600s, P. S. Radisson recorded in his journal that a Salteur Ojibway had pointed to him a "river of copper" that ran east of the Pictured Rocks; the surrounding mountains were believed by the Salteurs to be made of copper as well (Radisson 1961: 121). Later, an exploratory camp was established at Miners Beach, unsuccessfully. To our knowledge there have not been further sightings of open sky copper around the park area.

During his Lake Superior voyage, Sault Ste. Marie trader John Johnston came upon a large ore of red pigment he called "cinnabar" (mercury sulfide), located at Vermilion Point, to the east of the park and near the Two Hearted River (Masson 1960: 151). While there is no geological confirmation that a cinnabar ore existed there, Johnston's trading experience may have led him to identify correctly this rare mineral that was so precious to the Ojibway.

Archaeological Resources

Cultural resources at PIRO encompass at least 34 sites, prehistoric (8), native historic (2), and historic settlement (24) sites recorded recently (Clark 1991; Jones 1993). Additionally, evidence of historic use of the lakeshore's landforms and resources by Ojibway people is recorded in ethnohistoric documents and ethnographic accounts. These cover a three-century period, beginning in the mid-1600s (Quimby 1938).

Prehistoric Occupation. Remains of prehistoric inhabitants are not abundant, however, those present at the park indicate that small groups may have used the area on a seasonal basis since archaic times. Detailed archaeological studies of the northern Great Lakes and particularly of Lake Superior reveal a subsistence pattern that emphasized spring and fall fishing with hunting and plant collecting as complementary winter and summer activities, respectively (Fitting and Cleland 1969; Cleland 1982; Jones 1993; Quimby 1960; Benchley et al. 1988; Brose 1975; Clark 1993). Large villages may have existed in sheltered bays such as that at Naomikong Point, to the east of the park and Bay Furnace, to the west of the park; for the most part, however, occupation along this portion of the shoreline was likely limited to temporary camps. Geoarchaeological research along relict shoreline dating to the Lake Nipissing stage (ca. 4,000 BP) was conducted in the neighboring Hiawatha National Forest unit adjacent to the west end of the park. This research uncovered numerous archaic fishing camps along the ancient shoreline, portions of which are visible in Grand Marais and Beaver Basin. Archaic sites are also found on Grand Island (Anderton 1993; Roberts 1991).

At least one site dating to the late Archaic-early Woodland transition (1500 BC-100BC) was found in the Coves, on the west edge of Beaver Basin and about 60m from the shore. This site (20AR261), containing a lithic scatter, fire-cracked rock, and a contracting stem biface, may have been a short-term campsite used by a small group (Jones 1993: 60). Six other lithic scatters without diagnostic artifacts have been found along the lakeshore, suggesting that this settlement pattern was common to the park area for an extended period of time. The largest of these sites is 20AR13, located in Miners River and Beach. This campsite contains a layer of fired-cracked rock, shattered quartzite cobbles, lithic artifacts, and burned organic mater, that has been recorded at several nearby locations (20AR 283, 301, and 302; Briggs and Fitting 1968; Jones 1993). A possible archaic "Old Copper Culture" finding near Grand Sable Dunes was examined by J. Griffin in 1961 and reported in the *Michigan History* magazine (1978: 10). Other isolated occurrences of copper artifacts are confined to Munising's South Bay shore (Jones 1993: 13).

Broad-spectrum adaptations to the northern Great Lakes region, with a focus on seasonal spear and angler fishing, apparently continued throughout most of the early Woodland period (Cleland 1966: 60). No middle Woodland-Laurel Culture sites have been found in the park; the closest known site dating to this period (100 BC-600AD) is located on Namikong Point on White Fish Bay, about 50 miles east of PIRO. This bay, known historically for its abundant fisheries, contains evidence of sequential seasonal occupation by fishing-hunting groups (Janzen 1968). Smaller contemporaneous sites are located in the Garden Peninsula to the south of the park, Summer Island, and in the Door Peninsula adjacent to the Fox River drainage (Mason 1981: 276-284). Sites representing a generalized Woodland tradition are found on Grand Island (Roberts 1991: 153).

The late Woodland period (600-1650 AD) is represented by a single site containing a grit-tempered potsherd, a lithic scatter, and fire-cracked rock. This campsite (20AR21) is located on an inlet in the northeast side of Little Beaver Lake. Artifact distribution suggests that more than one small short-term camping event may be represented at the site (Jones 1993: 49). Recent archaeological research in Grand Island, supported by the U.S. Forest Service, has uncovered remains indicating occupation throughout the Woodland period, and particularly the middle and late phases, and continuing into historic times (Roberts, 1991; James Skibo, personal communication, 2001).

Historic Ojibway Occupation. There are only a handful of known sites representing historic Ojibway occupation in and near the park: the Sand Point, which may overlay the prehistoric mound site cemetery (NPS [oral history files] nd; Jones 1993); the late nineteenth-century village said to underlie the Old Munising tannery near the Schoolcraft Iron Furnace Co. site (Richner 1992b); the village and burial ground on Grand Island; the carved depression and pictograph on Miners Castle (Hascom-Castle [1906] 1987); the eighteenth-century village at Grand Marais (McKenney 1959: 221; Stonehouse 1981: 7); and the child burial, spirit house, walpole, and nearby fasting lodge at Grand Sable Dunes (Gilman 1836). Of these, only the pictograph at Miners Castle have been positively located. Despite intensive efforts by PIRO archaeologists, research has yet to uncover remains of either burial ground; the local Indian families may know of the location of the Sand Point cemetery (NPS [oral history files] nd). The villages and burial ground on Grand Island are well documented (Roberts 1991) but the Grand Marais village and its burial ground are not. Ethnohistoric accounts document the presence of local Indians in the park area; the lakeshore's landforms and resources were used not only for subsistence activities such as seasonal fishing, hunting, and berry picking, but for a variety of ceremonial purposes that did not leave archaeological remains.

About 1662, P. E. Radisson witnessed two instances of ceremonial use during his Lake Superior voyage; the first occurred when camping on the beach east of the lakeshore, where a scalp dance was performed by a party of returning warriors, and the second when his own men offered tobacco and copper nuggets to the Pictured Rocks (Radisson 1961: 122). Shortly thereafter, the Jesuit missionary Allouez recorded that the Lake Superior Indians offered tobacco and copper to the shore's rock formations as well as to eddies and river falls (Verwyst 1886: 42, 49). The ceremonial character of the rock formations was confirmed by Father Marquette who, in a symbolic act, celebrated mass on Miners Castle and planted his cross on the rock's cupule and pictograph (Hascom-Castle 1987: 9).

Uses of the lakeshore's rock formations for gender-specific ceremonies are found in the oral history and historical accounts of the well-known Grand Island band of Ojibways. For example, maidens used rock ledges near waterfalls for fasting and seclusion before marriage (Graham 1998: 46). Warriors and hunters used caves on the sandstone (both along the shore and inland) as hiding places. At least one sweat lodge was recorded on a sandy beach to the east of PIRO (Radisson 1961: 151). Uses of dunes recorded in historical accounts include burial and male fasting, as indicated above. Other uses are recorded as well; naturally scoured depressions on the shore's sandstone were used for cooking large amounts of food during feasts

(Graham 1998: 17). River mouths and shallow areas were good places for fishing; parties would camp overnight on nearby rock ledges and sandy banks to keep dry (Gilman 1836; Graham 1998).

Settlement Era. Historic sites representing white settlement, subsequent logging operations during the 1880s and 1940s, and iron mining at the turn of the century, are abundant in the park, particularly on the west end and in the Beaver Basin. Of the 24 recorded sites, the best known are the US Coast Guard Station at Sand Point, Schoolcraft Iron Furnace Company in Munising (Richner 1992b), the Au Sable Point Light House Station (Stonehouse 1981), and Sullivan's Landing at Twelvemile Beach. The remaining sites represent logging camps, old logging roads, homesteads, and abandoned resort structures (Jones 1993; Stonehouse 1981). Settlement-related land and resource disturbance could have contributed to obliterate the record of prehistoric and native historic occupation at the park.

Aboriginal Settlement and Demography

Ojibway oral history indicates that one of the earliest settlements of the ancient Anishinabe in the western Great Lakes is Sault Ste. Marie or *Ba-wa-ting*, to the east of PIRO (Warren 1984: 81, 83). The populous Sault Ste. Marie was the place where the Megis shell appeared to the Ojibway after they had separated from the Ottawa ancestors. This was the location of the fifth migration stop where, for the first time, the waterdrum was given a home in which to rest and sing. Years later, the prophecy of the Fifth Fire that spoke of a false promise of joy and riches, would be realized as *Ba-wa-ting* became an important trading place with the Europeans (Benton-Banai 1988: 90, 99-100). After a time, the people divided in two groups; one would continue the migration following the northern shore of Lake Superior and the other group would move on westward, along the southern shore of this lake and eventually settle in Madeline Island, Wisconsin (see Chapter Nine). The latter group also stopped at "Grand Island, near the Pictured Rocks" before heading to L'Anse Bay (Warren 1984: 86). Clan origin stories also point to the Sault Ste. Marie as the place where the leader clan animal, the crane, found its first home and called out to the bear, catfish, loon, and moose-marten clans to gather (Warren 1984: 87). Schenck (1997: 26) suggests that the latter clan animals that figure both in oral history and in early historic records may refer to ancient proto-Ojibway or other Algonquian bands, such as the Amikwa, Missisagua, Noquet, and Nipissing, who eventually became part of the Ojibway nation (see also Bishop 1989).

The arrival time of the ancestral Ojibway to Sault Ste. Marie and vicinity is not a settled matter. Archaeologists and historians cite the mid-seventeenth century as the earliest confirmed date of Ojibway presence in the area by cross-dating sites with historic documents (Mason 1981: 400; Kinietz 1965: 317; Fitting 1975). Cleland (1992: 27) also suggests that the people from the late Woodland's Juntunen tradition in upper Michigan may be ancestral to the Algonquian-speaking groups, including Ojibway bands. At any rate, the settlement at Sault Ste. Marie was already a thriving population center in 1618, when the French *coureur du bois* Etienne Brulé visited Lake Superior. That year Brulé and his companion Grenolle, the first white men to see the great lake, reached St. Mary's Falls and

> the principal village of a savage nation afterwards designated the "People of the Falls,"—called by the French "Sauteurs." They were the ancestors of the modern Otchipwes (misnamed Ojibwas), now generally known as Chippewas (Butterfield 1898: 107).

Brulé actually noted the location of the St. Mary's Falls in Samuel de Champlain's map, which was published in 1632. It was not until 1639 that the Nation of the Sault was acknowledged by the Jesuits as one of the Huron trading partners (JR 15: 155). At the invitation of the Saulteurs, two Jesuit missionaries, Isaac Jogues and Charles Raymbault, visited the Sault Ste. Marie in 1641. They preached to the Indians and named the rapids, promising to return in the future (Magnaghi 1984: 1). A mission, however, would not be

founded there until 1668, when Fathers Louis Nicolas and Jacques Marquette established the Mission of St. Mary.

By the mid-1600s the Saulteurs had complete control of the entrance to Lake Superior country from the east; indeed, the Jesuit Relations of 1647-48 refer to them as the people "whom we call 'The nation of the Sault' whose consent it would be necessary to have if one were to go beyond" (Burnham 1930: 11). Not surprisingly, Indians and Europeans alike labored to maintain good relations with the Saulteurs. The arrival of large canoes manned by Ojibways or other friendly Indian groups, guarded by French traders, and packed with goods to be traded at the Sault, was a common sight in those days, according to Father Le Mercier from Quebec (JR 1654). This was the place where Indians and French traders rendezvous before their descent of the Ottawa River to Montreal (Magnaghi 1984: 2).

Traditional activities carried out seasonally also attracted vast numbers of visitors to the Sault Ste. Marie. The Sault and neighboring Whitefish Bay locales were famous for their fall fisheries:

> At the lower end of these rapids, and even amongst the eddies, a great fishery is carried on, from spring till winter, of a species of fish which is generally only found in Lakes Superior and Huron. They call them in their language, Atticameg and we, in ours, white fish, because this fish is truly very white and, moreover, very excellent. Hence it forms almost exclusively the food of the greater part of those tribes (Allouez Relation of 1670, in Verwyst 1886: 84).

The Ba-wi-ting or Saulteurs themselves numbered 150 in the mid-1600s; however, the Jesuit Fathers had counted as many as 2,000 souls who normally arrived during the summer for the fall fishing season (JR 23: 1642). Nicolas Perrot had also noted that warriors from different groups were present there during that season (Perrot in Blair 1911: 179). Another opportunity for large gatherings in the region was that of the ancient Feast of the Dead, a Late Woodland-Algonquian celebration of alliance that involved mingling the bones of dead relatives and burying them together to integrate neighboring groups (Hall 1997 (Chapter 5); Schenck 1997: 18). In all, Father Allouez counted 11 Algonquian-speaking groups that gathered seasonally at the Sault and depended on the St. Marie Mission (Verwyst 1886: 85). Additionally, two unnamed groups from the north shore came every year. Christinos (Cree) and other peoples from as far as Lake Winnipeg visited the Sault from time to time.

Because of its strategic location and metropolitan environment, Sault Ste. Marie was considered a permanent settlement. Yet, most of the Saulteurs and other groups moved to their hunting grounds soon after the first snow, leaving their village deserted, as Radisson found it in the winter of 1661. The Saulteur families of that time had three wintering grounds: the inland area on the north bank of the river, the southwest area of the Upper Peninsula (Schenck 1997: 23) toward Manistique and Bay de Noc, and the extraordinarily rich Manitulin Island, which the Ottawas shared with Saulteurs and other groups. To illustrate, in the year of 1670 Perrot related that

> We were obliged, in this voyage, to spend the winter with the Amikouets; the Saulteurs also wintered in the same quarter, and went hunting. They secured more than two thousand four hundred moose, in an island called Isle des Outaouas …This extraordinary catch of game was, however, only made with snares.

Land trails were probably used during the winter; an ancient trail still recognizable at the beginning of this century (Hinsdale 1931: 18) connected Bay the Noc to the Anna River (modern Munising), Bay the Noc to Indian Lake and a sacred spring near Manistique; Manistique by to Whitefish Bay; and Sault Ste.

Marie to the Two Hearted River. Another important trail connected Sault Ste. Marie to St. Ignace in Lake Michigan, where there was a contemporaneous Ottawa village of size, diversity, and strategic importance equal to or greater than the Sault.

Information on traditional activities along the Lake Superior shoreline comes from the journals of Radisson (Adams 1961), as mentioned above, and from the Jesuit Relations, particularly that of Father Allouez's voyage of 1666:

> The Savages revere this Lake as a Divinity, and offer it sacrifices. In storm, they sacrifice a dog, throwing it in the Lake. 'That is to appease thee,' they say, 'Keep quiet.' The Lake is the resort of twelve or fifteen distinct nations. They all betake themselves to the best parts of the shore for fishing, or to the Islands. We spent the whole month of September coasting along its southern shore where, finding myself alone with our Frenchmen, I had the consolation of saying Holy Mass (JR 1666-67).

An important detail for the history of land and resource near the Pictured Rocks is that the islands Allouez referred to in this passage actually appeared in the map of *Lac Tracy Ou Superieur* (JR 54: 1670-71); they are labeled as *Les Grandes Isles,* or what we call today Grand Island, Wood Island, and Williams Island (Hascom-Castle 1987: 10). Visitors and war parties that coasted the south shore of Lake Superior on their way to or from the Sault Ste. Marie may have camped near the Pictured Rocks, along the sandy beach or in one of the few protected coves that allowed landing. Recall that Radisson encountered one such group, who performed a scalp dance at a nearby beach. The Grand Island itself may have been used seasonally during this period (Ball 1993: 53).

In addition to traditional friendly visitors that shared the Saulteurs' wealth, the Sault Ste. Marie settlement witnessed an ebb-and-flow of assorted refugee groups who had been displaced from their homes by the Iroquois on the east and by the Sioux on the west (Blair 1911: 302 ff205). Periodic famine, such as that experienced by the Christinos in 1669 was another reason for the presence of refugees at the Sault (Magnaghi 1984: 3). Yet, this country remained under Saulteur control:

> The earliest and native inhabitants of this place are those who call themselves Pahouitinognach…whom the French call Saulteurs, because it is these people who live at the Sault as in their own country, the other tribes being there only by loan, as it were (JR 54: 1670: 121).

The Saulteurs themselves had been threatened by the Iroquois' repeated attempts at reaching the entrance to Lake Superior and generally joined their Huron and Ottawa allies in the war path (Perrot in Blair 1911). The 1655 Ojibway attack and victory over the Iroquois was followed by a great battle at Point Iroquois in 1662, where the Iroquois suffered a great defeat at the hands of a combined force of Ojibway, Ottawa, Nipissing, and Amigone (Tanner 1986: 31; LaPotherie in Blair 1911: 281; Magnaghi 1984: 2). The state of war was of great concern to the French, who feared loss of access to trade routes and trading partners in the remote interior. French commissioners made the Sault a central trading and temporary military post to protect this strategic passage; the St. Marie Mission was founded in 1668 (Perrot in Blair 1911). In 1671, a great council of tribes, including chiefs from as far as Green Bay and Detroit, convened at the Sault Ste. Marie to witness the taking of possession of the country by the French official Francois Daumont de St. Lusson for King Louis XIV. Thus the French intended to secure their access to trade and deter locals and visitors from taking arms against them (Perrot in Blair 1911: 222). Fathers Allouez, Dablon, Dreuillette, and Andre, who at different times served as missionaries at the local mission, were also present at that ceremony.

The Upper Peninsula under France

Throughout the mid-seventeenth to mid-eighteenth centuries the Lake Superior Ojibway had three main villages at the Sault Ste. Marie, Keweenaw Bay, and Chequamegon Bay (Tanner 1986: Map 6). The Ojibway population, however, used a much larger inland territory, where abundant resources were found seasonally. Despite missionary efforts to convert Indian people to Christianity and settled life, for the most part Ojibway people maintained their annual mobility cycle but adapted it to the economic and political demands of the French, in particular the fur trade and alliance against the enemies of France (White 1991). In 1750 a fort was established on the north side of the St. Marys River; it lasted until 1760. The location of the fort on the Straits of Mackinac was moved from the Upper Peninsula (Fort Buade 1690-98) to the Lower Peninsula (Fort Michilimackinac) (Tanner 1986: Map 9).

One of the most significant developments in Ojibway history beginning at the turn of the eighteenth century was their expansion into the woodland/prairie ecotone near the upper Mississippi River valley. As the French traders' pressure to keep a competitive fur trade market increased, so did the need for Indian hunters to expand their hunting grounds. While the Saulteurs had traditional grounds within the Upper Peninsula, those living at Keweenaw and Chequamegon bays were hunting dangerously close to Fox and Sioux territories. This expansion provoked a long and disruptive war with the Dakota Sioux and their allies the Fox and Sauk (see Chapter Four).

It had been known, since the arrival of the French to Lake Superior, that the Sioux and Saulteurs were at times enemies or allies. Their relations were also dependent upon changing alliances between either group and other tribes. Until the mid-1600s, for example, the Sioux were at peace with the Saulteurs and at war with the Cree; yet, the Cree were long-time friends of the Saulteurs. But the westward movement of Huron and Ottawa refugees prompted a violent reaction from the Sioux (Magnaghi 1984: 2) and retaliation from the former and their allies ensued. As the Ojibway expanded their hunting grounds to the south and west into Wisconsin and Minnesota, their relation with the Sioux grew tense while that with Cree became closer than before (Schenck 1997: 86-93). To complicate the situation even further, French traders began to bypass the Ojibway middlemen in the west to trade directly with the Sioux. As a result, a coalition of Ojibway-Cree-Assiniboine was formed and war ravaged the upper Mississippi valley between 1736 and 1751. At that time the existence of the Sioux was seriously compromised because former wild food and game resource areas had become battlegrounds (Magnaghi 1984: 18). Thus, changes in the complex web of trade-related alliances formed among the French, Ojibway, Cree, Sioux, and Fox sparked a war that was to last well into the nineteenth century, its repercussions disrupting trade, politics, and traditional economic activities from the upper Mississippi River to the Sault Ste. Marie and from Hudson Bay to St. Anthony Falls (see Warren 1984 for a detailed account of hostilities).

Of regional importance is the fact that Saulteurs and other Ojibway bands along the Upper Peninsula participated in numerous incursions into Dakota territory: the saga of the Grand Island chief Autumn Duck and his warriors' heroic battle against the Sioux (Graham 1998) is a case in point. The formation of multi-band war parties united against the Sioux contributed to forge political alliances among Ojibway chiefs and young would-be-chiefs. The chief of the St. Croix River band, for example, was born in the Chequamegon village at Bayfield (Verwyst 1886: 214). Similarly, the famous Sault Ste. Marie Chief Shingaba w'ossin fought, as a youth, under the La Pointe Chief Waabojeeg (McKenney and Hall 1933: 51). Shingwuakonse, who was born in Grand Island but fought in Sioux country, became a Mide and Wabeno priest and eventually a powerful chief of the Garden River band, Ontario (Chute 1998, 1998a; LeVeque and LeVeque, nd). A daughter of Waabojeeg married the Irish trader John Johnston, who became a prosperous resident of the Sault Ste. Marie. Their children were Saulteurs by birthplace but had kin ties to the La Pointe Ojibway (Masson 1960: 140). These are just examples of a network of relations that no doubt influenced patterns of land and resource use along the Lake Superior shore as well as inland.

The Saulteurs also campaigned alongside the French during the French and Indian War (1754-1761), following their allies as far as New York. In 1763 they joined the Ottawa leader Pontiac in his efforts to prevent the British from entering the Great Lakes region. The Ojibway participation in Pontiac's uprising culminated in the 1763 attack of Fort Michilimakinac, led by Chief Shingwaukonse. This is a widely known incident because it was witnessed by the British trader Alexander Henry, who reported it in gory detail (Armour 1995).

Population Dynamics during the British Colonial and early American periods (1763-1836)

Toward the end of the eighteenth century the Great Lakes Ojibway population stabilized and new villages appeared outlying the old ones. Along the southeast coast of Lake Superior there were several villages placed on strategic resource areas, from east to west (Tanner 1974, 1986: Map 20; LeVeque and LeVeque nd):

* St. Joseph Island, Drummond Island, and La Cloche Island, on Georgian Bay;
* Sault Ste. Marie Rapids, Michigan, where the oldest and largest Ojibway village was lo cated;
* Garden River, Ontario, on the northern side of the rapids;
* Tahquamenon River on Whitefish Bay, Michigan;
* Grand Island, Sand Point, and Bay Furnace, Michigan; and
* Chocolay and Carp rivers, Michigan.

A 1789 census indicated that there were 150 Ojibway at Big Island near Mackinac Island; 130 at Sault Ste Marie; 150 in L'Anse; and 500 in Chequamegon Bay (Magnaghi 1984: 28). These numbers correspond to adult males, that is, those who were old enough to be hunters and warriors.

Villages were also located along the Lake Michigan shore, on the traditional winter grounds at Bay the Noc, the Garden Peninsula, and Green Bay. The Lake Superior Ojibway, particularly the Chocolay and Carp River bands (e.g., the Kawbawgam family) continued to use these grounds well into the nineteenth century (Bourgeois 1994:16). Band chieftainship was kept within the lineages that traced their origin to the Sault Ste. Marie crane or bear clans, that of Chief Nabenayash from Grand Island (LeVeque and LeVeque nd), and among people who were actually born in the Sault Ste. Marie, as for example Charles Kawbawgam, chief of the Chocolay and Carp River bands until his death in 1902.

Until 1820, little was known of the upper Peninsula west of the Sault Ste. Marie rapids. That year, however, Michigan governor Lewis Cass, accompanied by Henry Rowe Schoolcraft, undertook the first official American expedition into the region (Cass [1828] 1975). Observations made by Cass and other members of his party are invaluable for reconstructing Ojibway demography before American settlement. Cass and Schoolcraft took a tour through Lakes Michigan and Superior, and visited the main Ojibway villages along the lakeshores. They were interested in assessing the condition of the Indian communities and, given that they had been enemies until recently, their willingness to collaborate with the new American government. Further they wanted to secure from the local Indians a land cession to build a fort (Tanner 1974: 9). Two years later, sixteen square miles were ceded at the Sault Ste. Marie to build Fort Brady; but the fishing rights along the rapids were retained by the Saulteurs. The Sault Ste. Marie Indian Agency was also established in 1822, but was transferred to Mackinac in 1833. The Indian boarding school was built by the Baptist missionary Abel Bigham in 1829 (Magnaghi 1984: 36, 38).

In 1824 the Indian census indicated that there were 180 Ojibway at the Sault Ste. Marie; 60 at the Tahquamenon River; and 95 at Grand Island (Magnaghi 1984: 37). Schoolcraft later estimated that there were 186 full-blooded Ojibway males living in villages along the shore from Miners River to the Carp

River, and an additional 36 male villagers in Grand Island (Schoolcraft [1832] in Mason 1958: 158). It is difficult to estimate the population at the Sault Ste. Marie because of the incessant human traffic throughout most of the year; according to Magnaghi (1984: 35), there were 200 Saulteurs in 1820. Anywhere between 200 and 3,000 adults could be found at the rapids; these visitors came to perform traditional seasonal activities, such as fishing and feasting, or to trade at the Johnston and Ermatinger houses, collect annuities, or meet with government agents and tribal chiefs at regional councils. To illustrate, in the summer of 1826 agent McKenney encountered 3,000 adults, 600 of whom were Ottawas from Beaver Island and L'Abre Croche, at Drummond Island in Georgian Bay. They had come to collect annuities (McKenney 1959: 165). They would travel up to 1,500 miles for this purpose.

In addition to the larger and more sedentary villages, smaller encampments of 6-12 lodges, such as those at Grand Marais (Stonehouse 1981: 7) and the mouth of the Tahquamenon River (Peters 1983: 29; Taylor 1991), were scattered along the lakeshore. In 1826, Waiskee, the eldest son of the La Pointe's Chief Waabojeeg, brother of J. Johnston's Ojibway wife, and uncle of Schoolcraft's half-Indian wife, moved his large extended family to a small bay located between Iroquois Point and Cedar Point, just west of the Sault. The bay is now named after him (Waiska Bay). In the next few years the Waiskee family would expand to Bay Mills Point, a large sand bar that shelters the bay (Tanner 1974: 10). In all, there were about 1,000 Ojibway males and females scattered between the Chocolay River and the Sault Ste. Marie (Magnaghi 1984: 39).

At the time of the Cass expedition (1820) the Indian communities of the Upper Peninsula were still living in the traditional way. While the population remained in the same general area, their small villages of bark wigwams shifted location from time to time. They followed an annual round of activities that included hunting and fishing year round, berry picking and canoe-making in the summer, and gardening and sugar-making in the late spring and early summer. McKenney (1959: 194) observed that corn gardening was not dependable due to the high latitude and short frost-free season, but vegetable gardens containing potato, oats, peas, and strawberries were still successful on a small scale (see also Magnaghi 1984: 28). During the winter hunting parties moved into their grounds to accumulate food and surplus to trade for European goods (Tanner 1974: 8-9). The trail system that connected villages from Lake Superior to Lake Michigan was particularly active during hunting and trading seasons as, for example, the trail that connected the Sault Ste. Marie to St. Ignace, one connecting Grand Island-Au Train to Bay the Noc, and the third one connecting the Indian village at Manistique to Whitefish Point (Burt 1840; Hinsdale 1931).

Other traditional land use practices were still in place in the early nineteenth century. Burial scaffoldings and spirit houses were commonly observed along the sand banks of the rivers and the lakeshore (Peters 1983: 29; Taylor 1991). Gilman (1836) reported a spirit house burial and a dream lodge located on the Grand Sable Banks. He also reported a visit to the Grand Island village, where visitors were welcomed and feasted; a similar experience was recounted by Schoolcraft (1851: 144-145) during his earlier expedition with governor Cass:

Here we found a village of Chippeway Indians, who, as soon as we landed, came from their lodges to bid us welcome. They manifested the most friendly disposition toward the party, and toward the United States; and when they were told of our objects in visiting their country, appeared highly pleased. The promptitude with which they offered the pipe of peace, left no doubt of their sincerity…In the evening they assembled in our camp, to show their skill in dancing, upon which they all pride themselves, and spent sometime in this amusement, which is also done as a mark of respect.

Subsequent expeditions by McKenney (1826) and Hubbard (1840) found the Grand Island villages practically deserted. According to the late Chief Daniel Sky, in the early days of American exploration

Grand Island remained an important landing and refuge locale for traveling parties. While most villagers alternated back and forth from the island to the mainland settlements, there remained two or three families in the island at all times to ensure that their enemies would not take advantage of their absence and invade the island on a foggy night. The early 1800s were years of great hostility among the Ojibway and Sioux who, even after signing the peace treaties of Prairie Du Chien in 1825 and Fond Du Lac in 1826, were still at war (Bascom-Castle 1987).

Treaties and Political Change (1836-1934)

The presence of a delegation from the Sault Ste. Marie at the signing of the Treaty of Fond du Lac, between the western Ojibway bands and the Dakota Sioux in 1826, marks the beginning of drastic change in the political organization of the Lake Superior communities. Ensuing changes would end with the establishment of the current reservations in Bay Mills and the Sault Ste. Marie.

Historical analysts, such as Chute (1998), suggest that nineteenth century warfare, carried out over vast territories and involving numerous geographically separate groups, had the goal of consolidating previously independent and isolated bands into a "single-voice" political entity with greater negotiating and resisting power than any group alone. In fact, the participation of Michigan bands in the Ojibway-Dakota battles along the upper Mississippi River was as much the product of peer pressure (e.g., Graham 1998) as of the common need to resist changes in their traditional ways that the American occupation of their lands would bring about. In this process, great regional chiefs and spokesmen, sought after for their diplomatic ability and eloquence, emerged. The Upper Peninsula saw at least two such chiefs: Shingaba w' ossin, chief of the Sault Ste. Marie bands and Shingwaukonse, chief of the Garden River band (Chute 1998; Tanner 1974). Chief Buffalo, from La Pointe, can be considered the Western Lake Superior counterpart of the Michigan chiefs. Yet, factional alliances among first, second, and third tier chiefs, played artfully by government agents and competing churches would, in the end, prevent a lasting consolidation of power (Kugel 1998).

The American government perceived a regional consolidation of Ojibway bands (sometimes including Ottawa bands, as in Lower Michigan) as a potential threat to the local settlers. After the establishment of Fort Brady, Schoolcraft fought strongly against Washington's proposal to relocate the Great Lakes Indians to the west of the Mississippi River. Rather, he attempted to secure as much land as possible for the bands as a means to dispel discontent that would increase the risk of a violent uprising. But the push of settlement was far stronger than a single man's ability to control, locally and at the Federal level, what was to happen to Indian lands.

The Ojibway and Ottawa of Michigan deeply distrusted the American land policy for various powerful reasons: (1) the government's refusal to protect their fishing grounds in 1833; (2) the unauthorized and uncompensated wood cutting by government officials in 1834; (3) the withdrawal of blacksmith services from St. Ignace in 1834; and (5) the construction in 1835 of an extension of Fort Brady over a burial ground that had been preserved under the terms of the 1820 treaty. Regional chiefs attempted to negotiate various arrangements, among them, the movement of the Sault bands to Canada (Chute 1998: 67). But all attempts ended with the signing of the Treaty of Greenville in 1836. In this treaty, Ottawa and Ojibway bands ceded to the federal government all of northwestern Michigan above the Grand River and the majority of the Upper Peninsula, east of a line drawn between Bay de Noc and Marquette (Graham 1998: 78). The treaty was the culmination of a string of misfortunes for the Lake Superior Indians, including unusually bitter cold spells, winter famines, and epidemics that left them weak and powerless to struggle against encroachment.

The provisions of the 1836 treaty were complex and included the relocation to the west "when the bands so desired." The treaty reserved for exclusive Indian use Sugar Island and a large area estimated at

close to 250,000 acres at the base of Whitefish Bay, extending from the mouth of the Waiska River to the Tahquamenon River, and including offshore fishing grounds and islands from the Sault to Marquette (Royce area 205). It also confirmed earlier treaty provisions of the rights to fish and camp at the St. Marys rapids (Carter and Rankin [eds] 1987: 28; Tanner 1974: 12).

In the years following the land cession some of the bands relocated their villages along the reserved lands. According the Methodist missionary John Pitezel's 1849-1850 journal, villages outlying the Sault were clustered around the shores of Whitefish Bay. The Naomikong settlement included the family of Monomonee, a Grand Island chief who moved east after the Island was settled by Abraham Williams in 1840. At the mouth of the Tahquamenon river were the settlements of chiefs Kaybanoden, Ogemahpenasa, and Shegud. To the east of Naomikong, the family of chief Waishkee occupied the mouth of the red Carp or Waiska River, near the newly built saw mill or Bay Mills (Pitezel 1883: 188). No mention of the village at Grand Marais is found after 1835. Mainland villages south of the Pictured Rocks, from South Bay to the Carp River, continued to exist without a land base (Bourgeois 1994).

As late as 1852, the Sault continued to attract visitors from farther regions. An Indian camp meeting organized by Pitezel's mission, the first religious gathering of its kind, was held that year near Whitefish Point. The camp meeting drew leaders from as far as Lake View Desert and Keewanaw Bay in Wisconsin. The next gathering of regional leaders would take place during the signing of the Treaty of Detroit in 1855, the last treaty to be signed between the Michigan Ojibway and the United States (Tanner 1974: 15).

The prelude to the Treaty of 1855 began with Congressional approval of a project to build a canal along the St. Marys River in 1853. Previous attempts at building a canal in 1839 had been prevented by the garrison at Fort Brady. However, the ground was broken in 1853. The immediate consequences of this project were the dispersal of several bands located along the rapids, particularly the band of chief Osawano, a prominent chief converted to Roman Catholicism, who lived at the head of the St. Marys falls. The 1820 reserve was severely damaged by the construction of the ship canal; band relocation to the neighboring Manitulin Island was a solution offered by the Canadian government (Tanner 1974: 16-18).

The 1855 treaty affected six bands living at or in the immediate vicinity of the St. Marys Falls. The major impact of the 1855 treaty on these and other Michigan bands was the institution of the land reserve system and the discontinuation of the annuity payments five years upon ratification (see Chapter Seven for a detailed description of the provisions); a one-time lump payment for lands lost was agreed upon by the signing parties. The goal was to provide permanent homes for the Ojibway and Ottawa bands and to incorporate them into mainstream society by eliminating the annuity system. The lands reserved for the Sault Ste. Marie bands were located in four places: (1) Salt Point, east of Naomikong Point on the Whitefish Bay; (2) Point Iroquois, (3) eastern side of Sugar Island, and (4) Hay Lake and the southern St. Marys River channel opposite Neebish Island.

In theory, the first three locations were the same as those reserved by the earlier treaty. In practice, however, land was owed to the construction company as a payment for building the canal, marshes were returned back to the state and were thus unavailable for Indian claims, and patents had to be competitively won at a market dominated by settlers and businesses. Further, the treaty did not provide for the bands living west of the Pictured Rocks except for tiny reserves divided in family allotments. Reserves were thus difficult to secure, and many secured ones were subsequently lost due to tax default (Tanner 1974). Land selection for the Sault Ste. Marie bands was not completed until 1871 and patents were not received until 1873. As late as 1881, bands that were seasonally absent when the Indian agents and boundary commissioners inspected the reserves, had not yet received their patent certificates.

In the years following the receipt of patent certificates the six Sault Ste. Marie bands concentrated on improving their agricultural prospects, in view that their fisheries had been impacted by the canal and by private fishery businesses, and that the game was scarce. Yet, drought and harsh winters often prevented them from achieving success in their efforts. The younger generations then turned to waged labor, particularly that available in the logging and mill industry, mining, and commercial fishing (Graham 1998). Bay Mills, for example, became a focus of economic growth for the local community until the timber was depleted at the turn of the century. With the passing of the General Allotment Act in 1887 the bands were once again able to regain some land holdings; however, forfeiture and attrition continued into the next century.

As a result of the Merriam Report of 1928, the status of the Michigan Indian tribes was once again examined and previous treaty and act provisions were revoked with the passage of the Indian Reorganization Act in 1934. The new law ended allotment, instituted a program of land acquisition for Indian tribes, and enabled Indians to draw up constitutions for the government of their people (Tanner 1974: 33). The Bay Mills Community adopted a constitution and bylaws in 1936. In the subsequent years the community was able to purchase land held in trust by the United States government.

Under the leadership of Fred L. Hatch, Sr., the Sault Ste. Marie bands organized in a single tribe in 1953, named the "Sugar Island Group of Chippewa Indians and Their Descendants." In 1959, the tribal name was changed to the "Original Band of Chippewa Indians and Their Heirs." With the approval of the Tribal Constitution in 1975, the tribe acquired its current name, "The Sault Ste. Marie Tribe of Chippewa Indians." Currently the tribe has six reservations (Stozicki 1993).

Many individual families, particularly those living in areas not included in the reserves of the 1855 treaty, were able to obtain land by purchase or keep the allotments within the family. Their descendants now live in Au Train, Marquette, and Indiantown (Thomasville), Michigan. Importantly, there are modern families, such as the LeVeques of Indian Town in Munising, who can track up to seven generations of bloodline back to the ceded tracts, including Grand Island.

Cultural Affiliation of Pictured Rocks National Lakeshore

The historical information provided in the previous sections of this chapter indicates that Pictured Rocks National Lakeshore is culturally affiliated with the Ojibway as an ethnic group. While the park and its surroundings may have been visited or used on occasion by traveling parties, warriors, or refugees belonging to a different ethnic group, the area remained under Ojibway control until 1820, when the first land session was signed between the local bands and the United States.

There are several Ojibway tribes that may rightfully claim cultural affiliation with the park. These are:

The Sault Ste. Marie Tribe of Chippewa Indians, which encompasses descendants of the aboriginal Saulteurs and of many other Ojibway bands who inhabited the Upper Peninsula of Michigan since "time immemorial" and who became part of this modern tribal entity.

The Bay Mills Community, which encompasses the descendants of those Ojibway bands that settled around Whitefish Point Bay in historic times.

The Bad River Band of Lake Superior Chippewas, Wisconsin, which has ancestral clan and kin ties to the families who settled Bay Mills and to several Saulteur families and a record of having used the park lands and resources on a seasonal basis.

The Red Cliff Band of Lake Superior Chippewas, Wisconsin, which has ancestral clan and kin ties to the families who settled Bay Mills and to several Saulteur families and a record of having used the park lands and resources on a seasonal basis.

The Garden River Band, Ontario, which has inhabited the immediate area since "time immemorial" and which has historic kin and clan ties with the bands that comprise the modern Sault Ste. Marie Tribe and Bay Mills Community.

The Manitulin Island Community of Ojibway and Ottawa, Ontario, which has ancestral and historical kin ties with the bands that comprise the modern Sault Ste. Marie Tribe and Bay Mills Community.

There are at least five other Ojibway bands whose lands are located on or near the north banks of the St. Marys River and north shore of Lake Superior and have close ties with the Garden River and Sault Ste. Marie Ojibway.

These are:
Batchewana Band
Thessalon Band
Serpent Band
Sagamak Nishnaabek Band, and
White Fish Lake Band

In addition to these bands, tribes, and communities, it is advisable to contact the Little Traverse Band of Ottawas and the Grand Traverse Band of Ottawa and Chippewa, who once inhabited the Upper Peninsula and who may have ties to the park area and the neighboring tribes (see Chapter Seven for a historical review of the Grand Traverse Band of Ottawa and Chippewa Indians).

The ethnographic information contained in the text that follows strengthens the historical evidence of cultural affiliation.

Contemporary Uses of Pictured Rocks National Lakeshore

Representatives from the Sault Ste. Marie Tribe, and the Red Cliff and Bad River Bands of Lake Superior Chippewa were interviewed at several locations within the park to elicit information on the contemporary use and/or cultural significance of specific places and resources in and around PIRO. The sections below contain site-by-site summaries of their responses to site interview questions.

Hurricane River

The Hurricane River pours into Lake Superior at the eastern edge of the Twelvemile Beach near the rock outcrops that mark of Au Sable Point (Anderson 1988: 23). The vegetation at the river's mouth is heavily influenced by the moderating effects of the lake and consists primarily of beach strand-dune communities with various types of grasses (Read 1975: 6). Behind the beach strand, immediately fronting Lake Superior, there is a more substantial vegetation with a medium cover of shrubs and stunted trees (blueberries, juneberries, bilberries, black spruce and cherries).

Ethnic Group Use History. Five interviews were conducted at the mouth of the Hurricane River after a short walk along the banks of the river to the point in which it delves into Lake Superior. The group had the opportunity to observe the diverse ecology present in the Hurricane River basin (Figure 8.2). Ojibway

consultants interviewed reported that the Hurricane River basin was used for the resources it provided at different times of the year and because of its easy access into the interior (Figure 8.3). Furthermore, the spring-fed nature of the Hurricane River makes it important for ceremonial uses of its waters.

Seasonality. There was general consensus among the Ojibway consultants interviewed that the site has been used on a continuous basis for fishing and hunting activities and for gathering food and medicines. The river constituted a major source of fish in the spring and the fall during the periods of the spawning runs. Consultants underlined also the significance of the place for the abundance of berry patches utilized in the summer. Although the Hurricane River use patterns are related to the type of resources available at different times of the year, Ojibway consultants asserted that historical use of the place occurred on a continuous basis switching activity according to the season. In winter, however, Ojibway people tended to move the villages inland because of the extreme influence of the "lake effect snow" at this location. Because of the easy access to the inland offered by the Hurricane River in an otherwise rough coastline, Ojibway consultants believe that its basin drew considerable attention and was subject to intense use.

Resources and Regional Connections . The Ojibway consultants noted that the Hurricane River is connected to various places along the Lake Superior shoreline, including Grand Island and Grand Marais, and to the permanent villages along the shoreline. Connections among places include kinship and family ties, the range of activities and associated cycles, the water, and Lake Superior itself. Ceremonies in the early spring and fall would have been conducted here. One Female consultant synthesized this ideology of connection by stating that:

The lake connects places to places, places to people, and people to people.

Water

Ojibway consultants interviewed have interpreted the water at this site as a source for drinking, for ceremonies and for medicinal uses. The Hurricane River's water assumes a greater importance in Ojibway's worldviews because the river is spring fed, as illustrated by the following comment given by an Ojibway male:

Since the river is spring fed, medicine men would ask you to go there and get water from there for purification.

Another Native American consultant highlighted the fact that the choice of water sources for medicinal uses often depended on the mineral properties of that particular body of water, a knowledge that was property of specific medicine men.

Native American consultants, furthermore, stressed the importance of water at this location for transportation reasons, especially between Lake Superior and the interior. While traveling along these routes, Ojibway people followed a life style in which water played a crucial role especially in an economy based on fishing activities. Ojibway consultants viewed this water not only at the level of resource-use, but included a spiritual dimension that was and is still manifested through ritual and ceremonial performances.

Plants

The plants that Ojibway consultants at the Hurricane River identified as part of their cultural lore are the following: different types of berries (unspecified), raspberries, sugar plums, beech peas, wild onions,

wild asparagus, sugar maple, cedar, birch, different types of grasses (unspecified), and mosses. When asked how the plants at this location were used, the answers offered were, in order of frequency:

As food
For Medicine
To make things
For ceremonies

The following associated uses of plants or parts thereof have been elicited through the site specific ethnographic interview instrument at the Hurricane River:

Maple	To make sugar
Cedar	To make drums
Birch bark	To make canoes, baskets, and as medicine in combination with tobacco
Grasses	To make mats
Mosses	As linen for cradle boards

One Ojibway female consultant explained the processes necessary to collect plants for medicinal uses. The gathering activity would only take place during the day and from specific areas associated with particular sources of power, and during particular seasons. The collection of plants would also be conducted according to well defined criteria geared towards a low impact on the plant population and the ecosystem. In order to illustrate this, one consultant explained that plant collection would generally take place in areas where there is abundance of it, while the age and width would be the determinant factors in the selection of trees to be felled.

Animals

Responses elicited through the interviews at the Hurricane River emphasized the common nature shared by humans and animals. Two Ojibway consultants reported that a story exists according to which Indian people are made of different parts of an animal. Animals, furthermore, act as intermediaries between humans and the spiritual world, and play an important part in the determination of an Ojibway's clan identity within the tribe.

Ojibway consultants interviewed at the Hurricane River asserted that the following animals have or are still being used by Ojibway people: deer, bear, birds (unspecified), moose, rabbits, eagle, partridge, snakes, and turtles. In many cases the uses range from consumption of meat for nutritional purposes, to medicinal uses, ceremonial uses, and to manufacture goods and utensils. Below is a summary of the associated uses of animals or parts thereof elicited through the site specific ethnographic instrument at this location:

Deer antlers	To make different tools
Eagle feathers	For ceremonial purposes and as dancing regalia
Bear claws	For medicine and as dancing regalia
Turtle eggs	For food
Deer bladder	To make containers to carry water
Deer brain	To tan hides and as food
Snakes	As medicine
Bear grease	As medicine

Figure 8.2 Hurricane Rivr Basin

Figure 8.3 Ojibway Consultant examines the site's plants

One male Ojibway consultant stressed the fact that, contrary to what often commonly believed, the primary form of hunting consisted of the snare-line laid out in a circle, and not of bow-and-arrow techniques. A deer snare, for example, consists of a big loop on a trail that would choke the deer once it got trapped in it. The snare lines were set up on an average of two mile tracts of land and were placed along the trails used by specific animals during their seasonal movements.

Fish

Ojibway consultants interviewed at the Hurricane River identified the following fish species as part of the resource-use complexes utilized by Ojibway people in historical and contemporary times: steelhead, menominee, clams, white fish, and sturgeon. Usually people spear-fished on the river while net techniques where used on the lake. The following associated uses were mentioned in the interviews conducted at this location:

Lake white fish fat	To make oil for medicine
Fish (unspecified) bones	To make combs
Fish (unspecified) eggs	For food and as bait for other fish and bear
Sturgeon	For ceremonies (both Menominee and Ojibway)

Fish was also traded in historic times for a variety of items not obtainable in this area. One Ojibway male reported that fish was exchange with other tribes, clans, and with people of European descent for dyes, clothes, flint, salt (from the southern lakes), and for rifles. According to this testimony, flint was exchanged with people from the west of the great lakes where deposits of iron and copper can be found. Dyes, instead, came from many locations along the lake, although the red dye came from Wisconsin together with the clay used for pottery. It is evident from these statements that fish played an important role not only in an economy of subsistence for its nutritional values, but also as an item of exchange through which access to a larger variety of items not directly available in the area could be obtained.

Archeology

Ojibway consultants interviewed at the Hurricane River interpreted the area as a possible area of archeological interest despite the lack of obvious material culture remains at the time of the visit. Yet, one prehistoric site has been uncovered near the mouth of the Hurricane River (Jones 1993: 72). According to a male Ojibway consultant, the very existence of the river is a sufficient indication that Indian people would have occupied the area during the spawning season. The presence of sugar bushes in the vicinity enhance even more the likelihood of potentiality for archeological interest.

Geology

Information elicited through the ethnographic site specific instrument at this location placed the Hurricane River within a larger geo-morphological context that includes the Au Sable point, the dunes, and the immediate coastline. The specific landforms present in the area were used, according to the consultants interviewed, as navigational points of reference both at the stage of development of travel plans and during actual travel. At other times, specific landforms would be indicative of the presence of given resources. For example, the presence of a river running into the larger lake was read by Native Americans as a place for spawning runs. In addition, dunes constituted a barrier against strong winds for camps inside the forest.

Sable Falls

The Sable Falls are located at the easternmost end of the park, on the east side of the Grand Sable banks. The Falls are fed by a stream that carries water form the Grand Sable Lake about one mile south of the falls' location. The area surrounding the Sable Falls has a fine example of moist forest with an understory rich in herbaceous (non-woody) plants and ferns and deciduous trees (Chadde 1996: 5; Read 1975: 9).

Five interviews were conducted at the site. The group followed the trail that passes through the Sable Falls (Figure 8.4) and proceeded to the beach where the creek enters Lake Superior. This little excursion made it possible to contextualize the site as part of the water landscape that connects the falls, the creek and Lake Superior. Morphologically the place offers various advantages: it provides access to the interior, the inlet near the falls is protected from harsh weather on the large lake, and the river itself constitutes spawning grounds where fishing activities were conducted.

Figure 8.4 Sable Falls

Ethnic Group Use. Within Ojibway understanding of water landscapes, the site is important for two reasons: the presence of the falls that are associated with women's ceremonies and the relationship between the creek and Lake Superior. Specific types of water associated with specific locations constitute axioms of Ojibway religious life. Because of the spiritual connection between the land and the lake, cliff faces on the shore accrue power; the spirits of the rock reside there. Because of this reason cliffs constitute choice places to conduct ceremonies.

Historically, falls were used by Ojibway people as camping sites and as places to get together. According to one male consultant interviewed, the morphology of the territory near Sable Falls made this place a good location to stop when traveling along the lake. The inlet near the falls, in fact, provides good protection from stormy weather on the lake. In addition, food could be procured quite easily in the area by hunting, gathering and spear-fishing at the inlet when fish migrate upstream. Furthermore, this location is a favorable one for the collection of medicinal and ceremonial plants that are found in moist forest environments.

The dichotomy male/female is used by Ojibway people to classify the natural world. Within this context, Ojibway people identify the water with the female portion of natural essence, whereas the fire is proper of the male counterpart. The association is usually substantiated through a series of symbolic links between the female world and nature. Because falls are water features, women are considered to be the "keepers of the falls" as well as of the rivers, lakes and all other water features. Thus Ojibway consultants perceived Sable Falls to be primarily a woman's place, and because of this, an important location where various ritual performances are conducted by women only.

Seasonality. One male consultant asserted that this area constituted a prime fishing ground for the people based at the Grand Marais village (where a fisherman clan existed), although another village located roughly at the junction between the sand dunes and the rocks might have used this place too. Fishing was a main activity that was conducted primarily in the spring, although warm water fish was extracted also during the summer. Prior to the fur trade era, a migration pattern existed that would take most of the people towards the south in wintertime. The onset of the fur trade, however, broke the ancestral migration rhythms, and Ojibway people began to remain in the area around Sable Falls also during the winters. Later, during the logging era, many Ojibway people were employed in the lumber industry and stopped to work in this area year-round.

Regional Connections and Resources. Sable Falls has been interpreted by the Ojibway consultants interviewed as part of a water landscape that coincides roughly with the boundaries of Lake Superior. Ojibway people interviewed asserted that all places along the coasts of Lake Superior are connected both through kinship ties and through a spiritual essence that links the dunes with the cliffs and with people. The connection between rocks and people is manifested primarily within the realm of the sweat lodge. In particular, one male consultant reported that according to Ojibway worldviews, a special connection exists between people and copper. To illustrate this point, he narrated a story concerning the removal of a large copper boulder from the Ontonagon River, an act that devastated the people inhabiting the area causing their ultimate dispersal as a group.

The following locations have been identified by the consultants interviewed as connected to Sable Falls: St. Mary's Falls, Red Cliff, Duluth, and Fond du Lac. Although surely not an exhaustive list, the examples given testify that connections between places exist because of similarity (St. Mary's Falls), as well as because on traveling routes or kinship relationships (all of the locations fit these descriptions). According to an Ojibway consultant, furthermore, places along the lakes are connected to each other because they were named by the same people during the ancestral migration westward.

Water

Because the Sable Falls belong to the realm of the water features, Ojibway people consulted consider the location as a female place. This makes the place important for the performance of women's ceremonial duties which take place at various times of the year. Despite the common nature of all waters, Ojibway people attribute a differential power to waters with peculiar characteristics. Each type of water is used in different medicinal and ritual complexes, and the water at Sable Falls constitutes one such particular type of water used by specific medicine men for specific purposes.

When asked how the water at this site was used, the answers offered were, in order of frequency:

For drinking purposes
For ceremonies
As medicine

Plants

The following plants have been identified by Ojibway consultants as important in their tribal cultural lore: various types of berries, sugar maple, spearmint, wintergreen, cattail, cedar, star flower, trientela borealis, birch, pine, and wild rice. A summary of the associated uses mentioned by consultants during the interviews is reported below:

Berries (unspecified)	To make teas
Maple	To make sugar in early spring
Spearmint and wintergreen	To make tea for stomach problems
Cattail	To make mats and bowls
Cedar	To build shelters, and as purifier
Cedar bark	To make canoes
Cedar leaves	To make pillows heated up to cure muscle soreness; also put in shoes to bring good luck
Pine sap	To seal canoes
Birch	For food, clothing, and canoes
Sweet grass	For crafts
Leeks	To make soup

According to one male consultant, a large variety of medicinal plants were collected in this area, some of which grow only in this particular place. Although certain curing practices were widely known among the Ojibway people, more complex diseases and illnesses were usually cured by medicine men with particular knowledge about specific plants. One male consultant, however, stressed the fact that the role of plant substances in the curing process is only marginal, because healing occurs first of all on a spiritual level.

When asked about how the plants at this site were used, the answers offered were unanimous and equal in order of frequency in respect to medicinal and ceremonial uses, as well as for food and utensil production purposes.

Animals

Consultants interviewed at Sable Falls reported that the following animals found in this area were and are still used by Ojibway people: porcupine, rabbits, bear, squirrel, raccoon, wolves, skunk, beaver,

turtle, crane, fox, moose, deer, and otter. Below is a summary of the associated uses of animals or parts thereof that have been elicited through the interviews at Sable Falls:

Bear nails	For medicine
Bear grease	For rubs for arthritis and back problems
Porcupine quills	For crafts
Wolf tails and heads	For ceremonies
Turtle eggs	For food
Moose	For food and hides
Wold, deer, bear, and otter	For ceremonies
Eagles	For ceremonies

The connections between Ojibway people and animals are plural. Ojibway people observed animals' practices in curing themselves in order to learn medicinal properties. However, the animal would instruct an individual through dreams or visions about the powers of certain plants. Ojibway people are also strictly interconnected with animals through the clan system. People of a given clan are brothers and sisters with the beings in their actual animal status, and eating of the clan's animal is prohibited. Animals, furthermore, occupy a central role in a variety of ceremonial rites including, among others, naming ceremonies, births, weddings, feasts, harvests and moon dances.

Fish

Fishing constituted a major activity in this region and was conducted primarily in the spring and in the summer. Interviewed consultants only mentioned few specific types of fish utilized in this area, among which are trout, sucker, carp, walleye, clams, and crayfish. This fact should not be interpreted as a lack of interest in other types of marine fauna utilized historically and recently by the Ojibway people, but rather as a result of interviews conducted as similar ecological locations with similar fish species, in which case consultants often do not tend to repeat the information given elsewhere for fear of redundancy.

One female consultant reported that both males and females were involved in fishing activities in this area, although spear-fishing constituted primarily a male's activity whereas netting was performed by both sexes. Women, furthermore, were responsible for the processing and storage of fish, which was either smoked, brined, or canned.

Archeology

Although no material culture items were visible on the surface during the interviews, Ojibway consultants believe that the site presents features and characteristics that evidence its use in historical times. In particular, consultants stressed the morphology of the place with a combination of an inlet and a waterfall, and the presence of a stream where fish would migrate upstream during the spawning runs. Because of these reasons, Ojibway consultants believe that this place constitutes an archeologically sensitive area.

Geology

Sable Falls stood out in the interviews as a low lying area between a mass of dunes. The surrounding dunes have been identified by consultants interviewed as lookout points, fasting sites, and burial sites, whereas the Falls constituted an important ceremonial place for female rituals. One consultant, furthermore, reported that because of its intrinsic characteristics, places like this were used to build medicine lodges.

Consultants reported that sand spits lined with rocks were often used for cooking purposes and to store food. In other cases, sand could be used as a form of "refrigerator" to maintain foods at low temperatures.

Beaver Basin

Beaver Basin the largest primitive area of the park. The basin contains several streams and lakes, including the lakeshore's largest – Beaver Lake – and is open to Lake Superior along the western half of Twelvemile Beach, cutting through the Pictured Rocks escarpment. It is a narrow, elongated valley bounded by high, forested sandstone bluffs (NPS 1981). Landforms within the Beaver Basin are highly variable and reflect the last episode of glacial activity in the area (Hughes 1985).

Three interviews were conducted on the Beaver Basin at a small cave located at the base of a relict shoreline ridge, halfway along the trail to the beach. Consultants represented the Bad River and Red Cliff Bands of Lake Superior Chippewa (Figure 8.5). A purification ceremony was conducted in the cave before the interviews began. The cave was interpreted as a powerful and ceremonial place the importance of which in enhanced by the fact that it was carved by the water and was once submerged. Because of its secluded nature, Ojibwa people interpreted the area as being the residence of the "little people," spiritual beings that figure in Ojibway cultural tradition. To illustrate this point, one Ojibwa woman gave the following account:

This secluded area is the home of the little people and everyone has legends about the little people. They exist and this may be one of their homes. There are tree holes and caves here where they would live. Children are closer to the spirit world and can talk to them, but the little people are also protectors of the land and the area here.

Ethnic Group Use History. Beaver Basin cultural resources include a number of caves, trees growing on rocks (Figure 8.6), and several "grandfather trees" considered home to spiritual beings and used by the wind to sing songs. A variety of medicinal plants are found in this area, some of which have been identified as "strong medicine" in relation to the place where they grow. A female Ojibway consultant explained that a direct relationship exists between the "grandfather trees" and the strength of the medicine plants that grow on them, but that "grandfather trees" are also protectors of people, giving clear air, shade and warmth.

According to the interpretations of the Ojibway consultants given at the interview sites, the Beaver Basin was used historically by Ojibway people as a ceremonial site, a hunting ground, a place for collecting medicines, and a camping site. The caves seem to represent an important component of this site, since they constituted a central element in different types of rituals and in providing shelter. Hunting, on the other hand, was conducted in this area because of the abundance of berries that would attract animals and make them an easy prey for Ojibway hunters.

An Ojibway female consultant interpreted this area as a location used by women to give birth. Various spots along the Beaver Basin, in fact, have extensive patches of mosses both on the ground and around trees. Traditionally, Ojibway women would hold on to trees during birth-giving, and the presence of mosses on the bark would prevent traumatic lesions of the skin on the arms.

Seasonality. Ojibway consultants observed that the place was used for different types of ceremonies that follow a seasonal pattern. The site was used ceremonially both by men and women, and it may have

been part of a larger ceremonial landscape that Ojibway people used to visit regularly either singularly or in groups.

Regional Connections and Resources. Since the place was used as a seasonal ceremonial site, it might be part of a larger network of ceremonially interconnected places. In addition, the water from the creek, the land, the trails, and the lake represent other important connections that linked fairly distant locations and the people who used them. In particular, the series of caves found in this basin may have been used for fasting purposes and to seek knowledge and power by Ojibway people. As we mentioned previously, this interpretation of the cave is consistent with information found in secondary literature on caves and explanations offered elsewhere by Ojibway people. Interestingly, one consultant noticed the fact that the formation surrounding the cave was once under water and interpreted as an additional significant characteristic for occupation. This observation also accords with archaeological observations made by Jones (1993) about possible prehistoric use of this place.

Water

Water occupies a central place in Ojibway ceremonial life. Consultants reported that water at this location was used for women's ceremonies and for grandmother's moon ceremonies, a ritual held at full moon to honor the tidal cycles. One female consultant reported that medicine lodges would be set up near the creek, while the lake would be used for fishing, bathing, and entertainment. When asked how Ojibway people used the water at this place, the answers offered were, with the same frequency: for medicine, ceremonies, and drink.

Plants

Consultants interviewed at Beaver Basin identified the following plants or parts thereof as traditionally used by Ojibway people: balsam, pine, moss, berries (unspecified), wintergreen, cedar, weekay, hominy, fern, and maple. The following associated uses of plants were elicited through the site specific ethnographic instrument:

Moss	As diapers for babies and menstruating women
Wintergreen	Tea for stomach aches, and lung medicine
Cedar	Tea for congestion, lung medicine, and ceremonies
Weekay	Used to soothe throat of drum singers
Fern	Used in sweat lodge ceremonies
Maple	Lung medicine
Balsam	Lung medicine
Chokecherry	Mixed with jerky to make Pemmican

In general, consultants reported that plants found in the Beaver Basin were used for medicine, ceremonies, making things, and food. All consultants who visited the area stressed the importance of the presence of "grandfather trees" and "trees growing on rocks" that are found at this location. The importance of these features have been illustrated in the general introduction to this site.

Animals

The Beaver Basin has been interpreted by the Native American consultants interviewed as an important site for hunting activities. Deer, elk, and moose used to hunted in this area, primarily for food, although all body parts were used to make tools, instruments, and other material culture items. The following animals or parts thereof have been used by Ojibway people in this basin historically and recently:

Deer skin	Hide tanned to make clothes, blankets, moccasins, and handbags

Figure 8.5 Consultants at the Beaver Basin

Figure 8.6 Trees growing on rocks

Deer bones	Used to poke leather and for scraping
Deer brain	Used to soften hide in process of tanning
Bear	Used for food and ceremonies

In addition to all these uses, food in general, and animal food in particular, is part of Ojibway rituals connected to hunting activities and other ceremonial cycles.

A deer use-complex seems to emerge from the information elicited through the ethnographic interviews. Apart from consumption and utilization of different parts of the deer, Ojibway people in this area had deer dances, ceremonies, and songs. Interestingly, the use of deer hides for clothing, the gender of the animal used followed the gender of the wearer, i.e. men dressed buck-skin clothes, whereas women dressed doe-skin clothes.

Fish

According to the Ojibway consultants interviewed, fish caught in this area was used for food, medicine, for making tools, and for ceremonial purposes. In addition fish provided the structure for some of the Ojibway clans. Fishing, however, emerges from the interviews conducted not as a central element of the Beaver Basin, the use of which seems to have been associated rather with ceremonial purposes and hunting activities.

Archeology

Ojibway consultants interviewed at Beaver Basin pointed out that, despite the paucity of material items encountered during the survey (among which fire marks and soot stains on caves), the area is of archeological significance. Particular important is given to the caves as ceremonial places and shelters for camping, as well as the presence of trees growing on rocks, a feature that is associated with power in Ojibway culture.

Geology

The cave along the Beaver Basin trail has been interpreted by the consultants interviewed as a landmark, a place to communicate with *Gitchimanitou*, as an Ojibway woman reported. According to another consultant, the peculiar geological history of the basin and its having been once completely underwater, make this place particularly significant for ceremonial purposes. The importance attributed to water by Ojibway people, and the power of water to connect all forms of life, seem to support the logic that attributes particular power to this geographic location.

Miners Beach

Miners Beach is located on the western portion of the park. The beach area is composed of several sandstone ledges subject to the eroding action of Lake Superior. The site and its surroundings contain topographic features that are culturally significant for the Ojibway (bluffs, ledges, caves, falls, sandy beach, spring) (Figure 8.7). An archeological site is located on the small trail leading into the beach, and it consists of fire-cracked rock and charcoal layers.

Nine interviews were conducted at the site in two rounds of field visits. Consultants represented the Bad River and Red Cliff Bands of Lake Superior Chippewa and the Sault Ste. Marie Tribe. The interviews were conducted at the beach (Figure 8.8). Particular concerns were expressed by the participants about the need to burn berry patches and understory brush to stimulate growth and to selectively manage forest speciation. Practicing native burning is part of an Ojibway cultural tradition that reflects their management responsibility toward nature.

Figure 8.7 View from Miners Beach

Figure 8.8 Interview at the ledge and spring location

Ethnic Group Use History. The site was interpreted as having been used for a variety of activities, including fishing, plant collecting, water collecting, hunting, The abundance of natural resources (berries, fish, animals, wood), and close proximity to Miners Castle contribute to the site's significance for Ojibway people. The beach, in fact, was one of the few places where people could land and access the interior, in a section of the shoreline composed primarily of high cliffs. Rock ledges, in particular, were used for camping because they offered protection from the lake.

An Ojibway female consultant interpreted Miners Beach as a medicine place for curing and cleansing, and the following explanation has been given to illustrate its characteristics:

The old ceremonial places had no trees but grass. This area is not burned, although trees don't grow as a form of respect to the place. It is a circular cycle.

Seasonality. The place offered a variety of resources that attracted people all-year round. Hunting, gathering of berries and maple sugar, fishing, and collecting medicinal plants were activities that took place at different times of the year but that would follow each other virtually without breaks. The subsistence patterns were integrated with cycles of ceremonies conducted directly at Miners Beach, or more often at Miners Castle. Consultants indicated that hunting, fishing, and gathering were activities carried out primarily in the spring and in the fall, although one Ojibway male asserted that because of the strong underwater currents, fishing did not play a major role at this location.

Regional Connection and Resources. The beach is connected ceremonially to Miners Castle, and had a different name in the past that was related to the Midewiwin society lodge. Other connected places include all the rocky areas along the shore, Sand Island, Grand Island, and Bay Furnace. The entire area is perceived to be one big use-area, used primarily by Grand Island villagers although the Bay Furnace villagers would have also exploited these resources. The nearby Miners Castle, in fact, was a ceremonial place for offerings to the two major spirits of the lake to appease them and keep the lake calmer: *Mishbishen* (water panther) and *Mishikenibec* (great serpent). One female consultant stressed the fact that people from Bay Furnace as well used to come to the Miners Beach/Castle area for ceremonial purposes. In this context, Miners Beach constituted the primary location for people's gatherings when ceremonies were held at Miners Castle, and was described by one male consultant as a place on a coastal trail as well as possibly near an inland trail.

Places also are connected by the activity cycle, canoe travel routes along the shore, and ceremony. The places along the lakeshore are also connected by kinship and social relationships, since people married into different groups and visited each other at various locations.

The interviews at Miners Beach were conducted on sandstone ledges near a small spring-fed waterfall. This location is situated at the intersection between two bodies of water: the water from Lake Superior, and the water from the small spring. The two waters occupy differential positions in the Ojibway's cultural schemes and different meaning are attached to each specific typology of water.

Consultants interpreted the water coming from the spring as a sign of powerful spirituality associated with the place. According to one Ojiwbay consultant this water springing out of the rock is rich in iron, whereas others indicated that such small waterfalls are often places where the "little people" (also referred to as "fairy people") reside, a factor that significantly empowers the place. In addition, another interviewee explained that the water from this spring is purer because filtered by the earth. One consultant observed that Ojibway people have songs for this water, and that ceremonies of purification can be held at this location.

In other interviews, Ojibway consultants indicated that water from specific sites along the coasts of Lake Superior is necessary for ceremonial activities related to the yearly purification of the eagle feathers before the onset of the winter. The water of Lake Superior generally emerges from the interviews as an important element in purification ceremonies for food, clothes, feathers and other items. The following account illustrates the purification ritual of eagle feathers:

> *We need to wash our "big bird" feathers in Lake Superior before fall or winter. Whenever possible we are supposed to go to a power-center on Lake Superior and do this. We do it periodically if we use the feathers for talking circle ceremonies and the people in the circle need to smudge them, take them down, and wash them. You have to give them water sometimes too, since they need to breathe. They are definitely living breathing things, and the big lake is better than any other place.*

Regional Connections and Resources. Since the place was used as a seasonal ceremonial site, it might be part of a larger network of ceremonially interconnected places. In addition, the water from the creek, the land, the trails, and the lake represent other important connections that linked fairly distant locations and the people who used them. In particular, the series of caves found in this basin may have been used for fasting purposes and to seek knowledge and power by Ojibway people. As we mentioned previously, this interpretation of the cave is consistent with information found in secondary literature on caves and explanations offered elsewhere by Ojibway people. Interestingly, one consultant noticed the fact that the formation surrounding the cave was once under water and interpreted as an additional significant characteristic for occupation. This observation also accords with archaeological observations made by Jones (1993) about possible prehistoric use of this place.

Water

Water occupies a central place in Ojibway ceremonial life. Consultants reported that water at this location was used for women's ceremonies and for grandmother's moon ceremonies, a ritual held at full moon to honor the tidal cycles. One female consultant reported that medicine lodges would be set up near the creek, while the lake would be used for fishing, bathing, and entertainment. When asked how Ojibway people used the water at this place, the answers offered were, with the same frequency: for medicine, ceremonies, and drink.

Plants

Consultants interviewed at Miners Beach stressed the importance of this area for blueberry patches. Blueberries were used for various purposes among which medicine, ceremonies, and as dyes. Ojibway people ritually burned the blueberry patches at Miners Beach. Responses concerning the modalities of burning diverged from natural explanations (fire ignited by lightning) to man-originated activities. One female consultant asserted that historically the Shaken Lodge (Giseki), composed by men and women, was responsible for the planning of berry patch burning activities, but that at times their decisions were anticipated by lightning. In this latter case, Ojibway people interpret the lightning as the sign that the time for burning is ripe.

In addition to blueberries, the following plants found at Miners Beach and associated uses were identified by the Ojibway consultants interviewed:

Jack pines	Sap used to fix canoes and to seal or waterproof things
Dandelions	Used as food

Mosses	As linen in cradle-boards
Cedar	Circles of cedar leaves used for wedding feasts

Of these plants, jack pines have been identified by several consultants as something peculiar growing in this area.

Animals

The following animals, parts thereof, and associated uses have been identified by Ojibway consultants interviewed at this site:

Geese	For food (hung upside down to take the "wild" taste away)
Canadian ducks	To make soups
Horns of various animals	To lift hot stones out of the fire
Bladder of various animals	As container for water
Hooves of animals	Inside of hooves eaten in emergency situations
Deer hooves	Used as buttons and decorations
Moose hide	To make moccasins

In addition the following animals have been identified, although no associated use was mentioned during the interviews: crows, water bugs, bears, otter, mink, deer, moose, and waterfowl. According to one consultant, moose seemed to have inhabited this area and go back and forth from Miners Beach to Grand Island. In general, animals at this location were used for food, medicine, ceremonies, and for making tools.

Fish

According to one male consultant, Ojibway people fished along the rocks on Lake Superior, although as pointed out above, other consultants were dubious of the possibility to fish at this location because of strong underwater currents. Nonetheless, net fishing has been identified as the most commonly used technique, and white fish and lake trout as the major species obtained in this area.

Archeology

Prior to the interviews, consultants have been able to observe the fire-cracked stones on the path at the edge of Miners Beach. One Ojibway female interpreted these stones as being the remains of fires used to set the adjacent blueberry patches on fire.

More generally, Ojibway people consulted believe that the site could be of archeological interest, and that remains would most likely be associated with subsistence activities, although ceremonial remains may be present as well.

Geology

Several geo-morphological elements have been underlined by the consultant interviewed as important features for historical and contemporary Ojibway people. Features include the rock point used as a landmark and a navigational point of reference; the ledges used for camping, for fasting purposes, or for ceremonies not beyond the family level of participation; the underwater caves; the long sandstone protruding into the lake; and two types of green and black clay mixed with grease to produce ceremonial paints. The type of sandstone found here, furthermore, was used to make tools out of layered rocks and preferred to other types of stones because of the ease with which it can be manipulated.

One consultant also stressed that all geological features visible here were used as navigational points and had different names at different points in time reflecting different importance invested in them. In

addition, the rocks on the edge of the lake were points of communication with spiritual beings to seek knowledge and power.

Miners Castle

Miners Castle is located on the western end of Miners Beach. Miners Castle is a striking sandstone formation that was used by Ojibway for ceremonies and as a landmark along the major travel route following the Lake Superior lakeshore (Figure 8.9). The formation commonly identified as the "Castle," has a cup carved in the rock painted in red on its top; the vertical cliff has a series of caves at its feet. Moist forest grows at the base of the shaded cliff and other rare species that favor rocky soil. (Chadde 1996: 3; Read 1975: 9). Six interviews were conducted at Miners Castle.

Ethnic Group Use History. Miners Castle was interpreted as a place were people made offerings to the two major spirits of the lake to appease them and keep the lake calmer: *Mishbishen* (water panther) and *Mishikenibec* (great serpent). As indicated in the analysis of Miners Beach, Native Americans often gathered on the beach in order to use Miners Castle for ceremonial purposes.

According to the consultants, the area surrounding Miners Castle was used by the local Ojibway band but also by other bands from Grand Island and Bay Furnace. The area was used uninterruptedly by these groups. Consultants asserted that they would usually stay for limited amounts of time, especially in the warmer months of the year. Miners Castle was identified as a powerful place used for communication with higher spiritual beings.

Ojibway consultants associated the painted cup with ceremonial uses, including weddings and name-giving (Figure 8.11). The area is also important for the presence of natural resources used both ceremonially and for subsistence, as well as for its connection with other landmarks along travel routes in the Great Lakes area.

Seasonality. Consultants interviewed asserted that the place offered its best resources in the warmer months of spring and summer. Before the establishment of the reservation system in this area, Ojibway people would follow migration patterns that would take them westward in conjunction with the seasons and the availability of resources. In wintertime, they would move south, however. For the Native consultants interviewed, Miners Castle's closeness to the river makes it a good place for hunting and fishing. The beginning of the hunting season was marked by the appearance of fire-flies in the area.

According to one male consultant, given the harsh conditions of the winter and the steep cliffs would have prevented a secure living in the area. The importance of the place is rather due to its significance in ceremonial rituals and as a transitional site for communicating with higher spirits.

Resources and Regional Connections. The site appears to be part of a larger cultural and sacred landscape that includes the Castle, the beach, the island in front of the cliffs, the cliffs, and the caves at the bottom of the geological formation (Figure 8.10). One Ojibway woman, however, argued that looking at this area in isolation would distort Ojibway perception of the place, especially considering the fact that to some people the Great Lakes area constitutes the center of the universe.

Miners Castle has been interpreted as part of a series of connected places that were and are linked through common travel routes, the common body of water and the prophecies. These features make Miners Castle a place nested in a larger regional cultural landscape that ranges as far as North Dakota, Canada and the starting point of the prophecies on the Saint Lawrence River. Associated connections include also a number of shoreline places, various points along the north and southern coasts of Lake Superior, and the

places where people commonly resided at other times of the year. Consultants believed that Miner Castle is further connected to the mentioned places through kinship ties and family relationships.

Figure 8.9 Miners Castle

Figure 8.10 Detail of the formation where the painted cup is found

Figure 8.11

Water

Consultants asserted that the water at Miners Castle was used primarily for drinking, ceremonies and for medicine. Although some fishing activities were conducted near Miners Castle, consultants interviewed believed that such activities did not constitute a crucial reason for the use of the place. The general ceremonial and spiritual importance that Miners Castle constitutes for Ojibway people is reflected at the level of the water through the ceremonials conducted at this location for *Mishbishen,* the water panther, and *Mishikenibec,* the great serpent.

Plants

The following associated uses of plants or parts thereof were elicited through the interviews at this site:

Sumac	For medicine and food
Cedar	For medicine and food
Weekay root	For sore throats and congestions
Berries	For food and medicine
Mosses	Used as diapers for babies and menstruating women
Wintergreen	For stomachaches
Chamomile	For stomachaches
Maple sugar	As preservative for fish; also mixed with meat to take on trips
	Inner bark of high bush
cranberries	Used for tea for PMS
Mountain Ash	To make baskets
Dogwood	Used in spite of tobacco for ceremonies and medicine
Clover and buttercups	For medicine and as dyes
Mushroom	Substitute for fish or meat.

In addition to the mentioned plants with associated uses, the following plants have been identified by the Ojibway consultants interviewed at this place as significant in their cultural settings: ferns, wild asparagus, and wild onion. It is relevant to note that according to one female Ojibway interviewed, berries constitute a link between the humans and the spirits, especially through the clan system. Berries, in fact, are food both for the people and the animals determining the clan. It has not been investigated whether the same logic can apply to other foods that other clan and associated animals consume.

Animals

Ojibway consultants interviewed at Miners Castle stressed the significance of the eagles' presence at this site. However, the following animals have been identified as present in historical times or at present at or near Miners Castle: deer, bear, moose, otter, wildcats, badger, partridge, lynx, beaver, and eagle. Below is a summary of the associated uses of animals or parts thereof that have been reported by consultants interviewed at Miners Castle:

Deer heart	Eaten by warriors to carry their spirit along
Deer brain	Used for tanning hides
Deer shoulders	To make scrapes for hides
Turtle shells	To make rattles and containers
Otter pelts	For ceremonies

In addition to these, the following animal parts have been obtained from this location: bear claws, liver and bladder, various furs for different types of regalia, and deer antlers, hooves and sinews.

Consultants interviewed stressed the fundamental link established by animals between humans and the spiritual and natural worlds. Animals, in fact, are conceived by Ojibway people as sources of power, food, and spiritual strength. According to one female consultant, furthermore, animals constituted an important exchange item when population density grew in the area and a subsistence economy could no longer be sustained.

Fish

The importance of fish sources at Miners Castle is unclear from the ethnographic interviews. While some consultants asserted that fishing was only conducted marginally in this area, others are of the opinion that the location constituted a prime netting area. One female consultant reported that various fish species can be obtained from these waters, among which sturgeon, whitefish, chubs, coho, and salmon.

Fish at this location was used for food, ceremony, medicine, fertilizer, and for making things. At this site, fish bones were used to make combs, while fish skins constituted medicinal items. In addition, fish scales and fish eyes were traditionally used by the Ojibway people, although consultants could not specify in what ways and for what purposes. It needs to be pointed out, however, that although the above information concerning fish and associated uses was elicited at Miners Castle, it may as well pertain to the same fish species found at other locations.

Archeology

Ojibway consultants interviewed at Miners Castle asserted that the place is part of their creation stories and that as such it constitutes an important cultural resource continuously used until the present day. Information about archeological material focused principally on the cup found on top of the castle-like formation. There was general agreement among the consultants that the place constituted a ceremonial site for males in search of their vision, as well as a site where offerings were made to spirits of the water. Two female consultants asserted that the point of entrance into adult manhood was marked either by the acquisition of a hunting outfit or by the killing of the first deer. It was immediately after one of these events that young men would come to Miners Castle to complete their spiritual path towards adulthood.

Geology

A complex picture emerges from the analysis of Ojibway responses concerning the geology of Miners Castle. Consultants viewed the interaction between the lake and the coastal rocky shores in terms of spiritual exchanges between the two entities. According to this view, both rocks and lakes are good, strong, but also vulnerable spirits whose interaction generates the geo-morphology of the place. This interaction is then marked temporally by the formation of layers of rock, each of which represents a layer of time and/or a season. Each layer of rock, however, can be also viewed as a layer of water due to the action of the lake's spirits. In this context, caves become vectors of spiritual power and are thus used in healing rituals, for vision quests and in general for prayers. Finally, the peculiar position of Miners Castle along the coast made it an important marker of territory as well as a look out point to control movements on the lake.

South Bay

The following text refers to three major locations that were evaluated by the research team and two local Ojibway consultants: Munising Falls, the Sand Point swamp, and the old Ojibway cemetery near Sand Point beach. These have been grouped under "South Bay" because of the close location and relationships to each other. The South Bay was inhabited by members of Grand Island band of Ojibway until the late 1800s.

The aboriginal population had three connected villages at Bay Furnace, Sand Point, and Grand Island (Figure 8.12). People fished at Sand Point beyond the ledge and beyond the current NPS quarters, and trapped on Grand Island. A wealth of plant and animal resources made this area ideal for year-round settlement. Ceremonies were held at solstices and equinoxes as well as during times of gathering.

Sand Point Swamp. The Sand Point area, near the park's headquarters, is a large sandspit that formed at the western end of the Pictured Rocks. Just behind the low sandy hill one finds varied vegetation, including moist forest, wet forest, and swamp. Two interviews were conducted on the elevated trail built by the park personnel in the swamp area (Figure 8.13). The Ojibway consultants interviewed at this site are originally from a Grand Island family and are now members of the Sault Ste. Marie tribe. They have been serving on tribal cultural resource programs for a long time and are extremely well acquainted with the area under study.

Consultants interviewed recalled that the swampy grounds were important sources for rice in traditional times. One female consultant asserted that at the time of her grandparents, rice in this area constituted the principal food crop for Ojibway people. It is interesting to note that rice was not only collected wild in this area but also cultivated. To do this, Ojibway Indians would use clay obtained from the west end of Munising. Seeds were then placed inside small amounts of clay which would protect them in the marshy grounds.

Sand Point Cemetery. According to a variety of sources, an old Indian cemetery is located at the east end of the City Limits Road[1]. The cemetery extended for an approximate 10 hectares off to the right at the end of the road where a big white pine stands next to an old field. The location of the portion of this cemetery where graves were removed during road construction is also clearly visible as a borrow area on the eastern side of the existing road. Within that area, the road construction crew erected a wooden post to mark the location. this post was still standing in the early 1990s. There is general consensus among documentary sources and ethnographic data collected through the fieldwork interviews as to the location of the cemetery.

Oral history accounts provide additional information as to the exact location of the cemetery. The place has been identified as in the vicinity of the current parking lot, near the present location of the start of the sand beach coming out from Munising, approximately two blocks south of the existing boat ramp, and on the east side of sand point road and north of the disabled asphalt trail in the inter-dunal clearing. In addition to this, a large white pine with peculiar shape has been identified as a marker for the location of the cemetery. The tree has been identified as still in place today, and a picture with "spirit houses" and the peculiar tree dating to the pre-road period is on file at the Marquette Historical Society (Figures 8.14 and 8.15) (NPS, Oral History Archives; NPS 2001).

The photograph in Figure 8.14, found by Bruce Jones, was taken in 1886, thus providing a secure Indian use date of Sand Point. NPS personnel subsequently identified the large pine tree that still stands a short distance west of the present Sand Creek Road (NPS, Oral History Archives nd.; NPS 2001). This location was shovel-tested (Jones 1993) and examined through ground penetrating radar in 1987 (Bevan in Jones 1993) The land in the immediate vicinity of the illustrated tree was shovel-tested in 1991 by Nickel (NPS 2001).

According to first-hand testimonies, the graves must have been in place, very formal, and well taken care of, at least until 1918. Oral history documents refer to "maybe two dozen graves" with "masterpiece picket fences" around them. At that time, the cemetery had been estimated to be twenty to thirty years old, and to have hosted both Indian and non-Indian burials, i.e. fishermen from Powell Point. One of the documents, however, asserts that Rosalea Cameron's mother (an Ojibway woman), died after her son's birth and

Figure 8.12 Sketch of the Grand Island Band Villages (LeVeque Family Papers)

Figure 8.13 Interview at the Sand Point Swamp

was buried at the Sand Point cemetery. Rosalea was born in 1861 and there is good reason to believe that the brother must not be much younger than she, in which case the cemetery could be dated earlier that indicated by other informants (Le Veque's Archives). The morphological features of the place and especially the slight raise of the ground that prevents damage from water action seem to have largely determined the choice of this particular location for burial purposes.

The cemetery has undergone some modifications in consequence of the Coast Guard building that was put in 1932, and especially at the time when the WPA built a road through the very location of the cemetery in 1936. Oral history interviews point to the fact that during the road construction, a fairly large number of bodies (two interviews refer to "one to three bodies a day") was removed from the cemetery and re-interred not far from their provenience, possibly between the road and the adjacent property. The bodies found in consequence of the developmentworks had been apparently buried in pine boxes, and both bodies and their coffins are said to have been immediately re-interred after discovery (NPS, Oral History Archives).

Munising Falls. The Munising Falls occur within an inland escarpment created by a little stream whose activity is also responsible for the gorge resulting from a 50 feet cascade from the ledge above. The falls have been interpreted as a woman's site of fundamental importance for a set of specific ceremonies and for training women in different areas of life. The waterfall might have been used by individual women or by groups of women for meditation and to seek knowledge and power. Two interviews were conducted in the sand just off the trail near the base of the falls (Figure 8.16).

Regional Connections and Resource Uses. The different places evaluated within the South Bay area were connected through the annual subsistence and ceremonial cycles. Other places at and near the South Bay were also connected because of kinship and family ties, and because of similar ceremonies conducted at these locations. The waterfall, the burial grounds, and the swampy area were identified as part of larger landscape that includes, among other places, Bay Furnace, Grand Island, and Miners Castle. The waterfall, in particular, is part of a larger network of places that women used to visit regularly for ceremonial purposes.

The South Bay area was conceptualized by the consultants interviewed as a triangular form demarcated at each corner respectively by the Sand Point cemetery, Bay Furnace, and Grand Island. This area was historically recognized as an hereditary chief area from Bay Furnace, claimed in recent historic times by Chief Shingabowassin. The burial of hereditary chiefs at the burial grounds of their correspondent villages constitutes a strong connection between places in this area. The following passage from an interview with a female consultant helps illustrate this point:

> *This place is connected with the burial ground down where the hospital is. Sand Point village includes all of this area – Bay Furnace and Grand Island – the three village area. One hereditary chief came from Bay Furnace, a war chief from Grand Island.*

Figure 8.14 The old Sand Point Cemetery (courtesy Marquette Historical Society)

Figure 8.15 The Sand Point Cemetery today

Figure 8.16 Munising Falls

Because only a limited number of interviews have been conducted in each of the sites composing what is here referred to as the "South Bay," the information concerning each feature will be aggregated under each specific category although specific locational references will be indicated where available.

Water

The interviews on water and its significance in historical and contemporary Ojibway culture have focused primarily on the Munising Falls site. It is this particular "form" of water, in fact, that makes the place an important one for Ojibway people. According to one consultant the spirit of the waterfall is distinct from that of the water of Lake Superior. This waterfall constitutes a "female place" because of the intrinsic relationship between the water and women (explained in earlier sections). One consultant asserted that men would avoid coming to this place altogether, and that menstruating women would not be allowed to bathe in the water at the falls.

The waterfall occupies a crucial role in the ceremonial life of women as a necessary site for practicing Ojibway ways of living. A female consultant asserted that the Munising Falls have been used on a continuous basis up until the present by Ojibway women as a ceremonial site for various rituals. Another consultant asserted that the Falls constituted a place for women's societies. At this location elderly women and medicine women would gather to teach several subjects to younger women (practical skills, astrology, stories of grandmother moon, and elements of childbirth). Thus Munising Falls have been defined by one consultant as a "training center" for women, although it functioned also as a meditation site, a place for vision quests, and a quiet place for individuals and groups of people.

The water at Munising Falls is considered particularly powerful by the consultants interviewed, who have made use of it in curing and purifying ceremonials. Because the necessary water for healing and purification is often dreamt of by either the medicine man or the patient, the significance of this water goes beyond the use of the local band of Ojibway people.

It is important to notice that although the water from the Lake Superior was used in medicine, the same was not true for the water coming from the bog.

Plants

A large number of plants and parts thereof were identified by the consultants interviewed at the various sites along the South Bay. The specificity of the plant location, however, is difficult to determine, because consultants often referred to their general knowledge of the area rather than to the plants present at a given location. Below is a summary of the associated uses of plants elicited through the site-specific instrument:

Cedar	Used in ceremonies
Wintergreen	Used for medicine
Gum of various trees	Chewed, made it soft and used to cure wounds
Plankton leaves	Rubbed on swollen bites from insects; also tea
Cranberry juice	Used for kidneys
Chamomile	Used for stomach problems and for nausea symptoms
Wild raspberry leaves	Used during pregnancy to "clean the blood" and after birth-giving to stop bleeding
Wild roses	Used to make tea
Cattail down	Dried and used as alternative to moss for diapers
Pumpkin blossom	Used for thickening
Cattails	Used to make mats and as covers for wigwam doors
Arbutus	Used for weddings in the spring

Dandelion and lamprey roots	Used to make tea to heal skin from problems related to diabetes
Spruce gum	Used to seal canoes
White birch bark	Used to collect, cook and store maple syrup
Red willow bark	Used for vein problems

Consultants reported that cedar in this area was greatly valued by the Ojibway people, and that people as far as Canada used to come to collect it here. In addition, birch, cedar, berry leaves, plankton and pine were used for medicine and ceremonial purposes. Cedar occupied a prominent role in Ojibway culture and consultants reported that it could be used as a substitute for sage when smudging if the latter was insufficient in quantity. Cedar or pine, moreover, were also used to demarcate the circle within which an individual seeking his or her vision were supposed to remain.

Finally, the area provided access to extensive quantities of potatoes, cranberries, wild rice, blueberries, and maple sugar, all elements of fundamental importance for the Ojibway livelihood system.

Animals

Consultants identified various animals that were used traditionally in this area, although the main trapping area was situated on Grand Island. Bears, bobcats, lynx, elk, moose, beaver and deer were the most important animals obtained in the South Bay. A summary of the associated uses of animals or parts thereof is presented below:

Bear claws	Inner part as glue; outer part for ceremonial ornaments
Bear jaws	Used for plowing and to make holes
Elk and moose jaw-bones	Used as war-clubs
Bobcats skins	Used only for furs
Deer hooves	Used to make tools

Fish

Interviews at the South Bay concentrated primarily on the water and plant features, and therefore little information has been elicited in regards to other features. As far as fish are concerned, consultants reported that northern pike used to be obtained from the area near Sand Point, although commercial fisheries have had a harsh impact on its population. The major fishing technique used to be netting, although trolling was also used at times, especially in the area beyond the actual NPS office.

Archeology

Information about the archeology of the place has been outlined in the previous pages and focuses primarily on the presence of a traditional burial ground near Sand Point. Detailed information from oral history sources and ethnographic fieldwork can be found in there.

Geology

Similarly to other areas, Ojibway people attributed particular importance to rock ledges on the Lake Superior as sites to communicate with spiritual beings and to the beaches which were used for ceremonies. As far as the waterfall is concerned, consultants stressed the importance of the horseshoe-like formation of the rock surrounding the waterfall. This particular characteristic separates the place from its context, adding power to the place especially through the reverberation effect on sounds. Consultants highlighted that the acoustic enhancement factor is not to be sought in the loudness *per se* but in the value added to the voice of

the drums used in ceremonies. Furthermore, because of the peculiar position of the opening facing the west, the site recovers an important role in the ceremonies for the western sun.

[1] This location is also referred to as “on ‘E’ ski trail in open field with white pine areas” in a document on file at the Pictured Rocks National Lakeshore’s archives.

APTER NINE

APOSTLE ISLANDS NATIONAL LAKESHORE

Apostle Islands National Lakeshore is located on the southwestern shore of Lake Superior on the Bayfield peninsula in Wisconsin. This park unit is comprised of 21 islands and some 2,568 acres of shoreline between Squaw Bay and Little Sand Bay, Wisconsin (Figure 9.1). With a total of 720 square miles, the park ranges from 50 to 500 feet in elevation (NPS 1989b). Twenty of the 22 Apostle Islands were established as a park on September 26, 1970 (Public Law 91-424). An additional island, Long Island, was added to the park in 1986 (Jordahl 1994). The largest Apostle Island, Madeline Island, not included in the park, is owned by private citizens, corporations, the Bad River Band of the Lake Superior Chippewa, and the State of Wisconsin.

The Park and its Resources

Over a third of the acreage in the Apostle Islands National Lakeshore is submerged as the park includes a quarter mile into Lake Superior from both the islands and the shoreline portion of the park (NPS 1989b). In addition to the islands themselves, other resources, such as navigable waters, fish, and waterlogged timber, are managed by various agencies, including the United States National Coast Guard, the Wisconsin Department of Natural Resources, and the Corps of Engineers. Between 1959 and 1970, several of the islands were protected as a state forest (Frederick and Rakestraw 1976b: 8; Jordahl 1994: 82). The park's resources currently include mainland and island beaches, tombolos and sandspits, or what Judziewicz and Koch (1993: 59) call "sandscapes"; the 21 islands (20 have forest stands and five have not been logged); and sandstone walls and glacial formations, also called by these authors "rockscapes" and "clayscapes." Each of these resources, in turn, support a variety of flora and fauna.

Archaeological studies have been undertaken at the park, as well as geological surveys. The natural and cultural collections at the park contain well over 12,000 items, almost all of which (95%) are archaeological or related to historical fishing, lumbering and farming (NPS 1989b: 30). Archaeological collections include items from prehistoric times to early contact. Most, if not all, of the park's archaeological collection is housed at the Midwest Archaeological Center (MWAC) in Lincoln, Nebraska (NPS 2001).

Both natural and cultural activities have affected the quality and depth of vegetation on the islands, but human activities are to a greater or lesser extent responsible for fish and wildlife distribution and quality levels (NPS 1989b: 31-32). Humans are responsible for the introduction of the sea lamprey into Lake Superior and the influx of mercury into the fresh waters. The most helpful preservation provisions in the last century have been in response to neglect on the part of past industrial efforts.

Physiographic and Geological History

The spectacular red rock cliffs of the Apostle Islands are the product of lithification of iron-rich volcanic sands into sandstone formations during pre-Cambrian times, or about 600-200 million years ago (Nufher and Dalles 1987). But the islands themselves are of more recent origin; they date to the Pleistocene; many glaciers covered the region and scoured the land now submerged under Lake Superior as well as the surrounding lakeshore.

Figure 9.1 Apostle Islands National Lakeshore

Scientists believe that the Apostle Islands were created by the last glacial retreat, leaving the tips of mountain peaks visible as islands. These mountains were once part of the Bayfield Peninsula, but the melting of sequential glaciers eroded channels that eventually isolated the land into 22 separate islands. The modern surface of the Apostle Islands is made up of red sandstone outcroppings often capped by glacial till or glacial drift, with a topsoil of clay and sand (Frederick and Rakestraw 1976d: 1; Judziewicz and Koch 1993: 48).

An interesting feature of the islands is its highly dynamic hydromorphic environment. In fluctuating water levels the islands have numbered differently throughout the years. Not surprisingly, when the last glacier was first retreating only Oak and Bear Islands were standing above the waters. Since the water level stabilized somewhat, the islands have varied between 20 and 23 in number. Much of this variation is due to the fluctuating nature of sandspit formation and natural erosion (NPS 1987: 27). There are beaches, sandspits, and tombolos arising from this wave action and constantly changing the Apostle Islands (Engstrom 1985).

All but five islands have been logged for their dense forest stands and, today, the resource management planners have adopted a strategy for re-establishing native forest, although most stands are in second or third growth stage now. Efforts have been made to identify and protect the stands of old growth that still exist (NPS 1989b: 28). In addition to cyclic episodes of erosion and deposition that characterize the islands' geomorphology, human use of resources, including logging and sandstone mining, have indirectly affected the rate of natural erosion, specially in the last 150 years. The park has programs in place to monitor the effect that visitor use is having on erosive processes. Both fire management and management of terrestrial wildlife are parts of the General Management Plan (NPS 1989b: 29).

Vegetative Resources

The Apostle Islands National Lakeshore is situated between the northern border of the hemlock/pine hardwood forest and the southern border of the circumpolar boreal forest. Most islands are hardwood hemlock/white pine complexes, but a few islands and the mainland have boreal spruce-fir forests (Jordahl 1994: 2). Old growth forests that were common before logging were described by Norwood (1852) and Hotchkiss (1925). Frederick and Rakestraw (1976a: 20) describe the aboriginal stands as being dominated by upland mixed/coniferous hardwood forest, comprising hemlock, white pine, sugar maple, and yellow and white birch, with small scattered stands of red oak (see also Judziewicz and Koch 1993: 53). Timber logging in the mid-to-late 1800's depleted white pine forests (Frederick and Rakestraw 1976b: 5). Burning after logging for white pine often did not yield new stands of pine but regenerated aspen, paper birch, and conifers.

All the highest quality softwood was cleared in the last century and large hemlocks, birch, and maple trees were gone by 1950. Most forest cover is now second growth with small patches of old growth (Juziewicz and Koch 1993: 53). The mainland is also second growth. On the mainland, there are also aspen, paper birch, scattered red and white pine and some other conifers (Frederick and Rakestraw, et al 1976a: 23). In order to fully understand the range of resource availability on the islands and mainland, it is necessary to examine some of the environmental niches that are recurrent, but not uniformly present, on all islands. Each island will then be examined as to whether these plant communities are known to be present on the islands today.

Typical Second Growth Succession or Rise of the Aspen-Birch. One of the most ubiquitous plants of the second growth phase of a forest is the quaking aspen. These sun-loving trees can thrive on disturbed lands better than trees such as hemlock and white pine. Second growth by its very nature needs a disturbance of some kind. Most commonly it is fire, but can be due to logging as well. First aspen moves in via the wind or from seeds that were buried beneath the forest humus. Great willow herb or fireweed com-

monly follows fire disturbance and chokes out saplings for the first year. Bunchberry, honeysuckle, wintergreen, and blueberries are other post disturbance plants that move in. After these plants take hold, the aspen suckers begin taking over.

Once aspen suckers establish themselves, they need sunlight to flourish, thus saplings cannot survive under the shade of already established aspen. This allows for shade-tolerant trees to move in or reclaim their former territory. White pine and hemlock are generally good shade tolerant trees but seeds may not be plentiful enough to break through competition from brambles and other tree species which can sprout from trunks. In this case, white spruce, balsam fir, sugar maple and other hardwoods may out-compete them. In most cases, the under-story growth of the second growth aspen forest will tell what the eventual forest type the stands will be.

In the case that the location of the second growth is lowland and wet, a marsh forest under-story will develop with white cedar, spruce, black ash and balsam fir that will eventually colonize the ecosystem. While this has occurred in the case of the Apostle Islands, there is also the boreal and hardwood succession. Where there was boreal climax, boreal species such as balsam fir and white spruce will come to dominate the other species. The mixed hardwood forest has been able to re-establish itself on the rich well-drained areas of the islands, but often lacks the white pine and hemlock that were so heavily logged. In these cases sugar maple often out competes other hardwoods (Daniel and Sullivan 1981: 255-263).

Boreal and Mixed Hardwood Forests. Typical trees found in the mixed hardwood or northern mesic forests are sugar maple, beech, basswood, yellow birch, hemlock and white pine. Boreal or circumpolar boreal forests are typically comprised of balsam fir, white spruce, paper birch, quaking aspen, balsam poplar, big toothed aspen, and mountain maple and ash for under-story (GLIFWC 1993).

Wetland Communities. Wetland communities found on the Apostle Islands National Lakeshore are bogs, bog and swamp forests, alder thickets, marshes, and sedge meadows. Sphagnum bogs are interesting because they carry many of the same species as are found in the boreal and hardwood forests. Bogs can then be found intermixed, replacing or being replaced by the forest ecosystem. In this manner bogs are ecotones like the old field-forest ecotone. In the case that a bog is in transition to the forest ecosystem, these are referred to as bog forests. Bogs can be found by the abundant supply of sphagnum moss and tamarack, both, along with cedar and spruce, indicator plants of the boreal bog. Similar to bog forests are swamp forests. Swamp forests, or white cedar, balsam fir- and black ash-dominated “drier” wetlands, will merge with mesic forests such as the boreal and mixed hardwood variety. All of these types of plant communities are found in the Apostle Islands but logging has greatly determined their frequency.

Marshes are different from bogs in that the water is usually better drained and has larger amounts of free standing water. Sedge meadows occur in open areas bordering aquatic habitats such as lakes and marshes. Periodic flooding in this environment prevents the encroachment of trees. Typical plants found here are Joe-pye weed, blue-joint grass, and willows. Jewel weed, cattails and iris are also plentiful and are generally endowed with tall staffs; loose-strife is a common exotic. Along rivers and streams another type of wetland community can emerge. This is called an alder thicket and is comprised of shrubs like speckled alders, meadow sweet (*Spirea alba*), and pussy willow (Daniel and Sullivan 1981: 264-302). All of these communities exist in varying degrees at the Apostle Islands (Juziewicz and Koch 1993: 53-67).

Dunes and Old Fields. Dunes and fields are both dry open habitats, but are distinguished by soil and plant characteristics. Dunes are areas lacking a well-developed soil, and share characteristics with rock cliffs and roadsides. Dune type vegetation includes beach grass, wild rye, beach pea, poison ivy, sand cherry, sumacs, bayberries, pitch pine, cottonwoods and red and white pine. These plants determine the amount of

soil stability. The most essential of these is the beach grass. This plant provides enough stability for other plants such as trees and shrubs to take root (Krichner and Morrison 1988: 132). Dune plants are found on the beaches and sand pits of Long Island and other islands. Judziewicz and Koch (1993: 68) identify thirty-seven different endangered or threatened species in the lakeshore. Red and white pine can be found along the dunes of the mainland, and the shoreline of Outer Island as well (Frederick and Rakestraw 1976a: 23).

Old fields are a type of disturbance zone much like that described in the second growth forest section. Old fields begin from cleared land that has been raised to the dirt level due to occupation or other clearing activities. This type of ecotone is initially characterized by pioneer plants such as ragweed, fireweed, and crab grass; more developed old fields are characterized by asters, goldenrod, and grasses. Shrubs and trees will begin invading at 3-10 years of age (Krichner and Morrison 1988: 99-100). Logging brought exotic plant species to the island such as red and white clover and red top. In the cases of animals being used to clear forests, grain and hay was taken to the islands and seeds were allowed to germinate (Frederick and Rakestraw 1976b: 7). Agricultural activities such as those on Sand Island have brought cultivated plants to the island that were not previously there. In addition, this island at one time probably had a good stand of white pine. Almost all the hardwood was cleared in the 1940s and 1970s (Frederick and Rakestraw 1976b: 8).

Animal Resources

The Apostle Islands in general have many animal resources including birds, black bear and white-tail deer (Jordahl 1994: 2-3). Between the mainland and the islands, there are shrews and bats, squirrels, chipmunks (mainland only), beavers, muskrats, porcupines, rabbits, raccoons, mink, otter, fisher, foxes and bobcats (mainland only) (NPS 1988). Also found at the Apostle Islands are frogs, snakes, and turtles. Seasonal birds found here include: loons, herons, swans, geese, duck, sandpipers, hawks, gulls, pigeons, owls, cuckoos, kingfishers, larks, swallows, ravens and crows, chickadees, wrens, mockingbirds, waxwings, warblers, blackbirds, and sparrows (Jordahl 1994; NPS 1988). Fish found in the waters of the region are: bass, burbot, carp, chub, sturgeon, salmon, shiner, smelt, sucker, trout, walleye, whitefish, perch and alewife.

Mineral Resources

Quarrying for minerals, particularly sandstone for buildings, has occurred on the Apostle Islands through the years. Basswood Island was mined between 1868 and 1893 (Frederick and Rakestraw 1976a: 27, 29). Mining rights in this area were negotiated and won by the government in the 1847 treaty with the Ojibway, signed at the village of La Pointe on Madeline Island.

Archaeological Resources

Archaeology and geomorphology suggest that the islands were occupied since Paleoindian times until the historic period. The earliest known site was found by Salzer and Overstreet (1976: 30) on an old birch hill site in Chequamegon Bay; the site has a late Duluth beach deposit dated around 11,000 BP and contains stone tools and chert materials. Beaches on islands date to 10,500 to 9,500 BP and suggest a possible Paleoindian occupation (Richner 1978: 3). The next prehistoric occupation dates to the late Archaic phase Burnt-Rollways; unfortunately, water level fluctuations may have flooded living surfaces during the Archaic period (Richner 1978: 5-6).

No early or middle Woodland sites were found in surveys in the 1970s-1980, with the possible exception of the Morty Site in Stockton Island (Richner 1987; cf. Salzer 1980). Salzer and Overstreet (1976) explain that non-ceramic seasonal or special activity occupations are present but have not been recognized due to a lack of diagnostic artifacts. At the time habitation sites were not yet recorded (cited in Richner 1978: 7). In contrast, the late Woodland occupation is well represented in the Islands. Late Woodland

ceramic assemblages are similar to the Lakes phase of the Northern Lakes area and are best represented at the Morty Site (Richner 1987: 12).

Sites dating to the protohistoric period lacking in the park; Salzer (1980) found sherds dating to the 1600s at the Morty Site. The P-flat Site on Manitou Island contains quartz and fire-cracked rock. It is an historic expression of island fishing by aboriginal people. Although the ethnic affiliation of its inhabitants cannot be completely ascertained, Richner (1989: 50-51) suggests that it may be Ojibway or Proto-Ojibway.

A 1961 excavation carried out by Leland Cooper at the Winston-Caddotte (Grant's Point) Site on the tip of Madeline Island aimed at finding the trading post that was in place from 1693 to 1698. The site had ceramic components of mixed ethnicity (including Siouan) dating to the 1600s as well as Ojibway and European remains from the 1700s and 1800s (Birmingham 1992: 179). This may be the largest site with multiple ethnic group references that was acknowledged by the Jesuit fathers. The Marina Site, located nearby, has a small unidentified prehistoric component and an early 1700s Ojibway village and cemetery, a mid-1800s village, and a late 1800s Euro-American occupation. This was the site where a trading post was established in 1718 (Birmingham 1992: 186-188). The Marina Site is a good example of island shore fisheries in the Great Lakes, and site 47AS47 on Manitou Island is an even better example of that kind of fishery (Richner 1989).

There are less known prehistoric and historic sites Otter, Rocky, Bear, Stockton, Manitou and other islands (Jordahl 1994).

Resource Distribution in the Mainland and Among the Islands

Mainland. The predominant forest type of the mainland portion of the Apostle Islands National Lakeshore is a hemlock-yellow birch with lowland cedar-fir swamp forests and marshes. Along the shoreline are patches of hemlock, cedar, white birch, and balsam fir with an under-story of cedar, fir and hardwoods. In the hemlock-yellow birch patches there is an under-story of hazel, dogwood, and maple. Near Sand Bay is a paper birch forest and a lowland marsh and a cedar stand. The mainland, including areas now located within the Red Cliff and Bad River Reservations (Sutherland Papers 1951), was logged for white pine in the late 1800s and was logged for hardwoods and hemlock for half of the 1900s. Most of the mainland is second growth with a hardwood under-story. Animals found on the mainland are deer, bear, raccoon, chipmunk, squirrel, fox, wolf, and rabbit (Frederick and Rakestraw 1976a: 22-23). There are eight prehistoric sites on the mainland.

Basswood Island. Basswood Island had been originally forested with sugar maple, yellow birch, and hemlock, with a band of white pine. Basswood was logged in the 1870s for hemlock and in the 1890s for white pine. Hardwood logging occurred in the 1940s and 1950s. In 1865, Richard W. McCloud set up a homestead on the island (Alanen and Tishler 1996: 11). Today Basswood is mostly hardwood new growth with red oak, white birch, red maple, and sugar maple (Judziewicz and Koch 1993: 75). On the east side is paper birch and hemlock under-story. Where there was almost exclusively white pine is now white pine with paper birch, hemlock, cedar and balsam fir. Sandstone quarrying occurred on Basswood island in the 1870s (Frederick and Rakestraw 1976a: 29).

Bear Island. Bear Island originally had been forested with hemlock to the north and sugar maple to the south, with scattered pine. It was logged intenscely for its pine in the years before World War II through the 1950s and now is a young mixed hardwood forest with cedar, white birch, hemlock and fir (Judziewicz and Koch 1993: 76). large hemlocks remain, however, on high ground at the crest of the island (NPS 2001). The sugar maple to the south is regenerating with hemlock and cedar (Frederick and Rakestraw 1976a: 30). There is evidence of prehistoric occupation on this island.

Cat Island. Cat Island also had a mixed hardwood forest except for a part on the north end of the island, which has white and red pine with cedar-fir swamp forest type (Judziewicz and Koch 1993: 77). There was and is a lowland marsh. Logging was done by the Prentice Company for pine, cedar and hemlock in 1887. Today there are still mixed hardwoods with an under-story of cedar, balsam fir and hardwoods. Red and white pine has been replaced with cedar and paper birch. Currently there is a dense under-story of hardwood saplings, mountain maple and brushes (Frederick and Rakestraw 1976a: 36).

Devils Island. Devils Island had a white pine forest with white and yellow birch and some balsam fir. Extensive logging did not occur on this island. Today there is second growth mixed hardwood with aspen, spruce, fir, and cedar. There is scattered white pine throughout the forest. Balsam-fir, white cedar, white and black spruce, and white birch stands can be found in the northern two-thirds of the island (Judziewicz and Koch 1993: 78-79).

Eagle and Gull Islands. Eagle and Gull Islands are very small islands that probably were never logged. Eagle Island is forested with white birch, white cedar, balsam-fir, and a few yellow birch (Judziewicz and Koch 1993: 81). In an 1850s botanical survey of Gull Island sugar maples of 10-12" width were observed. Presently Gull Island has scrub of red-berried elder, june-berries, mountain maple, pin cherry and shadowy mountain ash (Judziewicz and Koch 1993: 82).

Hermit Island. Hermit Island had a mixed hardwood sugar maple hemlock forest with cedar on the western edge and white and red pine along the shoreline (Frederick and Rakestraw 1976a: 40). Similar to the other islands, logging was done first for white pine followed by hemlock and hardwoods. Hermit Island was the home of a man named William Wilson between 1847 and 1861 who had a small farm and grew fruit, hay and chickens (Alanen and Tishler 1996: 6). Today the island is predominately white birch, white cedar, balsam-fir, sugar maple, yellow birch, red maple and quaking aspen. There are a few pines along the rocky bluffs and south beach (Judziewicz and Koch 1993: 82-83). There is a grassy old field on the east shore (Frederick and Rakestraw 1976a: 41).

Ironwood Island. Ironwood Island had a mixed hardwood forest of hemlock, white cedar, and yellow birch. Presently this island is dominated by balsam-fir, white cedar, white and yellow birch, with some sugar maple, red maple and hemlock (Judziewicz and Koch 1993: 84). This island was possibly briefly farmed in the 1870s, but little was reported of it (Alanen and Tichler 1996: 8). There is evidence of prehistoric occupation on this island.

Long Island. Long Island, which was included as part of the National Lakeshore in 1986, was actually an alienated sand spit of Chequamegon Point that formed in the late 1800s. It has now been reconnected with the point through wind and water action in the 1970s. Since it is a sand bar, periodically the island becomes connected to the Chequamegon Point via varying levels of water on the sand cut. It is the only true barrier island of the Apostle Islands (Jordahl 1994: 617). This is basically a sand island that supports a jack pine/oak forest and a delicate sand bar ecosystem with dune flora (Judziewicz and Koch 1993: 85).

Manitou Island. Manitou Island had a hemlock hardwood forest with white cedar, red and white pine, white birch, red and sugar maple (Judziewicz and Koch 1993: 92). Logging occurred in the 1900s for hemlock and hardwoods for furniture. Currently, the forest of the island consist of white cedar, yellow birch, white birch, sugar maple, balsam fir, hemlock, and red maple. In the southwestern half of the island, there are mature second-growth stands of hemlock-hardwoods (Judziewicz and Koch 1993: 92). There is evidence of prehistoric and historic occupation on this island; aboriginal occupation indicates a rich shore

fishery and hunting ground (Birmingham 1992; Salzer 1980). Richner (1989) also uncovered a rich fishery site, 47AS47.

Michigan Island. Michigan Island also had a mixed hardwood forest except for a southwest shoreline with red and white pine, and some lowland cedar-fir swamp forest areas. There were also lowland marshes. According to Judziewicz and Koch this island's forests were dominated by hemlock, white pine and yellow birch; with white cedar and balsam-fir as smaller trees (1993: 93). Clearing for agriculture was done in the 1870s. After its initial clearing this island saw a small but steady stream of nursery and homestead sites (Alanen and Tishler 1996: 12). Michigan Island had a lighthouse manned by the same man who built a large nursery there (1996: 14). Homesteading was spearheaded by Joseph and Mary Sexton in 1877. This family was among the first to reside year-round on one of the islands other than Madeline (Alanen and Tishler 1996: 16).

White pine was cut between 1880 and 1910. High-grading for hemlock and hardwoods occurred in the 1920s. The island was also cleared in the 1960s (Frederick and Rakestraw 1976a: 34). Yellow birch from this island grew in almost perfect stands and was of very high quality. There are no more timber size yellow birch. New growth mixed hardwood is prevalent along with an under-story of cedar, fir and yew (Frederick and Rakestraw 1976a: 35). The section that was at one time red and white pine is now paper birch with an under-story of cedar and fir (Frederick and Rakestraw 1976a: 36). According to Judziewicz and Koch the island is presently balsam-fir, white birch, yellow birch, and white cedar (1993: 93). There is an old growth stand of hemlock near the eastern tip of the island. There is a small amount of red and sugar maple in the western half of the island (Judziewicz and Koch 1993: 93).

There is evidence of prehistoric and historic occupation on this island.

North and South Twin Islands. North Twin Island was a boreal island of white cedar, yellow and paper birch, balsam-fir, with scattered white pines. Today the forest is mostly yellow birch, balsam-fir, white birch, showy mountain-ash, sugar maple, pin cherry and white cedar (Judziewicz and Koch 1993: 96). South Twin Island was previously an island of white cedar, yellow birch, red maple, balsam-fir, and white birch (Judziewicz and Koch 1993: 111). Pines were removed in the 1890s and hardwoods and cedar and fir were removed in the 1950s. South Twin was briefly farmed in 1868-1872 and was later a site for a small Norwegian fishing station (Alanen and Tishler 1996: 9). Today white cedar, yellow birch, red maple, balsam-fir, and white birch dominate the island (Judziewicz and Koch 1993: 111). In 1976 there was a beaver meadow on the west shore (Frederick and Rakestraw 1976a: 38).

Oak Island. Oak Island had originally a hemlock and yellow birch forest with red and white pine along the southeastern shorelines. Also present were red oak, hazel, sugar maple, and white birch (Frederick and Rakestraw 1976a: 25). While some clearing may have started as early as the 1850s, commercial-scale logging was first noted in the 1870s, with pine being logged off between 1880 and 1900. In the 1920s, hardwoods, especially hemlock, were logged, and fires occurred extensively in the 1940s. A farm existed on Oak island in the mid-1800s owned by the Armstrongs (Alanen and Tishler 1996: 6). Today there is a new growth of mixed hardwood under the predominately boreal forest. There is practically no hemlock (Frederick and Rakestraw 1976a: 26). Oak Island has a small and transient bear population.

The island contains remnants of prehistoric, protohistoric, and historic occupation, including a historic Ojibway sugar camp.

Otter Island. Otter Island had hemlock, white pine, and yellow birch. Also there was white pine and red pine especially common on the southern and eastern shores (Judziewicz and Koch 1993: 97). The

cedar-fir stands are still found on the lowland areas (Frederick and Rakestraw 1976a: 33). There is one prehistoric site. Logging began in 1871 for white pine and hemlock. In the 1920s and 1930s logging for hardwoods and hemlocks peaked. Presently the forest is mixed with white birch, sugar maple, red oak, red maple, large-toothed aspen, yellow birch, hemlock, hophornbeam, balsam-fir, and basswood (Judziewicz and Koch 1993: 97).

Outer Island. Added to the spectacular beauty and historical significance of the lighthouse on Outer Island is the presence of a stand of old growth hardwood forest (Jordahl 1994: 2). The lighthouse on Outer Island is one of the first to be seen by nighttime boaters on Lake Superior, and is especially important because of its location as the farthest Apostle Island. The forest stands on this island used to be hemlock, white pine, and yellow birch. There were also important presence of white cedar and sugar maple. In smaller quantities were balsam-fir, red oak, white birch, basswood, and red maple (Judziewicz and Koch 1993: 101). There is a lowland cedar-fir swamp forest. White pine logging occurred on Outer Island around 1900, and hemlock and other hardwood logging occurred around 1922. During the loading of these hardwoods in the 1930s, fire swept over the logged area and allowed for aspen and paper birch to cover the former hardwood area. Presently the island contains yellow birch, sugar maple, and hemlock in the north; white birch, quaking aspen, balsam-fir, red oak, and red maple in the south. There is a small stand of hemlock and hardwoods never logged on the northwestern corner of this island (Judziewicz and Koch 1993: 102). There is still a red and white pine section of forest on the southwest edge, and the lowland swamp forest and marsh is a blow-down area with scattered spruce.

On Outer Island there are beaver, coyote, garter snakes, red squirrels, and snowshoe hares (Frederick and Rakestraw 1976a: 57). There is no evidence of deer, chipmunks, gophers, mice, porcupines, bear or grouse (Frederick and Rakestraw 1976a: 29, 57).

Raspberry Island. Raspberry Island's pre-settlement forest contained white cedar, balsam-fir, and both white and yellow birch. Logging was limited due to the status of the island as a lighthouse reservation. The forest is still dominated by white cedar, balsam-fir, white birch and yellow birch (Judziewicz and Koch 1993: 105). There are other trees scattered throughout the island such as sugar maple, hemlock, basswood, showy mountain-ash, and black ash (Judziewicz and Koch 1993: 105). This island had a potato, onion and barley garden tended by the lighthouse keeper. Today it supports yellow and white birch, quaking aspen and areas of balsam fir and cedar. There is a stand of sugar maple and basswood with an under-story of balsam fir. There is only a small strip of white pine left on the island (Frederick and Rakestraw 1976a: 43). Today there are raspberries and bunchberries on this island.

Rocky Island. Rocky Island was comprised mostly of yellow birch, white pine, white cedar, balsam fir, with maples being uncommon (Judziewicz and Koch 1993: 106). There was a cedar-fir patch on the northeast end. There were and are two lowland marshes. Pine logging came in the 1890s. Hardwood logging occurred in the 1920s and 1930s, and today the island has scattered hardwoods with a new under-story of mixed hardwood second growth. A small Norwegian fishing station was on Rocky Island (Alanen and Tishler 1996: 9). Presently the island has white cedar, white birch, and balsam-fir. Less common are yellow birch, red maple and sugar maple. Also white pine, showy mountain ash, red oak and basswood are uncommon (Judziewicz and Koch 1993: 106).

Sand Island. Sand Island was dominated by balsam-fir, birch, sugar maple, and white pine. White cedar, spruce and hemlock were also noted. According to stumps, yellow birch, white pine, white cedar and hemlock covered 90% of the island (Judziewicz and Koch 1993: 108). The pine here was logged in the 1890s and most of the other timber was logged or cleared for agriculture. These plots were later abandoned, allowing for the growth of typical second growth transition. Sand Island was one of two in the Apostle

Islands that supported year round villages. The other island, Madeline Island, has been occupied for at least three hundred years. Sand Island had a substantial farming community populated mostly by Norwegians (Alanen and Tishler 1996: 23). Yellow birch high-grading occurred in the 1950s. Subsequent activities have led to a high level of erosion. Today the island sustains yellow birch, balsam-fir, white birch, white cedar, and red maple in the uplands. On Lighthouse Point, there is a stand of white and yellow birch, balsam-fir, and red maple. Two swamps on the island contain, black spruce (Judziewicz and Koch 1993: 109).

There is one known prehistoric site in this island.

Stockton Island. Similar to Outer Island, Stockton Island also has a stand of old growth forest, although smaller (Frederick and Rakestraw 1976a: 25). Unlike Outer Island, Stockton used to be mostly hemlock and yellow birch; white pine on dry sites; white cedar and balsam-fir in boggy areas; sugar maple and red maple in well drained uplands (Judziewicz and Koch 1993: 112). Due to the logging from the late 1800s to the mid 1900s, and fires in the 1950s, some formerly entirely hemlock stands are now aspen and mixed hardwood, others are white pine and paper birch. There were pigs and cattle brought to this island around the turn of the century (Alanen and Tishler 1996: 23). Today the overall composition of many portions of the forest in Stockton is dominated by white birch, with sugar maple and red maple, and there is also white cedar, balsam-fir, and quaking aspen (Judziewicz and Koch 1993: 112). There are still lowland marshes and swamp forests (Frederick and Rakestraw 1976a: 24). Prehistoric Woodland sites are found on the island.

York Island. York Island had a hardwood hemlock white pine forest. Its small size must have limited its logging potential. Intense hardwood logging occurred in 1974 (Judziewicz and Koch 1993: 116). There are still stands of uncut timber quality wood. Today its composition is white birch, balsam-fir, and showy mountain ash. There is a small grove of hemlock west of the isthmus. There is balsam-fir, white spruce, white cedar, and white birch on the western peninsula (Judziewicz and Koch 1993: 116). There is also a stand of cedar-fir next to a white pine, balsam stand on the south end (Frederick and Rakestraw 1976a: 42). The island has a prehistoric site.

Aboriginal Settlements on the Apostle Islands and Vicinity

The demographic composition of the Apostle Islands and the Chequamegon area is hard to determine before the late 1600s. Aboriginal people have been occupying the islands and peninsula, seasonally or otherwise, as early as 300AD (Richner 1978). An archaic point found at site 47AS38 suggests an even greater antiquity for the occupation in the park. Although it is not possible to tie prehistoric and historic people who have inhabited the park since that early date, it is known that for the last 400 years, the Apostle Islands have in some manner been used by the ancestors of the people known as the Lake Superior Ojibway.

Village Life and Demography Prior to 1660AD

The Ojibway believe that the Apostle Islands have been part of their traditions since time immemorial (Benton-Banai 1988). They believe the islands were first created by the progenitor of the Anishnabeg, Nanabozho. Nanabozho encountered a great beaver and tried to imprison him by building a dam across the Chequamegon Bay. In his haste he dropped clods of earth and these formed the Islands. This beaver dam is said to be the origin of the name Chequamegon. These islands, though, were not initially occupied by the Anishnabe. According to both oral tradition and scientific explorations, the ancestors of the Ojibway occupied this area only in historical times. The Ojibway believe, however, that these islands were created for them, and revealed to them in a vision foretelling their migration. Between the time of their creation in the last glacial retreat, and the Ojibway migration in the late fifteenth century AD, the islands and surrounding mainland were utilized by some group or another. Who occupied these islands is a matter of great debate (see Hickerson 1974; Warren 1984; Noble 1996; Levi 1956; Danziger 1979).

Means believes that the island of La Pointe or Madeline Island was occupied by the Ojibway from 1490 to 1620, and then was deserted (Means cited in Levi 1956: 15). Benton-Banai's story of the Ojibway migration offers similar dates. According to the Ojibway migration legend, Madeline Island is the final resting point of the Ojibway (Benton-Banai 1988: 102; Warren 1984: 80; Copway 1850: 20). Following the end of the migration (late 1400s), the Anishnabeg stayed on Madeline Island for many years, gradually expanding out from this island into the Wisconsin and Minnesota areas. A second migration is thought to have occurred, this time in a southeasterly direction back towards the Chequamegon area in the late 1500s, early 1600s. A chief of the first settlement on Madeline Island had begun to keep track of the generations after the Anishnabe had settled on Madeline Island. He made a notch for each generation and charged a member of the next generation to keep it and pass it on (Benton-Banai 1988: 103; see also Warren 1984: 89). Using these notches to count backwards, Benton-Banai estimates the arrival of the Ojibway to the island at more or less 1394 and the arrival of the news of the French at 1544 (Benton-Banai 1988: 105). Most likely, given what we know about the archaeology of the area these dates are about a century early for known establishments at Madeline Island. These dates however would not be impossible, especially with a second migration bringing word of the French in the late 1500s.

Jesuit missionaries, who named the Apostle Islands, traveled through the Lake Superior area in the early 1600s and encountered some of the Ottawa-Ojibway bands (Levi 1956: 13). Among the early non-clerical explorers, Champlain probably encountered the islands in 1618. There is an early description of the Long Island or the Point of Chequamegon in Carver's travel journals (66-68), but Radisson and Perrot are perhaps the earliest descriptors of this area 1657-1663 and 1665-1699 respectively.

Village Life and Demography after 1660

Very few observations were made as to the occupation and demography of the islands, but they and Point Chequamegon were recognized by the explorers as an irrefutable dwelling place by 1660 (Blair 1996: 165; Adams 1961: vii). Before this time we must rely on cursory references by European traders and folk-lore either from the explorers' informants or modern descendants. Closely tied to the establishment at Madeline Island is the story of the founding of Point Chequamegon (maybe on Long Island or on Grant's Point on Madeline Island; NPS 2001) and its role in Ojibway kinship and leadership. Long Island figures prominently in the history of the Ojibway. Indeed, the allegory of the crane, which is held to establish the rightful position of the crane clan as hereditary chief, mentions Point Chequamegon (Warren 1984: 86-89; but see Noble 1996: 5):

> The Cranes claim the honor of first having pitched their wigwams, and lighted the fire of the Ojibways, at Shaug-ah-waum-ik-ong, a sand point or peninsula lying two miles immediately opposite the Island of La Pointe [Madeline Island]…. At a council [September 1854] …Ke-che-wash-keenh (Great Buffalo) the grandson of the celebrated chief Au-daig-we-os, head of the Loon Totem clan, was at the time, though stricken with years, still in the prime of his great oratorical powers. On this occasion he opened the council by delivering a most eloquent harangue in praise of his own immediate ancestors, and claiming for the Loon family the first place and chieftainship among the Ojibways.
>
> After he had finished and again resumed his seat, Tug-waug-aun-ay, the head chief of the Crane family….pointed to the eastern skies and exclaimed: 'The Great Spirit once made a bird, and he sent it from the skies to make its abode on the earth. The bird came, and when it reached half way down, among the clouds, it sent forth a loud and far sounding cry, which was heard by all who resided on the earth, and even by the spirits who make their abode within its bosom. When the bird reached within sight of the earth, it circled slowly above

> the Great Fresh Water Lakes, and again it uttered its echoing cry…and the bird flew slowly over the waters of Lake Superior. Pleased with the sand point of Shaug-ah-waum-ik-ong, it circled over it, and viewed the numerous fish as they swam about in the clear depths of the Great Lake. It lit on Shaug-ah-waum-ik-ong, and from thence again it uttered its solitary cry. A voice came from the calm bosom of the lake, in answer; the bird pleased with the musical sound of the voice, again sent forth its cry, and the answering bird made its appearance in the wampum-breasted Ah-auh-wauh (Loon)…the bird [Crane] then said to him, 'thy voice is music-it is melody-it sounds sweet in my ear, from henceforth I appoint thee to answer my voice in Council.'

'Thus,' continued the chief, 'the Loon became the first in council, but he who made him chief was the *Bus-in-aus-e* (Echo Maker) or Crane'….To support their pretensions, this family hold in their possession a circular plate of virgin copper, on which is crudely marked indentations and hieroglyphics denoting the number of generations of the family who have passed away since they first pitched their lodges at *Shaug-ah-waum-ik-ong* and took possession of the adjacent country, including the Island of La Pointe or *Mo-ning-wun-a-kaun-ing*.

Although this story is connected with the migration story (see Benton-Banai 1988), it is possible that this allegory may reflect a later settlement of the Ottawa back into the area in the late 1600s, especially if Madeline Island was deserted in 1620. There is a known migration of peaceful minded Ottawa, then still not wholly separated from the Ojibway bands into Chequamegon "as well as the islands that belong to it" in 1660 after journeys among the Sioux (Relations 1661 cited in Blair 1996: 165). This may be either part of the people coming from the east and/or part of the second migration from the northwest (see Blair 1996; Radisson 1961; Copway 1850; Levi 1956). This allegory, then, may reflect the secondary establishment of the Ojibway-Ottawa village in 1660 on the sacred area that encompasses both the islands and the Chequamegon Bay area. Warren continues his narrative by noting that the Ojibway people did not stay long at Point Chequamegon because of lack of security, and soon moved to the west edge of Madeline Island (Warren 1984: 96). This would coincide with the re-establishment of an Ojibway-Ottawa refuge village at Madeline Island in the 1690s (Table 9.1).

Noble (1996) disputes some of Warren's statements, and casts doubt that Long Island was the spot referred to in this story, given that the allegory is speculative in character and that Warren had some difficulty in reconciling oral history and physical evidence as of prehistoric occupations; Noble provides alternative interpretations of the occupational history of Long Island and its relationship with historic Indian populations.

Archaeological evidence is often lacking in sandspits, due to their very nature as water formed sand depositions. Lack of archaeological evidence, or "negative evidence" as Hickerson calls it (Hickerson 1970: 51) in this instance cannot be used as an irrefutable indicator of lack of occupation, merely as an impetus for further study. In these cases, it relies on Native American traditions and any historical documentation to establish decent reconstruction of patterns of use. There are documented battles between the Sioux and Ojibway in this time, and this battle's location at the Point of Chequmageon, knowing that there were Sioux in the area, and misunderstandings were ubiquitous, is not implausible. In fact, Perrot writes of the Sioux coming to Chequamegon in 1666 (Blair 1996). Given the allegorical nature of Warren's writings, an oblique reference to a modern calendrical date of an event is not out of keeping with oral transmission of history.

Table 9.1 Possible Arrival Timeline

1450?-1620	Ojibway-Ottawa (Proto-totemic Chippewa) settlement on the Island of Mon-in-wan-e-kan-ing (Madeline I.)
1620-1660	Probably a small confederation of the original Madeline Island settlers is found seasonally on the mainland at this time.
1660-1693	Ottawa and Huron refugees establish a permanent settlement at Point Chequamegon (with seasonal use of the other islands)
1693-1854	The village at La Pointe (Point Chequamegon) is moved to Madeline Island.

These arguments aside, by the time that Nicholas Perrot came to invite the Chequamegon Ojibway in 1671 to a meeting at Sault Ste. Marie, the village was firmly located at Point Chequamegon (at that time including Long Island). It would not be moved to Madeline Island for twenty years. Although many sources indicate that the Ojibway did not occupy Madeline Island between the 1620s and the 1690s, there had been a village on the mainland since 1660 (Warren 1984; Benton-Banai 1988; Levi 1956; Schoolcraft 1992; and Radisson 1961). Reasons for the exodus from Madeline vary, but usually center around a story implying cannibalism and "bad medicine" (Levi 1956: 15; Benton-Banai 1988: 106; Danziger 1979: 27). Unfortunately like most of the events of this age, this story is confusing, cannot be confirmed and its dates have been debated (Danziger 1979; Hickerson 1974). Whether this was the reason for the Ojibway not occupying the island until the 1690s or not, events from the establishment of a permanent mainland village in 1660 on are more clearly documented. Radisson and De Grosseilliers journeyed from La Pointe at Chequamegon in 1661 and traveled through the Lake Superior area for two years. At this time there was a well-established village there at Chequamegon. An ancient trail connected this village and another one located at Lac Courte Orielles, which Radisson visited that year (Adams 1961: lvii ff. 60). Perrot, who was travelling through the Mississippi area before his journey to Chequamegon in 1671, related a story he heard from the Jesuit Fathers. This historical recounting has the Ottawa and Huron pushing into Sioux country in the years 1657-1660. In 1660, after making peace with these people, the traveling Ottawa-Ojibway went up to Chequamegon Bay to live at Point Chequamegon "as well as the islands that belong to it" (Relation 1661 chap. iii, cited in Blair 1996; see Magnaghi 1984).

By 1665 both Huron and Ottawa were living at La Pointe, as it was called, and two years before Perrot came to the village, it was said to have 1500 Indians, more than a third of whom were Huron, the rest Ottawa-Ojibway (Relation of 1669 chapter vii, cited in Blair 1996). Hickerson would, based on negative evidence, preclude an already existing Ojibway village (4 or 5 families) at La Pointe before its official mention in the annals of history, and describes the village he considers to be in existence not before 1680 as entirely made up of coalesced Ottawa-Ojibway families from elsewhere. That no Native American group was using this area after centuries of seasonal and sporadic use, and in a time of burgeoning trade and population movement is highly doubtful. However, there is more substantial reason than logic itself. Judging from the lack of concern Perrot afforded the decision of the Ottawa to take up permanent residence at Chequamegon, following epic accounts of fights ensuing from people displacing other people and claiming land as their own, it is more likely that there were people there, but who were already fictive relatives (Ojibway). Given the seasonal activities of these people and the relative few numbers that a village comprised, it is not hard for the early ethnographers of the time to have completely overlooked the possibility of a small band dwelling at the point of Chequamegon.

Between the late 1600s and the 1800s commercial activities by the French and later the Americans greatly affected the Apostle islands. The French, in 1671, had formally taken control of the land, which

includes the Apostle Islands, and anxious to counteract the desertion of Radisson and DeGrosseilliers to the English, they sent more expeditions into Wisconsin and the Mississippi area. After 1671, the Chequamegon Bay area, including La Point and the Apostle Islands, was home to a variety of ethnic groups including the Huron, Ottawa, Potawatomi, Sauk, Fox and Ojibway (Jordahl 1994: 8; Tanner 1987). In 1678, an emissary of Quebec set up a post to trade with the Dakota who traded at Long Island, but Le Seur replaced this fort in 1693 with one at the southern tip of Madeline so as to join the newly moved La Pointe village there (Jordahl 1994: 9). The old village on Chequamegon Point had dwindled, and the French decided moving the trading post to Madeline Island would be more advantageous (Levi 1956: 15-19). The new La Pointe Ojibway village was established by Father Allouez and they and the French fur traders occupied the island until 1763 (Alanan and Tishler 1996: 5). There are a few sources which believe that the Ojibway as a recognizable people had not even occupied Madeline Island or Pointe Chequamegon before the 1690s. Hickerson (1974) and Jordahl (1994: 11) believe that the Ojibway were not in the area, or were then part of another group, such as the Ottawa, and after the French secured a post on Madeline Island in 1693, only then were the Ojibway referred to as a people.

Unlike Madeline Island, there is little evidence that the Long Island part of Chequamegon point was used year round, and Noble (1996: 9) suggests that it was a good spot for fishing and berry gathering, which would be seasonal. Shortly after the conclusion of the French and Indian War in 1763, Alexander Henry and Jean Baptiste Cadotte formed a partnership to re-establish dwindling trade at La Pointe, this time for the English. While living here, Cadotte married an Ojibway woman baptized as Anastasia. They had two children, John Baptiste and Michel. Michel Cadotte took over his father's enterprises on Madeline Island (then St. Michel), and upon his marriage to *Equay-say-way* or Madeline, Ojibway Chief White Crane, Madeline's father, renamed the island Madeline Island (Levi 1956: 16).

After the fur trade lost much of its momentum, logging activities and agriculture later expanded significant human impacts from Madeline and Long Island, to the rest of the 22 islands. The general pattern of resource exploitation started with the fur trade, and with its dissolution, came commercial fishing and sandstone quarrying as the major activities. Although logging started on these Islands in the mid 1800s, it really took off at the end of the nineteenth century. Due to poor logging management, fires, people, and bad high-grading, the forest industry efforts had reached its maximum potential by the great depression. People once again concentrated on fisheries and agriculture (NPS 1987: 7). Agriculture, which had been pursued hand in hand with quarrying and logging activities was maintained into the twentieth century. Sand, Michigan and Basswood Islands were among the best known homesteaded areas (NPS 1987: 8).

In 1820, when Henry Schoolcraft was journeying across the upper Great Lakes, he remarked that Madeline Island was not the burgeoning fur trade post it once had been. He comments that both Point Chequamegon and Madeline Island were reduced to a few dwellings (Schoolcraft 1992: 133). Kohl, residing in the vicinity of Madeline Island (Kohl 1956: 1-2) in 1855 indicates that this area was then one of the most important places along the shore of Lake Superior. This continued to be so, even after the removal of the Ojibway Indians onto reservations beginning in 1854.

Establishment of the Reservation System

Anxious to gain more land for the burgeoning logging and mining industries, the US government sought to take by treaty, the land of present day Wisconsin and Minnesota. The Ojibway, unlike many other tribes, were not forced out of their land, although this was tried (US Presidential Proclamation, 1852). Nevertheless they were considered in the way by the interest groups for logging, mining, and early sports fishing. In 1854 a treaty was signed at Madeline Island, which separated the Ojibway of the Apostle Islands area, known as the La Pointe band, into two reservations, Bad River and Red Cliff. The apportionment of

these groups into two separate areas, separated by Chequamegon Bay and the Apostle Islands, left the Apostle Islands open and legal for sale and logging by the newly formed state of Wisconsin.

Treaty of 1837

Although the treaty of 1837 did not directly affect the Ojibway people from the La Pointe area it did win a good part of present day Wisconsin for the United States of America and its implications for the Ojibway of southern Wisconsin did in turn affect the northern bands. The land cession eventually allowed white settlers to claim rights to log pine in mainland Wisconsin and later extended into the islands. During the negotiations, the individual bands who signed on to this treaty felt that they were only agreeing to let pine be removed and that they retained their fishing, hunting and maple sugar making rights (Satz 1991: 13). Maple sugar gathering was never mentioned in the final treaty but the Indians who attended the proceedings had been promised that these rights would be retained. In this same year a subagent was placed at La Pointe. Five years later, the land ceded in the 1837 treaty was not nearly enough and minerals found in the southern Lake Superior region were greatly desired. The United States government once again sought to treat with the Ojibway for their land, this time with the northern bands.

Treaty of 1842

Expeditions in the 1830s and 1840s by Houghton, Hubbard and others led to the discovery of ancient copper mines and large ore deposits. The government was not interested in contracting out these resources but wanted the land (Satz 1991: 33). Anxious to gain this land, treaty negotiators used two tactics designed at giving the US government the upper hand. A meeting convened at La Pointe between the La Pointe and upper Wisconsin bands and agents from the US government. One tactic was to imply that not to enter into negotiations would be to invite the military anger of the US and would be to deny a "vast amount of money" to the tribes. Additionally once negotiations were under way the Indians were informed that whether they agreed or not, the US government would "take the land" anyway (Satz 1991: 38). Another tactic, of which the tribes were not aware, was the US policy of treating the tribal "governments" as if they were democracies with one leader that was somehow uniformly elected by majority rule (Satz 1991: 37).

Misunderstandings aside, several issues arose out of this treaty. Some issues would not be immediately apparent. One readily noticed was that even though the Native Americans came to this treaty knowing that their ideas of the former treaties and the actual outcome from those treaties were different, they still left this treaty not having a clue as to the true meaning or nature of it. This treaty stipulated that mineral rights were to be given to the US but that the land probably wouldn't be taken unless the government needed it and then they would be removed to Minnesota. But this was never agreed upon and the Ojibway never believed that they had given up the right to their land (Satz 1991: 39, but see Clifton 1986) and were under the oral promise that they would not be removed if "they were peaceful and good". Whatever the Ojibway believed, the US government did not waste too many years in securing the land they had purchased from the representatives sent to the 1842 parlay.

Two important events happened in 1848. Wisconsin became a state of the Union and the La Pointe Indians gathered a group of people together to caravan to Washington to protest the non-enforcement of the US side of the treaty, namely goods and money owed them, and protection from encroaching settlers. The outcome of these two events would affect dealings between the Wisconsin Native Americans and Wisconsin businessmen for a century to come. The Ojibway came away from the proceedings in Washington with a promise that they would be paid for their land, but two years later a removal order came from the President that they not only had to leave their land but their hunting and fishing rights would no longer be recognized. This was more surprising to them than imagined, as these Ojibway never knew they had sold their land, and certainly had made no mistake of their intention to continue the traditional practice of hunting and fishing (Satz 1991: 51-54). Afraid of losing money from Indians, Wisconsin businessmen and locals protested this

removal order enough to support the Ojibway and have it revoked. With this support, another delegation formed to go to Washington to repeal the removal order in 1852.

Treaty of 1854

The treaty of 1854 was different from the last two treaties in that finally the Ojibway realized that they had to have their own translators and that they should hold out until they have secured land in Wisconsin. This treaty did secure residency on the land they had ceded in 1842 under the newly formed reservation system. In exchange, it allowed the US government to buy the land in Minnesota and formally portion off the Wisconsin Indians into reservations. Unfortunately the money that they were to have per capita, came often in the form of goods that were either dilapidated or useless. The St. Croix and Sakaogan, displaced back in the 1837 treaty, did not receive a reservation in this treaty as expected and many moved to the reservations formed at Red Cliff and Bad River (Mannypenny 1855; Kappler 1904; Vennum 1988; Satz 1991: 69). These refugees were also not included in the dispersal of money.

Although managing to stay on their land, the Ojibway fight for usufructory rights on ceded land was just beginning. It did not take the Wisconsin businessmen who had supported the Ojibway many years after to realize that allowing the Ojibway to stay would infringe upon their ability to exploit the resources of Chequamegon and the Apostle Islands. Many chose to look upon the fact that Wisconsin had become a state in 1848 as a means to denying the rights given to the Ojibway in 1842 and 1854. Many did not care if the Ojibway hunted and fished out of season on their "own" land, just as long as they did not hunt or fish out of season on state land, and also that the sport-fishermen be allowed to hunt (in season) on Ojibway land.

State of Wisconsin v. Morrin 1908

The vehicle to allow non-native exploitation of resources on reserved land came in the form of a court case against a Bayfield Ojibway man for violation of fishing regulations. They argued that allowing the Ojibway to continue to use their hunting and fishing usufructory rights on now state land would be in conflict with admitting the state into the union. In essence saying, that while it was acceptable when the land was a federal territory, no such agreement was made with the *state* of Wisconsin. Unfortunately it would be 75 years before the Supreme court would look at this and overrule its decision. In 1959 the Bad River Indians issued a "Declaration of War" against the government, silent and non-violent this declaration was just a precursor to the growing animosity towards one-sided, money driven agreements made in favor of anybody but the Indians. In 1972 a supreme court ruling allowed the Ojibway to practice traditional fishing practices in Lake Superior (and thus the Apostle Islands) by virtue of the 1854 treaty. Rights on the inland lakes and rivers of Wisconsin were still not to be seen.

Lac Courte Orielles v. Voigt 1983

Perhaps due to the American Indian Movement or just due to changing politics, by the time a court case got to the level of the Supreme Court, it had been 75 years since the Ojibway had been allowed to practice traditional fishing activities off their reservation. Yet this traditional practice essential to Ojibway life had not died off as intended, it was just hidden. In Lac Courte Orielles v. Voigt (The Voigt Decision) the issue was spear-fishing in particular and the right of Lac Courte Orielles people to do so off the reservation. The final decision in 1983 protected the Ojibway's right to hunt, fish, and gather on and off their reservation on public lands in ceded territory as declared in the 1847 treaty and not revoked by either the much debated Removal Order of 1852 or the treaty of 1854 (Satz 1991: 94).

Lac Courte Orielles v. Wisconsin 1991

After the Voigt decision in 1983 the Lac Courte Orielles did not stop until all the rights and privileges had been restored to them as won in the treaties made in the 1800's. In 1991 after a long series of adjudication between the tribe, Wisconsin sportsmen and the court of appeals, Judge Crabb of Wisconsin

ruled that the rights of hunting, fishing, and collecting maple sugar should not be interfered with on public, off reservation land. Specifically enumerated in this version were (Lac Courte Orielles v. Wisconsin 1991):

> The right to those forms of animal life, fish, vegetation and so on that they utilized at treaty time….[and] the right to use all of the methods of harvesting employed in treaty times and those developed since.
>
> The right to forest products, such as firewood, tree bark, maple sap, lodge poles, boughs, and marsh hay, but not including the right to harvest commercial timber.
>
> The right to harvest walleye and muskellunge without interference from the State of Wisconsin within the ceded territory in Wisconsin, as long as the Indians have a management plan for these resources.
>
> The right to hunt and trap on ceded land without interference from the State of Wisconsin, as long as the Indians have a management plan for these resources.
>
> These rights do not pertain to private land
>
> State hunting and trapping regulations apply when hunting on privately owned land.

Today the Bad River and Red Cliff bands of the Ojibway tribe are legally allowed to exercise their rights to fish, hunt, and gather maple syrup on public land. Unfortunately a great schism still exists between *de jure* and *de facto* law. Many people are unaware of their rights, and/or are harassed when trying to exercise them. The Apostle Islands National Lakeshore has enjoyed some success in rebuilding its relationship with the tribes in the effort to provide multicultural education to visitors. The current GMP for Apostle Islands acknowledges these rights and provides a platform for establishing and maintaining relationships with all bands of the Lake Superior Tribe of Chippewa Indians.

Contemporary Resource Use of the Apostle Islands

A total of 26 place-specific and landscape interviews were conducted with tribal representatives from Red Cliff and Bad River bands of Lake Superior Chippewa. Place-specific interviews were conducted at five islands: Outer Island, Oak Island, Manitou Island, Raspberry Island, and Stockton Island. The following text summarizes responses for site interview questions about each island.

Outer Island

Outer Island is the farthest of the Apostle Islands from the mainland. It is also one of the largest in the archipelago, measuring 7,999 acres in area (NPS 1989B: 45). A stand of old growth forest, mostly composed of virgin hemlock trees, is one of the most salient characteristics of the island today (Figure 9.2). In addition to the lush and varied forest described above, the island presents a striking topography, with low rock cliffs and clay bluffs flanking the east and west shorelines, respectively. There are several natural rock landings along the coast, and the south end has a large sandspit that encloses a one-mile long lagoon (NPS 1989B: 45). The island supports an active beaver population, which has built dams and lodges through the forest.

The interviews were conducted within the stand of virgin hemlock trees present on the island. No marked trail leading to the location of the interview spot exists, so American Indian consultants had to walk along a pebble beach and then inland toward the hemlock forest. Thus, only three consultants visited this area (Figure 9.3).

Ethnic Group Use History. Ojibway consultants emphasized the importance of a variety of cultural and natural resources in the island, especially the old growth stands. The old, "Grandfather trees" are considered powerful beings that connect the people with the environment but also are inhabited by ancestral spirits that reach across generations. The old forest was used for defense, shelter, and as a source of medicinal plants and raw materials for various crafts.

One consultant informed us that treaties signed between Wisconsin Ojibways under the leadership of Red Cliff's Chief Buffalo and the US government set aside some of the Apostle Islands and a portion of the mainland including the city of Bayfield, for their use. They eventually lost access to these lands and perceive that currently any resource gathering activity in the archipelago is not possible.

Seasonality. Recalling oral history and firsthand experiences of their families, consultants indicated that the island was visited year round for a variety of purposes, even though the surrounding waters were often dangerous for traditional navigation. Ojibways from Red Cliff and Bad River had both summer and winter camps on this island, and used to come to pick berries, collect birch bark, and gather maple sugar throughout the island. As reported by one consultant, the Winnebago also used to come to this island from the Iron River to pick berries and then burn the patches before leaving. Sometimes the berry surplus was sold or traded. Abundant beaver also attracted winter trappers. They would gather a large number of medicinal plants during their season and would come to seek knowledge and power at different times of the year.

Resources and Regional Connections. Ojibway consultants noted that Outer Island is connected to other islands and to the lakeshore not only because it is in Lake Superior, but also because all activities carried out in and around the archipelago were related to one another. One consultant said,

All lake places are connected [because] people would move from one place to another strategically, for resources.

According to the consultants, resource procurement activities and kinship relations born out of sharing activities and resources led to the development of powerful connections between people and places.

Statements about resources made by Ojibway consultants who visited the island organized by resource type. Because we concentrated on gathering information through the landscape interview form at this island, there were few place-specific interviews and most were not completed due to time constraints. Thus, the fact that no statements were made on archaeological resources does not signify a lack of knowledge or interest on the part of the people interviewed.

Water

Ojibway consultants emphasized, at its most general, the sacred character of Lake Superior and essential functions of water for ceremonial as well as everyday purposes. Specifically for Outer Island, one consultant mentioned that there is a story about a spring found on this island that had a spiritual significance and would have attracted people to come to the island seeking knowledge and power as well as healing.

As an ethnographic commentary we would add that this observation of the medicinal and spiritual powers of spring water were made independently by Ojibway consultants in other parks visited during the 1998 field season.

Figure 9.2 Close-up of a giant tree, Outer Island

Figure 9.3 Consultants form Red Cliff stand near an old beaver dam, Outer Island

Plants

Outer Island was particularly significant for Ojibway consultants because of the presence of "Grandfather trees." The island was renowned in older times for its berry patches that people from far away would come to gather and even buy and also for the abundance of medicinal plants in the forest. Traditional burning practices were also mentioned in relation to berry patches. Consultants also mentioned the existence of seasonal maple sugar camps here. Plant uses most commonly mentioned were:

Food
Craft-making
Medicine
Ceremony

Several plant uses were identified:

Wicki.	Sore throat
Evergreen trees	Similar respiratory problems
Cedar	Sacred, carries knowledge, medicine
Canadian yew	Medicinal
Birch	Wood for dugout canoe, bark sheets for frames
Maple	Sugar for food
Berries	Food

Animals

A notable presence in Outer Island is the beaver population. Consultants visited an old beaver dam and mentioned the importance of this animal for food, crafts, and medicine, and also noted that other animals such as otter and muskrat had similar uses. But the significance of animals that consultants stressed most was the relationship between clans and their animal totem and all the medicinal uses and food restrictions that they hold between people and their animal totem. Every part of this animal has a special significance for the clan.

Noted animal uses were:

Deer liver and heart	Food and prayer
Deer hide	Clothing
Beaver	Food, crafts, medicine, clan animal
Muskrat	Food, crafts, medicine, clan animal
Otter	Food, crafts, medicine, clan animal
Bear	Food, medicine, clan animal

Fish

Ojibway consultants stated that fishing occurred around the Apostles Islands and continues today. Whereas Outer Island may have been in dangerous waters, fishermen still came this far. They used to keep track of all details about fishing activities and, in recent times, record them in logs. When they got fish, for example, they would write down how many and how deep. One consultant said:

They [fishermen] had enough nets to circle around the island from Superior nine times…[Fishing was not permitted] but my father had to go out at night for fishing and hunting to feed us and often [fishermen] spent half their lives in jail because of this.

The islands they said, are surrounded by shoals, where fish are. Sturgeon was once fished around the islands.

Geology

Due to time constraints, only a few comments were made on geological and none on archaeological resources. A consultant observed that the caves formed by wave action on the island's cliffs were used for fasting and visions. Also, these caves were strategic for war and ambush, and for refuge during storms. Similar observations were made independently by other Ojibway consultants regarding caves at Pictured Rocks National Lakeshore, Michigan.

Oak Island

Oak Island is the highest of the Apostle Islands, with elevations up to 480 feet above the surface of Lake Superior and nine square miles of land. The island is characterized by high clay banks and steep forested shores; a sandspit is found at the southwest corner. The island is cut by steep ravines, and is heavily forested with a growth of mixed hardwood under the predominantly boreal forest. Ancient shorelines may be found along what was once the island's eastern shoreline (NPS 1989b: 37).

Four interviews were conducted at the campsite on the southwestern tip of the island. The group followed the major loop path around the island before reaching the campsite (Figure 9.4). This tour provided the opportunity to reach the highest spot on the island, a place that is considered important for ceremonial reasons, and to visit the location of an old sugar camp. Along the path there are various small mounds and depressions that members of the group speculated could be remnants of storage pits.

Ethnic Group Use History. Regarding its traditional use, the island is very close to the mainland and was easily reachable by canoe. Consultants observed that the abundance of thimble berry and blueberry patches combined with good fishing grounds and several sugar maple groves make this island attractive to Ojibway people. In fact, the island has been used continuously by the Ojibway until recently for sugar making, plant gathering, and fishing. Hunting and even gardening could have been productive here as well.

Seasonality. Given the proximity to the mainland (in fact, consultants could see the Red Cliff reservation lands from the island), Oak island was visited frequently and during the various resource procurement seasons (e.g., sugar-making in the spring, hunting in the winter, berry picking in the summer, net fishing from spring to fall, ice fishing in the winter). Additionally, the island also had a particular ritual role in the cycle of ceremonies associated with the different islands of the archipelago. In those occasions the island was used as a campground and gathering place.

Resources and Regional Connections. The island is connected to other places by water:

All sources of water are connected, a drop of water can connect all places in the world like a honey comb .

Oak Island's position in the ceremonial cycle also provides a significant cultural connection with the other islands. Ice in the winter provides another connection that allows animals to move from island to island and to the mainland. Connections among places are also established through group stories, descrip-

tive Indian names, family ties, and communal activities and resource sharing. The following resources were observed:

Water

In addition to drinking and domestic uses, water is used for ritual cleansing; a medicine man uses water as a part of curing; water drums are used in the sweat lodge. Water mixed with other medicinal substances, for example, cedar water, is used to rub the legs in the sweat lodge and in dances, because it purifies.

Even though most Ojibway people are concerned about pollution, many use Lake Superior's sacred water to promote their peace of mind and spiritual well-being. The water holds the key to their identity, one consultant said, and it is not just any water or water in general, but from this lake.

Figure 9.4 An interview is underway at Oak Island

Plants

Consultants were impressed by the luscious appearance of the island and variety of plants and trees. They particularly admired a large, "chest high" thimble berry patch. They noted that Oak Island has the second largest population of a rare orchid in the area (the first one is Red Cliff). Consultants also observed several large, old trees. They said that big old trees are significant because they are living spirits that are allowed to live longer. They all have spirits, like a person who lives many years and you respect them for what they have withstood. Plant uses mentioned were:

Berries	Food
Maple sugar	Food
Acorns	Deer fodder, human food
Wintergreen	Medicine
Indian pipe	Medicine
Wild asparagus	Medicine, cleans body after winter

Animals

Consultants observed that Oak Island's vegetation, particularly the acorns, may have attracted deer, which would swim to the island in the fall, before the lake froze. People then would walk on the ice to hunt them. The island contains suitable habitats for spawning of white fish. Other animals people hunted or trapped included bear, beaver, muskrat, otter, porcupine, and turtle. Specific animal uses mentioned were:

Deer bones, antler	Used as rattles, because it attracts other male deer who come to defend their territory
Deer ester	Attract males during hunting
Deer hooves	Ceremonies
Deer sinew, brain	Multiple uses
Bear claws, teeth	Ceremonies
Bear fat	Food, leather softener, air cleanser, among others
Bear meat	Sacred food
Squirrel	Good soup
Eagles	Ceremonies
Turtle	Sacred food
Pelts, various animals	Used for trade

A consultant also mentioned that a first kill of deer would be accompanied by a thanking feast and ceremony to make offerings to the deer spirit that gave up its life. In those occasions the men would eat the heart of the animal. One is supposed to use every part and give away all the meat.

Fish

All Ojibway consultants expressed the importance of fishing grounds around Oak Island, and the likelihood that fishing camps would have existed here in the past. In more recent times, the surrounding waters were used by the family of at least one consultant who visited the island; the consultant's family would set nets on the island itself.

In addition to be a primary food source, fish is also part of the people's identity, and many fish species, such as sturgeon, are also clan totems. Fish is consumed in great quantities during traditional funerary ceremonies. Some people depend on these ceremonies. Sometimes fish parts, such as large skins, scales, and

oil, are used for medicine in combination with other plants or animals. Fish bone may be used as an awl or needle.

Archaeology

Although consultants are unaware of any known or large archaeological site in the island, they suggest that there could be remains of sugar camps, fishing camps, and perhaps graves of people who died while camping here. One consultant would like to see more research done to increase her knowledge on the people's past in the island.

Geology

Consultants expressed that geological formations along the shoreline, in particular large rocks, were used as territorial markers. Also, because the shoreline changed frequently, these features were also used by canoers as navigational landmarks. Islets and the islands themselves were also used as landmarks. The shoreline caves also had many uses (see Outer Island).

Manitou Island

Manitou Island is one of the lowest islands and measures about 2.5 square miles. A gravel beach and a dock are found on the southwest end of the island. In the vicinity of the dock are some cabins and sheds that constitute the remains of a historic fishing camp listed on the national register (NPS 1989b: 38). Today the vegetative communities are composed primarily of a mixture of hardwood forests with some patches of white birch and hardwood under-story (Frederick and Rakestraw 1976a: 39). There is an aboriginal archaeological site on the western rim of the island. The site currently presents no visible remains of material culture on the surface and shoreline erosion seems to have affected its integrity. Because of its relative proximity to the mainland where large villages were located, this site could represent a short-term camp or a stopover when traveling. There re few—albeit very rich—runs and spawning grounds and this may have limited the fishing activities in the vicinity of the island.

Four interviews were conducted on Manitou Island (Figure 9.5). The interviews took place at the end of the trail that follows the western rim of the island. Ojibway consultants also visited the archaeological site and received an explanation from the park historian. The current name of the island struck great interest among the consultants, despite their knowledge of previous different names according to which the island was known. One respondent commented that the island's name may indicate that something significant happened here. Ojibway venerate certain places that they name after the "manitos" or spirits who live there.

Ethnic Group Use History. The consultants expressed that island's peculiar position, surrounded by other larger islands and invisible from the mainland, makes it a particularly powerful spot. This feeling is enhanced by the relationship between certain species of fish and particular ceremonial places that are inextricably associated in Ojibway culture. The island was coveted as a particular ceremonial place, a place for meditation and fasting, and possibly for puberty rites of passage. One consultant said:

> *They used this island for ceremonies because they would have to get away from the Europeans. They do this today in Canada—go to the bush where they can be away and not bothered.*

Seasonality.**T**emporary, short-term fishing camp have existed in this island, as indicated by the consultants and uncovered by NPS personnel through archaeological research. People may have come here on occasion of a puberty fasting or vision questing. The fish would have been needed for ceremonies.

Resources and Regional Connections. Consultants stated that Manitou Island is part of the regional landscape that include all other Apostle Islands and places on the mainland, and of the larger Lake Superior landscape. The connecting thread is represented in the cycles and the types of complementary activities performed at the different locations. Water itself provides a spiritual connection, as waterways were used for regional travel; animals and humans used these waterways Creation stories also constitute binding agents between people and places. The prophecies give clear directions as to where to go, how to travel, what people would find in a place. They provide place connections.

Consultants noted the following resource uses:

Figure 9.5 Ojibway consultant at Manitou Island

Water

All comments about specific uses of water in Manitou Island offered during the site visit revolved around water ceremonies that are practiced today. In addition to water uses for healing and ritual in general, consultants noted that their families practice water ceremonies because they offer protection while using the lake and its resources. These ceremonies are practiced annually:

> *Every year in my family we have ceremonies for this water to give thanks to the spirit of the lake and put offerings. The spirit then watches you when you are out in the season because of following the ceremonies. Those who do not follow get the anger of the spirit and have accidents or don't get fish.*

It was also mentioned that women, especially, need to maintain their connection with the lake and the water.

Plants

Consultants mentioned several traditionally used plants that they saw in the island, including cedar trees, blueberries, plantain (an ointment), medicine berries, mosses, and bark, among others. However, one consultant mentioned that this was not an island sought specially for berry picking. No mention was made of trips to the island specifically for using plants (e.g., sugar making, bark collecting), but some plants would have been collected during ceremonial activities here.

Information about animals again revolved around their ceremonial role. Consultants noted that people had spiritual connections with all animals, but that in certain ceremonies it is "compulsory" to have certain types of meat:

> *In the bear feast you need to have fish, maple sugar, berries, and rice, items that the bear and its spirit eat, but you become part of it by eating it like the bears do, simulating the bear with the mouth and without using hands.*

Consultants also stressed the connection between eagles and people; they both eat fish. Eagles fly high and communicate with spirits and drop or give people their feathers, like the eagles that live in Bad River. They do not give feathers to everyone, a consultant told, but only to certain people, such as veterans of war. Eagles were not killed because it was bad luck; on the contrary, they were fed and doctored when sick. Feathers are used in talking circles.

Fish

Consultants noted that, because all the reefs that surround Manitou Island, this was a good place to catch walleye in early spring. However, the lack of streams would have precluded spearing during the spawning season. They may have set the nets off the beach, and checked them regularly. There may have been a good source of whitefish as well. Fish would have been needed for ceremonies conducted in this island, and would have fed people and spirits.

Regarding fish uses, a consultant mentioned that fish skins, scales and oils are used in medicine. Bones were used for combs in the old days. Fish eyes had a specific use as well. More generally, fish are present in oral history and prophecy, and some species are clan totems, e.g., sturgeon. Fish is also important because it is a link that connects humans and animals, e.g., eagle. Bear also eat fish. It is part of a chain that

provides spiritual balance and should not be broken. The consultant used to trade stuff and knowledge of traditional practices (e.g., how to perform a traditional burial) for smoked fish or walleye and vice versa.

Archaeology

The NPS historian who accompanied the group informed consultants on the archaeology of the island. They commented that the fishing camp might have been located on the higher ground in the island.[1] This would have been a seasonal camp, but perhaps people also used it during other collecting or hunting seasons. One consultant mentioned that before the fishing camp existed the island was used for religious purposes and that a medicine lodge may have existed here. It is also possible, according to this consultant, that people were buried in the island.

Another consultant mentioned that there were pottery sherds on the surface and that people would have left behind pots used for boiling fish. Also, people would have kept the camping area clear of underbrush.

Geology

Manitou Island is considered a traditional shelter for both people and animals. The rocky formations on the shore would have served as refuge and also as navigational landmarks. Consultants explained that the rocks on the beach are also significant because all rocks have spirits; some rocks are called "Grandfathers" because of their special spirits and are used in ceremonies, including the sweat lodge. Rocks are also used for marking or commemorating events, including marriages and deaths.

Raspberry Island

Raspberry Island is located across from the mouth of the Raspberry River that delves into Lake Superior at Raspberry Bay. The island covers 296 acres of land and is one-mile long and 0.5-mile wide (NPS 1989B: 37). Today the island presents growths of yellow and white birch, aspen and sections of balsam fir and cedar. Various types of berries grow in abundance on this island. A wetland complex is present in the interior that might have supported wild rice in the past (Frederick and Rakestraw 1976a: 27). The location of Raspberry Island is particularly favorable because of its proximity to the mainland and its sheltered side facing the mainland. The island is close to Raspberry Bay and to Eagle Bay, areas that are now part of the Red Cliff reservation. Four interviews were conducted on Raspberry Island, with members of the Red Cliff and Band River bands. The interviews were administered at the beach after a short walk along the southern trail from the lighthouse (Figures 9.6 and 9.7).

Ethnic Group Use History and Seasonality. Ojibway consultants interpreted the island as closely related to family activities that went on in the mainland. The island was an important marker when traveling on the Lake Superior, and its proximity to the Raspberry and Eagle Baysmade this island important for obtaining a variety of resources. The island was part of the activity cycle: the main village was at Raspberry Bay, but people came to this island to pick blueberries, to fish, and to collect wild rice in its interior wetlands. People also came for hunting and for ceremonial purposes. Of special importance are the numerous plants unique to this island that were collected for a wide range of uses. In winter Lake Superior freezes over and an ice-bridge connects Raspberry Bay to the islands all the way to Otter Island. People used to go back and forth between the main village and Raspberry Island. One consultant expressed that this island did not appear to be a female activity area, even though it is surrounded by water, to which women have a strong spiritual connection.

Figure 9.6 Raspberry Island

Figure 9.7 Stockton Island beach

Resources and Regional Connections. The island is closely tied to the Red Cliff's band history, but it was used by more than one band. It is part of a larger landscape that connects the area from the Niagara Falls to the Rainy Lake. According to the elders, people came to this place from the St. Croix River Valley and from Bad River (including a consultant's grandfather) for seasonal ceremonies. Resource availability and ceremonial prescription for certain medicines would also bring people from far away. One consultant said:

> *It was from their memories when they were kids, so it would have been 60 to 90 years ago when this happened. In those days they would come for a month. [They would spend] four months trapping along the way with relatives in other villages. They were equally attracted by the ceremonies and natural resources that they did not have, for example, we bring cedar from here to Round Lake when we go to ceremonies. We go to St. Croix for sage. Medicines are stronger when you travel long ways for them. We even exchange foods.*

Consultants interviewed at Raspberry Island made numerous observations regarding the availability and use of its resources.

Water

Consultants noted that water from certain sources was used as a medicine specially prescribed in dreams. All water sources have spirits living in them, and the water itself is a spirit; some spirits control others and keep things in balance, so you need to ask permission to use it. The water in the island's interior wetlands is cleaner than the one in the lake because the plants there act like a filter. But in older times people used the lake water for drinking and swimming. Drinking lake water was particularly significant because of the lake's role as a source and center of life. In older times, ice chunks from the lake were used for refrigeration.

Plants

Throughout the visit to Raspberry Island consultants emphasized the importance of religious prescription of certain medicines including water and plants. People would receive a prescription through a dream or a medicine person. This still occurs to people in contemporary times and they may be sent to the island (or to any of the other islands) to obtain the plant needed to heal. One of the observations that provoked this emphasis on medicine plants was the presence of plants that, according to the consultants, do not occur in the same abundance, condition, or at all, in other islands or the mainland. They suggested that some plants could have been unique to Raspberry Island. Specifically, the following plants were mentioned:

Cedar	Sacred plant, carries the spirit of the warriors ("ogichida"), used as medicine in the north, cedar tea is good for fighting stress
Cedar and balsam branches	Used for making shades
Pine	Multipurpose
Tree bark	Multipurpose
Bog plants and roots	Medicine
Cranberry bush-inner bark	Female illness teas
Canadian yew	Medicine
Various berries and plum	Food, dye, medicine
Black walnuts, hazelnuts	Dye
Mushrooms	Medicine, ceremony

Animals

Consultants mentioned that this island might have been a good habitat for moose, turtles, birds, eagles, and bear. Raspberry Island is so close to the mainland that animals could have traveled back and forth. Many of these animals are used for multiple purposes while others are used ceremonially, such as the eagle. Certain pelts, like those of beaver and muskrat, are used in the Midewiwin lodge.

Fish

A consultant told that the old people speared fish in protected bays in this area. Also, they would go all the way up to Canada. The consultant went up there with elders who remembered fishing there in the past; they went for walleye. Other times they went south, toward Lac Du Flambeau, where people speared at night using torches. Spearing took place during the spawning season. Other consultants emphasized that there were good fishing grounds used by the Ojibway in the vicinity of the island.

Archaeology

Given that this was a frequently visited island, it is likely that sites such as old sugar camps or camps under old trees, may still be distinguishable. Consultants also stated that Raspberry Island is not just a site of the past but an active place where people still carry out certain activities. People from Red Cliff still use the island. In the words of one consultant:

> *Everything happens in this time. Everything that has happened is still happening here now. Events exist in places. Old trees can contain events—all the elements are there. A cut-down and sunken tree still has its spirit and still remembers what it has heard.*

Geology

Consultants mentioned the wetlands or sloughs in the island as significant features because they support unique medicine plants and wild rice. The beach is protected from the wind and therefore appropriate for camping. The island itself was a reference point for canoe traveling. Many secluded spots in the island would have afforded privacy for conducting certain ceremonies.

Stockton Island

Stockton Island extends for 10,054 acres and is 7.5 miles long by 2.5 miles wide. It is the largest island in the archipelago. Stockton Island today is mostly composed of mixed hardwood hemlock and yellow birch forests with small areas of red and white pine, cedar, fir and paper birch (Frederick and Rakestraw 1976a: 24). Several sandy beaches are present on the island, and on the southeast end of Stockton is a low sandy tombolo that connects the rocky Presque Isle Point with the rest of the island. A large lagoon provides a habitat for beavers, and bears are present in fairly large numbers.

The team conducted six interviews at the end of a long walk that took the people into the woods, across the large lagoon and marshy grounds, and along a red sandy beach coasting the southern edge of the lagoon. This long walk allowed Ojibway consultants to familiarize themselves with the diverse ecosystems and resources they support. A peculiar feature found at various points on the island is a type of bent tree that was used historically as trail marker—the direction of the bending corresponds to the direction of the trail (Figure 9.8). They also learned about the archaeology of the island from park staff.

Ethnic Group Use History. As with the islands above, Stockton Island belongs in a cycle of activities that regularly brought people from one location to another. One Ojibway consultant identified this land use pattern as a "mental archetype" that people still have with them. The island is part of the Lake Superior

regional landscape and is further connected through prophecies with the larger cultural region that reaches as far as the St. Lawrence River.

Seasonality. The variety of geological, plant, and animal resources makes this island unique for the Ojibway. The geology of the island (sand dunes, sloughs (Figures 9.9 and 9.10), beaches, cliffs, quarries) and its position relative to the water makes these features especially important for navigation and ritual. Bears came to the island in the winter to hibernate[2]; their presence is also very significant for ceremonial purposes. Also, there would have been ceremonies associated with berry picking and other gathering activities.

Figure 9.8 Trail-marker tree

Figure 9.9 Stockton Island sloughs

Figure 9.10 Stockton Island Beach

Resources and Regional Connections. Consultants emphasized the role of seasonal cycles and migration in building connections among places used at different times and for different purposes. Migration traditions also connect the Apostle Islands, and this island as a part of them, to all other places where people stopped along, all the way back to the St. Lawrence River. Stockton Island is also closely connected to the main population who once inhabited Madeline Island and especially with the village of La Pointe.

Consultants mentioned the following resource uses:

Water

In the past most people drank water from artesian springs and also from the lake. Water used for medicine and ceremonies was set so the rising sun would shine on it. Tobacco and cedar were used in the water to purify it. Nowadays the rules for drinking water from streams have changed.

The water from the slough supported wild rice. The slough at Stockton Island has a natural opening that people would have used to access the rice bed.

Plants

A consultant said that plants are beings with many purposes, and each plant part has its own use. Tobacco is offered when plants are gathered. Specifically, consultants mentioned the following plant uses:

Bog cranberries and thimble berries	Food, Stockton Island was renowned for them
Blueberries	Food
Wintergreen	Headaches, colds, heartburn
Berry bush inner bark	Poultice for infected wounds
Cedar	Sacred plant, also medicine, protects hair
Pine (pitch, needle, root)	Multipurpose
Balsam	Arthritis, pitch used for sealing containers and boats
Birch bark	Multipurpose raw material, canoe frames, containers

Animals

Consultants commented on the strong relationship that exists among humans and animals. Creation stories talk about how humans actually were created from animals. This explains how they learned to live in the woods and follow the practices of the animals. Although animals are here for human survival, clanspeople do not consume their own clan animal because that is their helper. Typically, animals are humans' protectors. Specifically, the following animal uses were mentioned:

Bear	Meat and grease for food, claws used for protection necklaces, claws symbolize hiding from things
Crane	Clan animal (at least one consultant is from this clan)
Deer	Jerky mixed with berries to make pemmican paste, major food staple

Consultants also talked about the spiritual significance of eagles. They said:

Eagles are highly respected spirits. Its like a messenger because it flies the highest to the creator and has a big wingspan. Eagles, like Indian people, live on fish, and like people they only have one mate and the mate takes care of the offspring.

Fish

The island provides shallow waters for fishing certain species. These are fished at different times. There are walleye, trout, whitefish, burbot, loho salmon, smelts, croppies, bass, chubs, perch, steelhead. Some of these were used as fertilizers, as oil, and also as bait. People would have come here in the fall.

Archaeology

Consultants made several comments regarding archaeology and material culture. For example, they observed that people took everything with them when they moved to another camp location and therefore they may not be traces of their presence left for the archaeologists to excavate. Ricing camps, in particular, may have existed here but are not visible; it makes sense that at the same time they gathered rice they fished and hunted, but there is nothing left of the camps. They also explained the significance of burial give-aways and offerings, saying:

> *Burial sites were usually family-owned and taken care of. They would take care of them as with the living ones. Dead people come back at times to protect you or to help you out. This occurs both in daylife and nightlife. If someone died and he/she comes to you, this means the spirit is asking you something. This is why we give away all their stuff or otherwise they keep coming back.*

> *There are stories about the paths that they take to go to the other side. There are trails to go to the other side and it would take four days. Medicine men at funerals talk to the dead ones and indicate them the path to follow. There are deviations and so the dead ones must make sure that they are following the right path. The families need to make sure that the dead ones have the right things to take with them and this varies on a gender basis. If they don't follow the right path, they would come back and bother you. It's important to give them all their possessions so that they wouldn't want to come back to get what they forgot or you forgot to give them.*

Geology

There were numerous topographic features pointed out by the consultants, who commented on their importance. Cliffs and quarries that stand over water, for example, are powerful depending on the direction they face; these are use to meditate because

> *Cliffs are open and higher up and closer to the Great Spirit… this place was sort of a neutral ground to communicate with the spirits*

Beaches were also mentioned as sources of eagle feathers. Shoreline trees and rocks were used as landmarks in the original language of the treaties and were also trail markers. Other important features were sand dunes, drying rocks, and clearings for camping.

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[1] Consultants were informed of the archaeological research at site 47AS47, but they chose to offer their own view on locations people would have chosen to place their fishing camps.

[2] According to NPS staff the bears live in the island year round.

CHAPTER TEN
VOYAGEURS NATIONAL PARK

Voyageurs National Park (VOYA) is located in the north-central portion of Minnesota, on the border with Canada (Figure 10.1). The park consists of 218,054.79 acres of land and water. At its center is the Kabetogama Peninsula, over 30 miles long in length and about six miles across. The peninsula contains numerous interior lakes, spawning sites for a unique muskellunge species, and active beaver ponds, among other resources. The large amount of water present in the park is mostly contained in four major lakes: Kabetogama, Namakan, Sand Point, and the larger Rainy Lake. The park also includes small lakes, many smaller ponds and bogs, and hundreds of islands of different sizes.

The park lies in the southern portion of the Canadian Shield, representing some of the oldest exposed rock formations in the world. This bedrock has been shaped and carved by at least four periods of glaciation. The topography of the park is rugged and varied; rolling hills are interspersed with bogs, beaver ponds, swamps, islands, small lakes and the four larger lakes. In the millennia since the last glaciation, a thin layer of soil developed, eventually supporting the boreal forest ecosystem - the "North Woods" of Voyageurs National Park. The lowest point in the park is located south of Sullivan Bay on Kabetogama Lake at 1,107 feet above sea level, while its highest point is on hills located about three miles south of Namakan at 1,405 feet above sea level. Glacial activities dating to about 11,000 years ago, however, have enriched the landscape with sheer cliffs, steep hills, and rock outcrops (Breining 1987).

The history of the establishment of Voyageurs National Park is closely connected with the conservationist debate in the state of Minnesota that dates back to the last decade of the nineteenth century. The various phases that ultimately led to the establishment of Voyageurs, from the Lomen Resolution to the quasi-legendary debate between Ernest Oberholzer and the industrialist Backus, to the present day dimension and legal status, have been outlined in great detail by Robert Treuer (1998).

Efforts toward the formation of Voyageurs National Park began as early as 1891 and were renewed in the 1960s, but the battle for incorporation of what was to become today's park lasted throughout the next decade, and by 1978 about 93% of the park was under NPS administration (Treuer 1998). Public Law 91-661, enacted on January 8, 1971, authorized the Secretary of the Interior to establish the Voyageurs National Park and the Chapter 852 of 1971 Minnesota Laws (House File No. 1337) provided for the donation of state lands necessary to its establishment. The park then was officially created by the Secretary of the Interior on April 8, 1975 encompassing a combination of federal (primarily U.S. Forest Service), state, and private lands. Within the park there are two tracts of land (190.47 acres) in joint tribal trust and cannot be acquired by the NPS. Three tracts of land were held in trust by members of the Gawboy Family and may be exchanged or purchased upon the initiative of the individual owner. One of these tracts has been acquired by the NPS (NPS 2000).

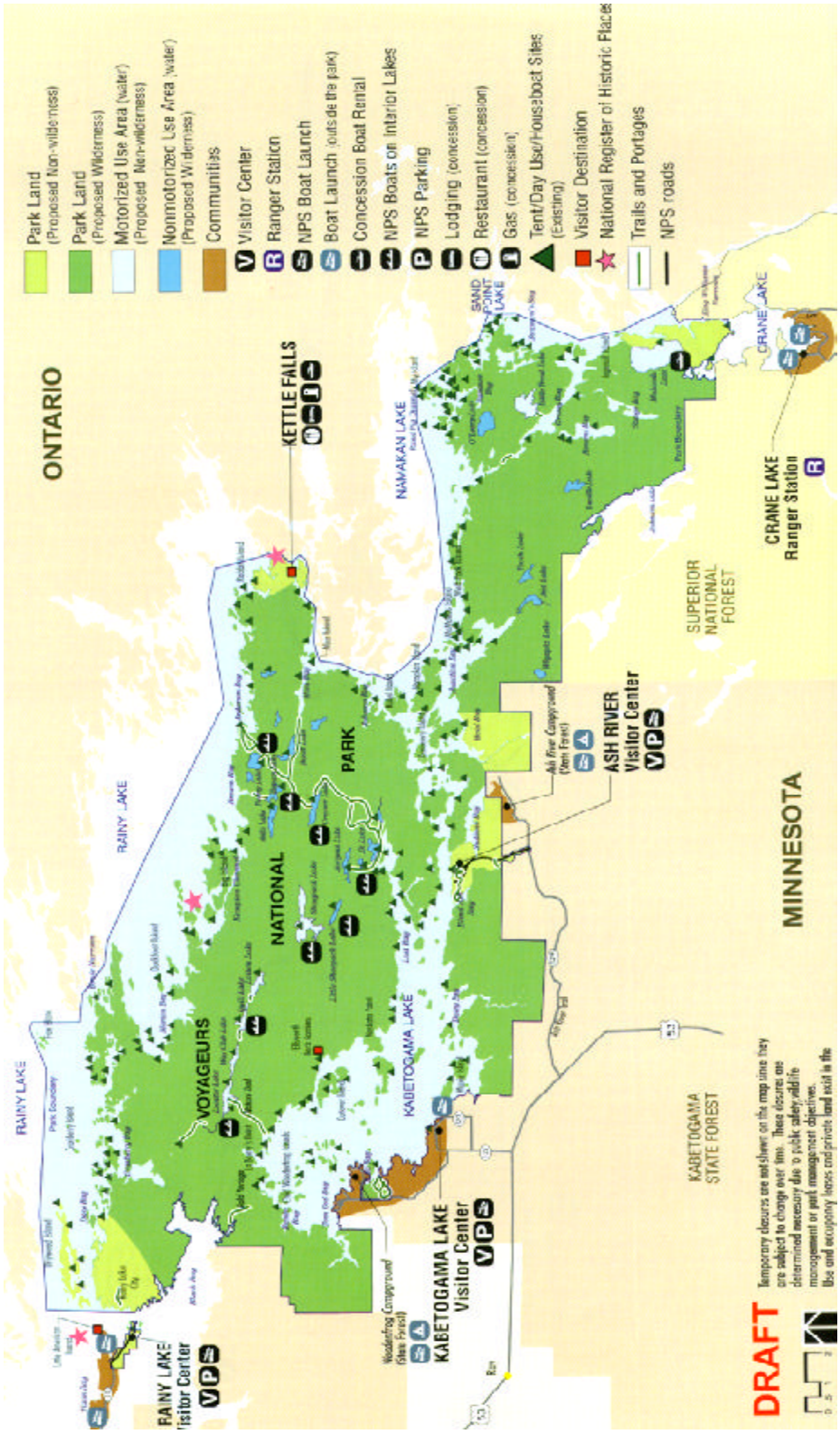

Figure 10.1 Voyageurs National Park

The Park and its The Resources

The *Draft General Management Plan/Environmental Impact Statement and Visitor Use and Facilities Plan* (NPS 2000a), describes VOYA as "a scenic land and water environment of great character, beauty, and recreational potential. The park protects roughly 134,000 acres of forested woodlands, 84,000 acres of water, 655 miles of undeveloped shoreline, and over 1,000 islands. VOYA was named after the French-Canadian voyageurs who during the late eighteenth and early nineteenth centuries traversed the park's segment of "transcontinental highway" or complex system of navigable waterways. Along this historic waterway system one may observe outstanding scenery, dense north woods, and unique geological features. The park was home until the 1910s to a large number of Ojibway families who sustained themselves on the variety of natural resources that the terrain offers (Richner 1995b). Modern voyageurs continue to ply the waters that give VOYA its national significance.

Physiography and Geological History

The landscape in this area and most of the physical features evident to the eye are the product of recent glacial activity that occurred about 11,000 years ago (LaBerge 1994; Breining 1987). Yet, some portions of the substrate date 2.7 billion years or pre-Cambrian era. During the pre-Cambrian era northern Minnesota experienced a series of cataclysms and volcanic eruptions, the partial residue of which is the pillowing of lava found in the park and at International Falls. The park also presents fracture lines in the rock formations indicating repeated shifts and settlings of the crust such as the ca. 80-mile long Vermilion Batholith of igneous material and the granite mass at Kabetogama Lake and Ash River. The northern edge of the park presents a belt of exposed greenstone on Dryweed, Big American, and other small islands towards Neil Point.

The broad regional physiography is mainly the result of a series of glaciations that occurred during Pleistocene times. During the last glaciation from 13,000 to 11,000 years ago, there were at least four major glacial advances that tongued down from the north and over the park area. The complex system of interconnected waterways and lakes is primarily the result of the southward movement of the great ice sheets (Heinselman 1996). Glaciers moving over bedrock also picked up large rocks that got embedded in the ice and later left behind as debris once the glacial activity ended. Complex glacial activity produced an undulating and rounded topography, leaving striations and gouges into the bedrock and farther edges cluttered with debris released during the glaciers' final retreat. The melting ice gathered up into what is estimated to have been the largest freshwater lake that ever existed on the North American continent. This is referred to as Lake Agassiz II stage, which overrode evidence of a previous Agassiz I stage at the end of an earlier glaciation.

The park presents a rare display of the nucleus of the North American continent–the Precambrian Canadian Shield–evident in the variety of rock colors marked by bright veins of white and pink quartz. Exposed metamorphic bedrock is the base of an ancient highland carved by a half billion years of erosion. Heinselman (1996) has provided a very accurate description of landscape evolution from pre-Cambrian times to the present including originating processes of bogs, swamps, muskeg (a type of bog or marsh formed by the deposit of thick layers of decaying vegetable matter and mosses in a depression), lakes and soils. There are dramatic rock formations surrounding the lakes, which are bounded north by the greenstone and south by the Vermilion Batholith. The first moraines are found to the south of the park, and the combination of granite cliffs, boreal forest, marsh, and a complex system of interconnecting lakes and rivers provide a mix of the post-glacial and Precambrian geology (Treuer 1998: 28-35).

Plant and Mycological Resources

The vegetative history of the park is closely related to the long-term effects of past glacial activities. Mosses, lichens and algae made their way into apparently impenetrable barren surfaces giving birth to a tundra environment. The decay of these plants provided soil on which larger vegetation could grow. The accumulation of mosses, reeds, and sedges in wetlands, where water prevented the complete decay of these plants, formed peat bogs. Warmer climate allowed the establishment of spruce tree colonies from the south. Simultaneously, tundra dwarf birch became abundant and tamarack and black ash began flourishing near the lakes. Jack pines and red pines also spread from the Appalachian regions northwestward and a cooling down of the general climate around 5,000 years ago favored their consistent growth.

Today Voyageurs National Park lies on the southern edge of the boreal forest, a cold-weathered community dominated by spruce and fir interspersed with birch, aspen and pine in the south. The lumber industry took a great toll on the area's forest. Before the onset of the logging era around 1880, a great coniferous forest mixed with deciduous trees, covered part of the area. Conservation policies over the twentieth century have allowed for the survival all the original species-jack white pine along the shorelines, dense stands of black spruce with occasional white cedar and ash in boggy areas-, but the forest composition has changed irreversibly. At higher elevations, aspen, birch, balsam fir, white spruce, oak, maple and jack pine are the dominant species (NPS 2000a: I-116).

Lynott et al. (1986) report 261 plant species in the park area further subdivided into 20 species of trees, 54 species of shrubs and vines, 152 species of herbs, 25 species of ferns and fern allies, and 10 species of lichens and moss, and this is only a partial count of the hundreds of species of vascular plants, lichens, and moss that exist in the park (NPS 2000a: I-116). The latter cover most rocks and the forest floors. Wild rice can be found in shallow bays and streams, and was once abundant in Black Bay on the west end of the park; cranberry patches are commonly found throughout the park's spruce bogs. Wild rice has been impacted in recent years by paper mill-related water diversion projects along the US-Canada border.

A variety of important shrubs such as hazel, dogwood, elder, swamp birch, mountain maple, alder and sumac are encountered in the park. In lower places, however, heather, honeysuckle, bayberry and willow are the most common species. Various flowers can also be found in the park, including twinflower, dwarf dogwood, clintonia, polygala, pitcher plant and large-leaved aster (NPS 1980). A complete classification of the plant communities in the park region is still not available, but a sound basis is provided by the classification of most of the upland vegetation of Voyageurs National Park by Kurmis et al. (1978). Studies conducted on the Boundary Waters by Ohmann and Ream (1971) and Grigal and Ohmann (1975) are helpful to integrate the knowledge of similar environments.

Forests. Heinselman (1996: 16-18) considers the border region as a transitional forest zone, or part of a continuum of plant distributions that exhibit a gradual shift in species composition and abundance within plant communities from the deciduous forests of southeastern Minnesota to the true boreal forests of northwestern Ontario. Heinselman's argument is supported by the complete absence of sugar maple, beech, and eastern hemlock and the scarcity of yellow birch (Heinselman 1996: 16-31). However, the regional affinities of the shrubs, herbs, grasses sedges, lichens and mosses reflect a nearly boreal character of the vegetation. In the park, however, boreal forests are most abundant, occupying about 70% of the park's vegetated area (NPS 2000a: I-116).

In the early stages of the succession of the forest, leafy trees such as poplar and birch are also found. Birch can usually supplant mature pine trees, although in the presence of forest fires the latter would be at an advantage. Periodic fires have been crucial to the self-sustainability of the pine community against the

encroachments of hardwood competitors. Fires have helped pines to regenerate and reseed, tending to hold down brush and other competing species without depleting the slowly accumulated soil. Treuer (1998: 130) asserts that prehistoric and historic indigenous occupants' activities had similar impacts on the forest as fires did.

Regional pollen columns, fire history, and soil development indicate that, at the time of the Voyageurs, the area was primarily covered by mature red and white pine forests (Lynott 1986: 16-17; NPS 2000a: I-119). Normal life expectancy for red pine is 200 to 300 years and slightly longer for white pine. The records of the US General Land Office Survey and other reliable early data clearly show that only about a quarter of the forests of northeastern Minnesota consisted of mature white and red pine at the time of European settlement (Marschner 1930). In an ecosystem analysis of 1973, however, the University of Minnesota team concluded that native pines are a species "endangered in the long run." The number of seedlings is relatively high but many do not reach mature age, both because of competition with other species on the ground and because of the lack of fires suppressing potential competition. Today the most dominant species are the birch and the aspen hardwoods (NPS 2000a: I-117). Aspen colonies are also encouraged by various interests because of their economic value in relation to the production of pressed wood.

Animal Resources

General descriptions of the regional mammals have been provided from Surber (1932), Gunderson (1953), and Hazard (1982). Woodland caribou and elk can no longer be found in the park area; moose, deer, black bear, and timber wolves have managed to survive. Beavers are often found in aspen and birch stands of the Kabetogama Peninsula. The park also hosts a variety of species such as snowshoe hare, porcupine, chipmunk, muskrat, red and flying squirrels, mink, weasel, skunk, otter, fisher, pine marten, coyote, bobcat, fox, Canada lynx, and various other rodents and bats (NPS 2000a). Before the onset of heavy lumbering a great variety of game and fur-bearing animals were found within the current park boundaries; most of these species recovered and are in the park today. Of these animals, the moose, the woodland caribou, beaver, muskrat, and various small mammals were the most important food resources in prehistoric times (Lynott et al. 1986: 16). Although moose are still present in small numbers today, the woodland caribou became extinct in the 1940s (NPS 1978:72).

Beaver habitats have had a substantial influence on creating wetland communities in the park. The growth of aspen—the beaver's preferred food—as a result of fire and logging combined with low incidence of natural beaver predators have contributed to the growth of their habitat. Studies indicated that this growth has had a dramatic influence on hydrology and riparian vegetation (NPS 2000a: I-120).

The park has a variety of ornithological resources. The most common birds found in the park are: herring gull, raven, white throat and song sparrows, least flycatcher, blue jay, chickadee, crow, flicker, red-eyed vireo, evening grosbeak, ovenbird, great blue heron, and various warblers. In addition, mallards, golden eyes, mergansers, widgeons, loons, herons, ospreys, and bald eagles are found on islands, lagoons and bays (NPS 1980). Generally there are 220 varieties of birds. According to Treuer (1998) the park hosts also grosbeaks, nuthatches, creepers, pileated, woodpeckers, chickadees, snow buntings, snowy owls, geese, swan, waterfowl, songbirds, and finches. The presence of birds in the park is fundamental for seed dissemination, insect control, and the balance of aquatic communities, among other important ecological functions.

Aquatic Resources

The park hosts a variety of lacustrine fish species among which walleye, northern pike, trout, bass, crappies, minnows, sturgeon, tullibee, whitefish, sauger, perch, and sucker. Furthermore, unique muskellunge species can be found in the Shoepack and Little Shoepack Lake on the Kabetogama Peninsula (NPS

1980). Kabetogama and Rainy Lakes currently contain at least 52 species of fish and important spawning grounds for walleye and northern pike (NPS 2000a: I-127). Beginning in 1917, the park and the Minnesota Department of Natural Resources have worked on stocking naturally occurring fish to keep a healthy balance between predator and prey species and on controlling illegal stocking of invasive species by private parties. This work continues today.

The park's wetlands support highly diverse plant communities as well; currently there are close to 100 species of known aquatic plants. Phytoplankton is also an important resource associated with wetlands that grows mainly in Kabetogama, Namakan, and in shallow areas of Rainy Lake (NPS 2000a: I-117). Various studies have been conducted on the aquatic community, from lake-bottom soils and organisms to plants, crustacean, insects, mollusks and worms. The level of oxygen near the bottom in combination to the presence of pollution sensitive insects and their larvae seem to indicate a relatively healthy condition of the aquatic community.

Archaeological Resources

The existence of archeological remains in the park and its vicinity has been known since the last two decades of the nineteenth century as a result of Euro-American activities in the area to clear forests for agricultural purposes. Various mounds were discovered along the Rainy River basin dating to the Laurel and Blackduck phases of the Woodland Culture (Breining 1987, Lynott et al. 1986). The identification of the Laurel culture was largely a product of research conducted by Wilford (1950a; 1950b; 1955) on the Rainy River. The Rainy River mound complexes represent the type sites for this culture. The Laurel culture sequence appears to be attributable to the Middle Woodland time horizon (Stoltman 1974).

Various excavations were conducted during the last portion of the past century at Grand Mound at the Smith Site. This led to the discovery of a large collection of relics, burials, and associated mortuary offerings. Major excavations directed by George Bryce in 1874, Andrew Lawson in 1884-85, and G. F. Hulbert and L. H. Kempton in 1897. Few decades later, A. E. Jenks and Lloyd A. Wilford initiated a statewide program in field research at the University of Minnesota, introducing more scientific methods to the study of the burial mounds. His work set the theoretical basis for the definition of the Laurel and Blackduck complexes (Lynott et al. 1986).

From the 1970s, numerous archeological investigations have been conducted in the Voyageurs National Park area by teams of the University of Minnesota, the Minnesota Historical society and the National Park Service. In 1972, Robert Wheeler and Douglas Birk conducted a reconnaissance of Sand Point, Crane Lake, and the eastern portion of the Namakan Lake, (Birk 1972) followed by an additional reconnaissance by Douglas George (1973) of the Black Bay, Gold Shores, State Point and Sullivan Bay areas. The Smith Site has been restudied in recent years and currently it is being managed by the Minnesota Historical Society.

Intensive study of archeological resources in Voyageurs National Park began in 1975 with a study of the Kettle Falls area undertaken by the Minnesota Historical Society (Watson, Oothoudt and Birk 1976). This study consisted of surface analysis and an underwater survey of the areas adjacent to the terrestrial sites and various prehistoric sites were identified in the process. The study revealed that the construction of dams at the beginning of the twentieth century had a strong impact on the archeology of the park area, especially in regards to prehistoric sites on the four major lakes within the park boundaries. An average rise of 3.5 feet in water level that followed the establishment of the Kettle Falls dam impacted many shoreline sites.

In the last two decades, archeological research at the park and its has uncovered abundant evidence of prehistoric and historic occupation by native peoples. The work of Lynott and Richner, among other archaeologists, has proven extremely successful in identifying a large number of previously unknown archeological sites. The sites occur primarily on shorelines or on islands, with only a few sites recovered on the interior lakes (Midwest Archeological Center [MWAC] 1997). These observations, however, could be biased by the fact that most archeological research has been conducted in correspondence with development projects for camping or houseboat sites. Gibbon (1977) argues that virtually all prehistoric sites are adjacent to major lakes and that the modern artificial lake levels have destroyed or seriously disturbed such sites. His view is influenced by the fact that he found no sites in his extensive interior transects but only on disturbed beach settings; yet, subsequent research indicates that fluctuating water levels have affected site integrity only partially, and that there remain 25% of known shoreline sites that still maintain undisturbed cultural deposits. Furthermore, the park has made a major effort to control erosion at threatened sites to ensure their long-term preservation; in fact, during the site visits Native American consultants had the opportunity to observe firsthand the results of erosion control.

Today, as many as 358 sites (130 historic and 228 prehistoric) are known at VOYA, and many of these are multicomponent. Five archaeological sites are listed on the National Register of Historic Places (NPS 2000a: I-141).

The Archaic Period. Very little is known about Paleoindian archeology and the subsequent Archaic period in the Rainy River and Lake region. The low energy potential of a rugged regional environment and the general low density of human populations in North America during the Pleistocene explain the paucity of data pertaining to this time period in northern Minnesota. A shift in lithic technology and projectile point forms is assumed to be associated with a shift from exploitation of now extinct big game animals to a more generalized hunting and gathering lifestyle (Lynott et al. 1986). The disappearance of the lanceolate Plano tradition and the appearance of these new material culture items is estimated to date about 6000 B.C. Archaic remains in the region have been cross-dated with radiocarbon assays from archeological sites in the northern plains and north-central United States (Lynott et al. 1986). In 1999 Richner reported a multicomponent site that has Archaic materials spanning many thousands of years (NPS 2000).

The low population density in the Rainy River and Lake region continued throughout the Archaic period. The limited number of well-documented Archaic sites in the area makes any conclusions about the sites' sizes, subsistence patterns, lifestyles, or industries only tentative. A similar paucity of Archaic sites is reported by Rajnovich (1980) in a survey of the Canadian side of Rainy Lake. Only two of the 37 sites recorded during the survey revealed evidence of Archaic occupation. In both cases, temporal placement is based upon the presence of a single dart point and an absence of ceramics. Nonetheless, Johnson (1969) argues that populations were semi-nomadic, and that groups might have moved on a seasonal basis to use locally available resources. More specifically, archaic sites have been identified by George (1973) in the vicinity of Tomahawk Lodge, by Gibbon (1977) in a reconnaissance of 108 sites spanning from the Archaic to the Late Woodland period, and by Gibbon and Budak (Gibbon 1978) along Lake Kabetogama and Lake Namakan.

The identification of Archaic period adaptive patterns near the Rainy Lake area is greatly hampered by paucity of data. Currently, it appears that two types of sites are present. The occupations at Houska Point in Ranier and the Late Archaic component at 21KC3 appear to represent small base settlements (Lynott et al. 1986). These sites are characterized by assemblages with a wide range of tool forms and the presence of hearths or other features. It is likely that these were occupied seasonally, but there are no data for determining what season is represented. In Voyageurs National Park, 21SL118 may also be a seasonal base camp, but

there are insufficient data to confirm this interpretation. The other sites in Rainy Lake appear to be small, short-term occupations. They exhibit low density of artifacts and only a limited range of tool forms. These sites probably represent foraging stations which were occupied briefly for exploitation of locally available resources by a small group of people, perhaps only a segment of the bands which occupied the larger base camps (Lynott et al. 1986).

The Woodland Period: Laurel and Blackduck phases. The beginning of the Woodland period in the border lakes region is marked by the appearance of burial mounds and ceramics. These two elements are the most visible manifestations of culture change, and current estimates suggest this change occurred between 300 and 100 BC (Stoltman 1974: 89; Wright 1981: 90). In this region the Woodland period is subdivided into two sequential phases in the border lakes area: Initial and Terminal. In their analysis of Voyageurs National Park, Lynott et al. (1986) adopted this sequential scheme because the conventional chronological sequence of Early, Middle and Late Woodland of the south do not correspond to local variations.

Between 100 BC and AD 700 a group of prehistoric people referred to as the Laurel Culture inhabited the central part of extreme northern Minnesota and adjacent areas of Ontario. This culture is composed of a number of temporally and spatially separate phases (Willey and Phillips 1958). During this period population density in the border lakes region increased. The Initial Woodland period is associated with the Laurel Culture in northern Minnesota and southwestern Ontario. Laurel sites have also been reported from northern Michigan (Janzen 1968) to Manitoba (Syms 1977). Chronological changes within the Laurel Culture are evidenced in data from recent investigations along the Rainy River. These studies demonstrate that temporal changes in the Laurel ceramic assemblage are apparent, and these changes present a temporal sequence that may be used to interpret Laurel chronology in the border lakes region.

Surveys by Gibbon (1977) and Lynott et al. (1986) within the boundaries of the park have failed to locate any Laurel burial mounds in the lacustrine regions. However, Laurel sites have been identified in 80 instances of Laurel occupation, some of which have ceramics and/or stone tools and faunal remains, on major shorelines across the park (George 1937; Lynott 1979a, 1979b, 1980, 1984, 1988, Lynott et al. 1984, 1986; Richner 1995b). Laurel burial mounds in the Rainy River region, all of which are associated with habitation sites, are located along riverbanks and lakeshore areas. Thompson (1980**)** has argued that the association between burial mounds and waterways is directly related to sturgeon fishing practices. Lynott et al. (1986) identified one mound that might be dated to the Laurel period but has never been systematically tested. More recently, Thomas and Mather (1996) provided a detailed analysis of sturgeon fishing as represented in the McKinstry Site.

The Laurel culture persisted in northern Minnesota until approximately AD 700 and was followed by a new complex called the Blackduck Culture (Wilford 1941). The Blackduck complex has been attributed to the Terminal Woodland phase and is characterized by different projectile point forms and variation in ceramic morphology and decoration. The major change in subsistence activity from the Laurel period consists of an intensive use of wild rice (*Zizania acquatica*) (Lynott et al. 1986). Bishop and Smith (1975) have argued for Manitoba Assiniboin descendance from the Blackduck Culture, whereas other authors believe the Blackduck people to be ancestral to northeastern Algonkians (although not specifically Ojibway) (Lugenbeal 1978; Syms 1977). Dawson (1974), on the other hand, concludes from ethnohistoric and archeological analysis that the area was populated by bands of proto-Ojibway people, while Ossenberg (1974) considers Blackduck people ancestral to both Dakota and Ojibway.

Syms (1977) proposes that the Blackduck people moved from the boreal forest to the plains. This transition corresponded to a shift in economic patterns as well, and would account for the relative paucity of

pure Blackduck sites in the Rainy River region. However, various excavations in the last decades have revealed Blackduck remains in the park area (e.g., George 1973; Gibbon 1977; Lynott 1979a, 1979b, 1980, Lynott et al. 1984, 1986, 1988; Richner 1995b; MWAC 1997). Currently there are 78 known Blackduck sites on the park (NPS 2000a: I-141).

The Protohistoric and Historic Periods. The introduction of European technology into the Western Great Lakes region produced considerable changes in the resident aboriginal groups. The protohistoric period refers to the time in which European goods are present, but the native material culture has not been replaced by comparable trade goods; at VOYA, this replacement did not occur until the 1900s. However, aboriginal populations were in direct contact with Europeans two-to-three hundred years earlier. Only few sites recorded at Voyageurs National Park have produced evidence of goods that can be classified as protohistoric. Most of these sites were occupied by later historic Ojibway groups and date to the 1700s.

The best documented protohistoric/historic site in the park is 21SL137, which has been interpreted as dating to the latter half of the eighteenth century. The site is small and provides the only data on technology and adaptation during this period. It presents a mixture of plain and textile-impressed ceramics, as well as trade goods comparable to those from the Long Sault site (Canada) dated A.D. 1750 ± 100 (Arthurs 1978). The trade goods are most closely associated with the plain ceramics, which do not appear to be Laurel. These plain ceramics seem to be similar to the protohistoric plainware reported by Richner (1984) from the P-Flat site at Apostle Islands National Lakeshore. These sherd materials represent a new type of ceramics in the border lakes region at this time, and they do not appear to be associated with earlier Terminal Woodland sites (Lynott et al. 1986). The occupation at 21SL137 suggests short-term or seasonal use by a small group of people. The presence of possible ricing jigs on the site is indicative of late summer and fall occupation. The faunal remains from the site are dominated by beaver, bear, white-tailed deer and muskrat with some fish. The absence of migratory water fowl may indicate fall-winter use, but Lynott et al. (1986**)** considers these inferences to be largely speculative.

One of the unsolved research problems in regional archaeology is how to identify the relationship between the Woodland Cultures and American Indian groups who occupied the area in historic times. Ethnohistoric sources document the presence of Ojibway people in the Rainy River region from the late seventeenth/early eighteenth century (Warren 1984). Hickerson (1967) correlates the arrival of Ojibway people in the mentioned area to the arrival of Pierre Gaultier de Varennes, Sieur de la Verendrye into the region: the first Ojibway group would have settled in an area west of Rainy Lake, at the junction between the Rainy and the Big Fork rivers—a portion of territory previously occupied by Cree and Monsoni (Henry 1901). Tanner (1986: map 9) illustrates Ojibway presence at the mouth of the Vermilion River on Crane Lake sometime between 1721 and 1760. And Dobbs (1968: 33) comments that, by the 1940s, the Ojibways were securely entrenched in Pembina, Lake of the Woods, and Rainy Lake.

Hickerson explains the Ojibway presence in the park area as a result of the expansion of the fur trade and the increasing Indian dependency on it. White (1984) and Pittaluga (1996), however, highlight that Ojibway selectively participated in the fur trade to enhance access to new resources by establishing a symbolic "middle-ground" of exchange. Trade and war appear to have been the most influential factors in the south- and west-ward trend in population movement. Yet, there remains the possibility that the Ojibway did not move into the area but developed in situ, thus making the timing of their arrival a moot issue. It is important to mention here, however, that the Ontario Ojibways from Siene River do have oral history that speaks of their southward movement and ensuing conflicts with the Dakota (Redsky 1972: 10).

Inventory and limited test excavations conducted in the park area uncovered extensive Ojibway occupation during this period—a total of 32 sites. Findings range from surface artifact scatters in and around a large depression at Kohler Bay Houseboat site, sites 1992-2 and 54-1 in Alder Creek, site 1992-4 in Kovtal West, to numerous features and artifact scatters at site 21SL36 in Nashata Point, to substantial structural remains at site 1992-7 in Virgin Bay, site 21SL53 in Cemetery Island and site 21SL183 in Wigwam Island (Richner 1992b). Chief Woodenfrog Island contains the most extensive evidence of recent historic Ojibway occupation of the Kabetogama Lake and Voyageurs National Park area (Richner 1995a).

Richner (1995b) reports that an inhabitant of the area had seen Native American graves on Namakan Island about 1935. These marked by wooden "spirit houses" where offerings of food and other materials were left for the deceased. During a survey of the area, He noted a small rock alignment that did not appear to be natural and that might be consistent with an historic Native American cemetery. Gibbon (1977) also identified two Ojibway village sites and five cemeteries in the Kettle Falls area during a park-wide transect survey, shovel testing, and beach reconnaissance. Another Ojibway site has been discovered at Sweetnose Island (21SL141) (Lynott 1988). In addition, Richner (1992) in 1989 relocated the sites of two Ojibway occupations plotted on Shepard's 1895 map, one at the mouth of the Moose River on Namakan Lake, and the other west of the outlet of Daley Bay on Kabetogama. At Rainy Lake City, on site 21SL52, Richner (1993) recorded several clusters of rock that might mark the location of Native American graves, while an historic Native American cemetery was located on Namakan Island on Namakan Lake.

There are also historic sites related to logging, mining, and homesteading.

Chief Wodenfrog Island: an Example of Historical Archeology

There are numerous archeological site in reference to the historic Ojibway occupation of the Voyageurs National Park area. The complex at Chief Woodenfrog Island on the Kabetogama Lake is perhaps the best known and one of the most important data sources; we have chosen to profile this site in the report as an example because one of the consultants who came to the site visits actually visited the island when she was a girl and the site was still occupied.

The island was a settlement for portions of a band, which continued to occupy their traditional homeland long after they had been officially assigned to live at the Bois Forte reservation at Nett Lake under the Treaty of 1866. The site is one of the few historical Native American sites in the area for which photographic coverage exists. A 1913 overview shows the frameworks of various wigwam and teepee-shaped structures and at least one log cabin. The site appears to have been in active use at that time. Photos from 1947 depict three log cabins in various stages of decay after the site had been vacated. In a 1995 survey, Richner, Budak and Graves (Richner 1995b), successfully matched and oriented the photographs with existing landmarks (rock domes, individual boulders, other topographic features) and relocated the remains of the three log cabins shown on the 1947 photos. Artifact scatters associated with the structures that contain a wide variety of discarded utilitarian objects were also found. In addition, Richner (1995b) argues for the existence of graves near the former structures. Chief Woodenfrog Island also presents a series of about two dozens pits of undetermined function. These might represent ricing "jigs" located near remnants of a possible root cellar and a second large pit of undetermined function (Richner 1995b).

Aboriginal Settlements at Voyageurs National Park and Vicinity

A broad picture of the indigenous historic occupation of the Rainy River region may be obtained by integrating archeological evidence with ethnohistoric records and oral history; a combination of these diverse sources of historical information indicate the intensity of Ojibway uses of the park's resources and the extent of aboriginal settlement. This section presents a summary of records left behind by early travelers,

missionaries, fur traders and explorers that reveal important details about Native American settlement patterns.

The most extensive study of the history of the Rainy River region was conducted by Grace Lee Nute in the 1940s and 1950s. Nute dates the earliest arrivals of Euroamericans in the area around 1688, when Jacques de Noyon spent the winter along the river banks (Nute 1941). In 1731 Pierre Gautier Sieur de la Verendrye began exploring the area west of Grand Portage in search for a northwest passage. This search resulted in the establishment of various trading posts in the Rainy River region, of which Fort St. Pierre at the outlet of the Rainy Lake and Fort St. Charles at the Lake of the Woods represented the more strategic positions (Nute 1950). In addition, Nute (1950) argues that evidence exists attesting to the construction of a temporary trading post on or near Crane Lake (a substitute for Fort St. Pierre) in 1736 by Rene Bourassa. This period saw the onset of the fur trade, a network that linked the northwestern region to Grand Portage and Montreal. The French and Indian War, however, brought an end to the French control of the area and the monopoly passed onto the hands of the Hudson Bay Company.

Two other major companies were active in the fur trade business until the mid-nineteenth century: the Northwest Company and the American Fur Company. In 1818, however, as a consequence of the War of 1812, a convention between Great Britain and the United States marked the boundary between the two powers at the forty-ninth parallel from the Lake of the Woods westward (Lynott et al. 1986). The Hudson Bay Company established a post at present-day Fort Frances, while in 1823 the American Fur competitors set up another trading point at International Falls (Wheeler et al. 1975).

The majority of occupants of the Rainy River region were neither the *Voyageurs* nor the fur traders. Various Native American groups inhabited the area. These were descendants of late prehistoric Algonkian-speaking groups (Lugenbeal 1978), the Ojibway (Wright 1963), the Cree (Evans 1961), and the Dakotan-speaking Assiniboin (Wilford 1941; MacNeish 1952; Bishop and Smith 1975). Ossenberg (1974) went further to suggest a direct relationship of descendance between the Blackduck people and the Ojibway and Dakota historical groups, although the high volume of physical displacement as consequence of the heightened warfare and trading patterns of the seventeenth century makes such historical links difficult to document (Brose 1971).

While competing arguments about the origins and ethnic affiliation of the aboriginal population of the Rainy River region have not yet been solved, the most abundant historic records of Ojibway presence in the region appear in association with the onset of the fur trade. As mentioned above, Hickerson (1967) correlates the arrival of Ojibway groups with the first voyage of la Verendrye into this region. He further offers a model of social development that occurred as a result of the Ojibway participation in the fur trade (Hickerson 1971). His reconstruction of three major stages of socio-political development in Ojibway society reflects broad changes after contact. The basic pre-contact social unit was composed of autonomous patrilineal descent groups, where the kinship system organized the individual's position within and without the group. The second stage was characterized by the "political village" structure, whose origins date to their entrance into a trade network through Huron mediation. And the third and final stage dates between 1720 and 1850, when they underwent a process of fragmentation, caused primarily by the individualization of hunting patterns. Fragmentation of the political village into smaller composite hunting-trapping bands coincided with their involvement in the French and English trade networks (Hickerson 1971; Pittaluga 1996)

According to Hickerson (1971) and Ritzenthaler (1978), the eighteenth century saw a major geographical expansion of the Ojibway people. The bands that are commonly classified as Southwestern Ojibway

moved into Wisconsin's northern rim and the northern half of Minnesota extending up to the Lake of the Woods. In describing those movements into the Rainy Lake region, Warren (1984: 84) gives the following account:

> A Large band early occupied and formed a village at Rainy Lake. Here they first came in contact with Assineboins (a tribe of seceding Dakotas), and from this point, after entering into a firm and lasting peace with the Assineboins and Knis-te-nos, they first joined their brethren of the Southern division in their wars against the fierce Dakotas. This band have to this day retained the cognomen of Ko-je-je-win-in-e-wug, from the numerous straits, bends, and turnings of the lakes and rivers which they occupy.
>
> A large body of this Northern division residing immediately on the north shores of the Great Lake, at Grand Portage, and Thunder Bay, and claiming the Totem of the Ke-nouzhay or Pike, were formerly denominated O-mush-kas-ug. Tradition says that at one time their fellow-Ojibways made war on them. This war was brought about by persons belonging to the Pike family. […] A considerable body of the Northern Ojibways are denominated by their fellow-tribesmen Sug-wau-dug-ah-win-in-e-wug (men of the thick firwoods), derived from the interminable forests of balsam, spruce, pine, and tamarac trees which cover their hunting-grounds. Their early French discoverers named them "Bois Forts," or Hardwoods.

In recent research, archeologist Richner (1995a; NPS 2000) has been able to identify various families that belonged to bands occupying the area now encompassed by Voyageurs National Park into the early twentieth century. The bands were organized under the name of well-known local men, among which are the following: Ne-zho-dain (who lived on Kabetogama), Sha-sha-we-gish-I-goke (a resident of Black Bay on Rainy Lake), and Ka-we-bish-ki-wa (Whiteman) (who lived at Moose Bay on Namakan Lake; at his death replaced by son Kay Zhuc ke aune quaib or Peter Whiteman). It also appears that select members of the Wa-gi-ma-wub band based at the northeast edge of Vermilion Lake, and the Gi-we-gishig-web band of Kettle Falls, and other individuals form additional bands probably lived near the park area. All the available data clearly indicate that park and its vicinity continued to be a very important location for both permanent occupation and seasonal use throughout the historic period and long after the Bois Forte were assigned to the reservation at Nett Lake in 1866.

Aboriginal Settlements during the French Period

In order to take advantage of the various resources offered by the natural environment, the Ojibway developed a pattern of regular movements based on seasonal variability and location of resources. This logistic strategy required high mobility and a flexible social organization. Larger groups would coalesce around summer fishing and hunting villages, while in winter people would split up into small family groups occupying camps for short periods of time, usually inland and away from the lakes (Densmore 1979).

Subsistence practices of the Ojibway included the hunting of moose, woodland caribou, deer, beaver, and other animals. Fishing activities and the gathering of wild rice and berries, however, played fundamental roles in the diversified economy of the Ojibway people. In addition, Ojibway people planted beans, pumpkins, and squash in small gardens. They also collected maple sugar. Hickerson (1967) argues that the increased importance of fishing and wild rice gathering was due to the gradual depletion of the large mammal population after the height of the fur trade.

According to Hickerson (1962) the Southwestern Ojibway (who Warren refers to as Northern Ojibway) showed important changes towards a more elaborate sociopolitical organization during the French

period. One impetus to greater (but not pronounced) organization was their involvement in war, first with the Iroquois, then with the Fox, and later with the Dakota farther west. Hostilities with the Dakota lasted intermittently for over one hundred years, reaching a peak in the mid-nineteenth century. Skirmishes were caused primarily by competition over the use of hunting and trapping territory and wild-rice beds. (Ritzenthaler 1978)

Historically, a considerable presence of Ojibway people in Minnesota began around the mid-seventeenth century, when various conflicts saw them opposed to the Dakota, the Cree, and other groups west of Lake Superior. A peaceful settlement between Dakota and Ojibway was achieved in 1679, but this lasted only until 1736 (Hickerson 1967). La Salle wrote in 1682 that Ojibway "go and trade in the country of the Nadouessioux, distant about sixty leagues to the west of Lake Superior" (Redsky 1972: 9). For a while after 1716, however, Cree groups and their Assiniboin allies occupied a vast country including the Rainy River valley, to the extent that contemporary accounts refer to the Rainy Lake as "Lake of the Christianaux" (the Cree), although an earlier Monsoni name was used to denote the lake, *Tecamamiouen*, meaning "the rain-like mist that rose from the falls" (Margry 1888, Nute 1950: 6). Hostilities between the Ojibway and the Dakota resumed in 1736 when the former attacked the latter at the trading post of Lake Pepin to avenge the assault on La Verendrye's men on the Rainy River near Lake of the Woods (Mittelholtz 1957: 9). Redsky (1972: 10) reports of oral narratives among the Seine River Ojibway of Ontario that tell of battles with the Sioux at Bear's Pass or Ota-ko-wa-kwan, which is now crossed by the first bridge going west over Rainy Lake.

In 1740 Arthur Dobbs traveled along the Rainy River and gave the following description of it:

> The River [Rainy River] they embark'd upon was about three Furlongs broad, but was not deep, and had no Waterfalls; the Course was South-west. The Indians who are on the West Side of that River are called Monsoni or Mosonique, or Gens de Orignal. The Lake Du Pluis is 100 Leagues in Length, and is so called from a perpendicular Water-fall, by which the Water falls into a a [sic] River South-west of it, which raises a Mist-like Rain. […] He passed down the Lake Du Pluis in the latter End of April, and Beginning of May, and staid 10 Days at the Fall with the Monsoni, where they fish with Nets at the Bottom of the Fall. They have two great Villages, one on the North Side, and the other on the South Side of the Fall (Dobbs 1967: 33).

However, Erwin Mittelholtz (1957: 10) reports that Ojibway bands were occupying the Rainy Lake region as early as 1730. Their westward expansion constantly collided with established groups already inhabiting the region, especially the Dakota. According to Mittelholtz, around the year 1748 the Dakota sent out three war parties from Leech Lake to finally expel the Ojibway. One of the three parties sent against the Rainy Lake group was identified as Cree, who had often come to support the Ojibway. The Dakota war parties met with defeat at Rainy Lake, Leech Lake, and Pembina. Thus from the 1750s onward, Ojibway people began occupying the areas left by Dakotas (Mittelholtz 1957).

The Rainy Lake Region under England

By the later decades of the eighteenth century, the Ojibway were strengthening their position in northern Minnesota. Alexander Henry in 1775 encountered several of their villages along the present international border as far west as Lake of the Woods (Henry 1901). This imaginary line corresponded to the most important route taken by the Ojibway from Grand Portage to the northern plains, and consisted of a series of waterways and portages which allowed the crossing of an otherwise densely forested area interspersed with bogs and small lakes. At the Junction of the Rainy River with its southern affluent, the Little

Fork, Henry recorded a village with approximately 50 lodges (perhaps 500 people), while another village east of Rainy Lake had been virtually destroyed by the Dakota (Henry 1901). Henry then encountered a band belonging to the Pillagers (or Pilleur) with whom he refused to trade. According to Hickerson (1970: 70-71), this encounter suggests that the Pillagers band had not yet established permanent settlements at Leech Lake (where they eventually settled), but that they were still active in the Lake Superior - Lake Winnipeg traverse, with Rainy Lake and Lake of the Woods as their focal communities.

From the 1780s onward, numerous traders began operating at Ojibway villages in northern Minnesota, although Alexander Henry indicated that they would also go to various posts including Leech Lake (Coues 1897). Until then the people seem to have been settled in communities less remote from the main trade routes on Lake Superior and Rainy River, while they were advancing west of Lake Superior and south of Rainy River for more favorable seasonal hunting grounds. These Ojibway were primarily Chequamegon Bay people extending their hunting range and the Pillagers extending southward. Only after they gained a real foothold in the area were traders willing to establish permanent posts (Hickerson 1970: 71).

Traveling through the area in 1767, Jonathan Carver reported that Cree and Assinniboine "inhabit the country between Chipeways territories on Lake LaPluie [Rainy L.] and Lake Winipeek," confirming Ojibway stable occupancy of the region by then (Parker 1976: 130). Stable occupancy is also known from reports of a severe smallpox epidemic at Leech, Sandy and other lakes. Evidence of a large epidemic that took a great toll on the people of Fond du Lac, Sandy Lake, Rainy Lake and "surrounding places" in 1783 is also found in Alexander Mackenzie's travel narratives (Garvin 1927: 59). In 1800, Alexander Henry the younger found a reduced population of Ojibway at Basswood Lake as a result of disease, warfare, and resource shortages. Henry purchased a canoe from them for the equivalent of sixty beaver skins to be cached at Rainy Lake. In another instance, Warren reported that about 1820 a group composed of Cree, Assinniboine, and Ojibway attacked a Gros-Ventres village that met them with unusually feeble resistance. By taking back the scalp of a very large individual, the "great red skin" (measles) quickly depleted the war party, and on their return to the village on the Dead River only four warriors had survived. In trying to run away from the fatal epidemic, the Ojibway of this village spread the contagion to Rainy Lake, "which village it almost depopulated" (Warren 1984: 262).

Although the origin of these Ojibway people cannot be ascertained, Knuth (1974: 88-89) argues that they formed a fragment of the people who habitually resided at Rainy Lake northeast of Royce Area 332 and/or Vermilion Lake within that area. This argument is plausible since at the turn of the nineteenth century Rainy Lake became one of the major trading posts along the boundary route and thus might have attracted larger numbers of Ojibway who operated from there. Numerous accounts attest to the region's importance. For example, John MacDonnel was traveling through the Rainy Lake region in 1793 when he encountered Premier, also called Nectam, a noted local chief who traded also with Hugh Faries (Gates 1933:103). In 1805 one village that regularly traded with the Rainy River post run by Faries was located at the Rapid River, or Riviere aux Rapides, which flows into the Rainy River from the south about halfway between the Long Sault and Rainy Lake (Gates 1933: 235). He recorded also another stable Ojibway village on Lake Meccane (Namakan Lake) to whom some of his men went "to endevour [sic] to draw in my debts &c. with the indians [sic] of that place" (Gates 1933: 239).

In 1800 Alexander Henry the younger found small groups of Ojibway manufacturing canoes on two locations on the international boundaries besides Basswood Lake: Saganaga Lake and Sand Point Lake, which is part of Voyageurs National Park today. Knuth (1974: 92) considers both locations to be only temporary encampments of Ojibway residing stably elsewhere, particularly at Vermilion Lake (Coues 1897(1): 13).

Early American Period

While the War of Independence succeeded in establishing a border between the United States and the Canadian Commonwealth, contemporary aboriginal groups residing on the borderlands continued to use the land on both sides as they had before, and kept their trading partnerships with England. People from Vermilion Lake, for example, continued to attend the British trading post on Rainy Lake until the 1830s despite efforts of the American Fur Trade Co. to establish a sub-post at Basswood Lake. Nonetheless in 1832, the American fur trader William Aitkin reported a substantial amount of pelts from the Rainy Lake post ($ 4,000) – one of the highest of all Minnesota Ojibway posts (Knuth 1974: 109) This is probably due to the scarcity of game in neighboring locations and to the abundance of marten in the vicinity of Rainy Lake.

One of the consequences of the American expansion into the Western Great Lakes is the blurring of ethnic differentiation among bands. For the Federal government it was politically and administratively more efficient to group bands of like origin and language in single "tribes." Thus, since the early nineteenth century the peoples who either inhabited or used the Rainy Lake area came to be recognized as the Bois Forte. However, the occupancy of the Rainy Lake region cannot be associated solely with Bois Forte Ojibway, since there were many people who were present in the region at times but did not actually occupy it. The early nineteenth century Rainy Lake trader Hugh Faries in his diary repeatedly recounts the presence of Ojibway groups from Lake of the Woods, Lac La Croix, Black River, Whitefish Lake, Eagle Lake, Big Fork River, and Little Fork River (the latter two being important sugar -making locations) (Gates 1933: 236; see also Van Kirk 1983: 57), and the Seine River region (Figure 10.2), who were regularly present in the Rainy Lake area for a variety of purposes including collecting rice, collecting maple sugar, fishing whitefish at Kettle Falls (Chaudiere at Namakan), participating in ceremonies, and trading at his post (Gates 1933). Of particular importance was a place called "Peche d'hiver" which in French means "winter fishing grounds" and that was regularly occupied by Ojibway people often in competition with traders for scarce fish resources in winter (Gates 1933: 233-234).

Even more explicit is an account of the Seventh Open Council at Red Lake during the 1889 attempts of the Rice Commission to remove most Minnesota Ojibway to the White Earth reservation. The speech is a testimony that these people affiliated with the Red Lake group lived at Rainy Lake. When selecting the potential territory for his band's removal, Chief I-een-ge-gwon-abe, who was in his fifties, in fact suggested the Thief River as their final location. He further inquired about the possibility of cutting a road through from Rainy Lake to bring his people down within the reservation (Mittelhotz 1957: 122; see also Rosenblatt 1985: 23).

The most important sources containing information about village size and population in Northern Minnesota differ according to the time period under consideration. Traders' and travelers' reports constitute the major source of information as far as the period until roughly 1800 is concerned. The diaries of trader Hugh Faries evidence that various groups of indigenous people were coming to his post from different locations. Of these Indians many were Ojibway or affiliated with Ojibway bands and villages. Despite the fact that it is difficult to determine the exact geographical location or provenience for many of the Indians with whom he traded, Faries reported that some of them came form the Whitefish Lake and from the Seine River. The nineteenth century is better documented by reports of Indian agents and official travelers. The following list comprises most of the relevant sources in which demographic data is contained: journals of Zebulon Montgomery Pike for 1805-1806, J.D. Doty for 1820, J. Allen for 1832, J. N. Nicollet for 1836 [1970], H.R. Schoolcraft from 1824, 1831-32 [Mason 1958], and 1847, D. P. Bushnell for 1839, A. Ramsey

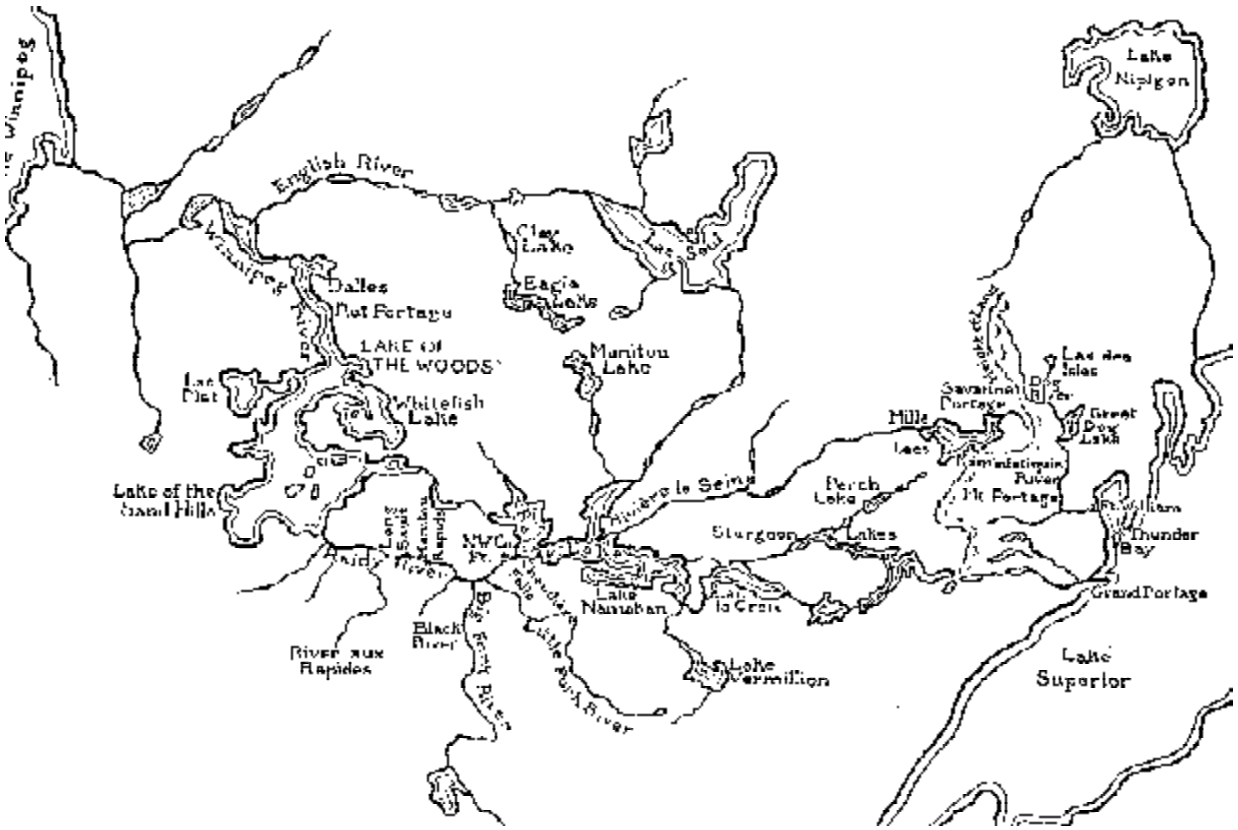

Figure 10.2 "The Rainy Lake Post and the Surrounding Area" from Gates (1933: 70)

for 1850, traders H. Monk for 1807, and H.M. Rice for 1848, missionary W.T. Boutwell for 1832, and adventurer Giacomo Costantino Beltrami for 1828 (referenced in Hickerson 1970: 37-51).

Treaties and Reservations

The information presented in this section has been summarized from the original ethnohistoric work conducted by Richner for the NPS-MWAC and thus should be consulted for further information and sources used.

For the Minnesota Ojibways, the transition to modernity was marked by a series of epidemic diseases took a great toll on the native populations of northern Minnesota in the first half of the nineteenth century. Despite diseases and a number of treaties from the mid-nineteenth century eroding their territorial basis, the Ojibway continued to occupy and use the areas currently under NPS management until the first half of the twentieth century. The annual reports sent by the Indian Agents to the Commissioner of Indian Affairs in Washington repeatedly report that Nett Lake Ojibway groups were not settling down on reservations and continued to utilize larger portions of territory to sustain themselves (Commissioner of Indian Affairs 1878). The region, in fact, provided important food sources incorporated into major food production and consumption complexes.

As mentioned above, more Ojibway peoples than only the Bois Forte band play fundamental roles in the history of what is today Voyageurs National Park. However, due to the establishment of the international border with Canada after the war of 1812, negotiations with the US government concerning land cessions were conducted primarily with leaders of what became known as the Bois Forte band of Ojibway. From the mid-nineteenth century to the present, in fact, Bois Forte history is closely intertwined with the treaty-making procedure embraced by the United States as well as with a series of environmental changes that gradually eroded Ojibway sovereignty over their territories. The "Treaty With The Chippewa" of 1854, ratified on January 10, 1855, represented a major land concession for the Ojibway people residing on Lake Superior and on the Mississippi (see Chapter Nine). Although the ceded lands included much of the Bois Forte's eastern territory, denominated Royce Area 332, the western treaty line excluded most of the Rainy Lake watershed to the north and to the west (Royce area 482). However, large portions of the ceded Bois Forte territory continued to be occupied by them and did not immediately fall under settlement pressure even after the ratification of the treaty in 1855 (Richner 1993; see Kugel 1998).

Within ten years of the treaty ratification, however, the presence of gold-bearing quartz at Lake Vermilion had profound impacts on the Bois Forte Ojibway. The news drew numerous Civil War veterans into the area, seeking work opportunities in the gold rush, and by 1866 over 300 people had arrived on the lake shores constructing a sawmill, fourteen houses, mines and three stamp mills (Blegen 1963, cited in Richner 1993). The gold rush ignited a chain reaction that affected the Bois Forte in terms of continual pressures to cede further land. These pressures materialized with the "Treaty With The Chippewa - Bois Forte Band" of 1866, which stated that the Bois Forte were to relinquish all claims to their lands as defined in the treaty of 1854. These included all lands east and west of the boundary line following the Vermilion River and all other lands within the United States territory. The 1866 treaty called for the establishment of a reservation at Nett Lake, where the Bois Forte would have had to abandon all traditional activities and begin a new life vested in farming and other "civilized" pursuits (Richner 1993).

The intent behind the 1866 treaty, however, did not match the government expectations. The Bois Forte continued to utilize the traditional territories for a mixed subsistence strategy that included hunting, gathering and farming at Nett Lake. In 1868, the Bois Forte band counted 1,063 individuals (Winchell 1911) but, contrary to the treaty's provisions that require people to stay within the reservation, in 1870 the Nett Lake reservation was practically deserted, despite the presence of wooden homes erected for the chiefs, a blacksmith shop and other buildings (Winchell 1911). The large-scale farming advocated by Indian Agents and Reformers was impractical, given the constraints of the local climate, the poor and rocky soil, and the vast swampy area adjacent to the reservation. Thus Bois Forte continued a way of living which was more successful in providing food, going fishing, hunting and gathering as they had done before settling at Nett Lake

The opening of the Canadian Dawson trail through Namakan and Rainy Lakes in 1870 marked the beginning of an increasing flux of settlers through the Bois Forte's northern territory. Despite the arrival of steamboats on Namakan and the Rainy Lake drainage, settler pressure became an issue only in the 1890s with the discovery of gold along the Rainy Lake. The gold fever soon became an insurmountable obstacle for many Bois Forte to carry on traditional activities (Richner 1993). Of even greater importance was the construction of the first iron range sawmill in Tower in 1884, which signaled the beginning of the logging era. Forest cutting was at first undertaken by Canadian companies illegally appropriating the wood. Later Minnesota companies selectively began to cut better pine stands on Kabetogama and Namakan Lakes and elsewhere. In the mean time, various Bois Forte families used the Nelson Allotment Act of 1889 to claim ownership of portions of land in the area on which they continued to live according to traditional patterns.

A second gold rush wave hit the Bois Forte in 1893. The precious mineral was discovered near the Black Bay on the Rainy Lake, and subsequent hordes of miners and settlers followed its finding. By 1894 over 500 people lived in the new town of Rainy Lake City, most probably displacing the Bois Forte settlement on the Black Bay due to heightened competition for resources, land, and game. Richner's analysis of the annuity rolls, census records, and oral histories, shows that at least three Bois Forte groups amounting to approximately 180 individuals were living within the current boundaries of Voyageurs National Park in 1902. Richner (1993: 441) attests that in a general statement accompanying the 1910 census, the enumerator provided a useful comment regarding those Bois Forte people living off the reservation boundaries:

> These Indians belong to the Bois Forte Reservation, and have allotments there. It is possible that the enumerator for Nett Lake District may also enumerate them as they call Nett Lake their home, and some of them go there occasionally. The main occupation of these Indians is fishing, hunting and trapping. They live in no one place for a very great time, but keep moving form one place to another in search of game and fish and fur bearing animals.

Richner (1992a: 108-109) reports that two unpublished maps from 1895 cast additional light on the off-reservation Bois Forte occupation of the area. The first map entitled "Map of the Country inhabited by Vermillion [sic] Lake Indians" was copied from an 1895 blueprint, and it depicts the area from Vermilion Lake to the Black Bay of Rainy Lake. Numerous small circles marked as "Indians" are shown outside the Nett Lake reservation. At least six occur near the mouth of the Vermilion River near Crane Lake, four on Johnson Lake, one at Moose River on Namakan Lake, some near Daley Bay on Kabetogama, and two near Gold Portage. In addition, a trail from Sucker Point to Gold Portage is also shown on the map. Archeological investigation along this trail evidenced physical vestiges of the occupations represented by these plottings. The other map is entitled "E.S. Shepard's Map" and was privately printed by the Hannaford improvement Company of Duluth. It covers a larger area to the west and it shows a road from the dam at Vermilion Lake to Crane Lake. Indian settlements are shown at various locations outside the current boundaries of the Park, but also inside it on the northern portion of Crane Lake, the mouth of the Sturgeon (Moose) River, south of Gold Portage, and various locations on the Black Bay.

In 1910 there were 46 separate homes listed along with about 140 individuals in areas within or immediately adjacent to the present boundaries of Voyageurs National Park (Richner 1993). This according to Richner represents a significant portion of the entire Bois Forte population that had dropped to 644 individuals in 1911. The completion of the dams at International Falls in 1909 and at Kettle Falls in 1914 greatly affected the possibility of the Bois Forte people continuing their occupation of Rainy and lower lakes. Large portions of the wild rice beds, in fact, were flooded, and the higher and wildly fluctuating lake levels of the first decades of water management proved devastating to rice beds with limited water depth tolerances. The higher water levels were built in order to facilitate the floating of logs for transportation. Consequently, within less than two decades, the Voyageurs National Park area was intensively logged (NPS 2000a: I-142). The aggregate effect of the early twentieth century environmental changes proved more detrimental to the Bois Forte's possibility to continue a traditional lifestyle than formal land cessions. In 1910, Ernest Oberholzer on various trips on Rainy Lake and the surrounding region, encountered Ojibway people on a regular basis who "lived on moose and everything else" (Oberholzer 1989, vol. 12). This lifestyle would soon change.

The impact of other forms of development such as commercial fishing and resort activities added momentum to the difficulties encountered by the Bois Forte in maintaining a stable basis within the Voyageurs National Park area. Some Bois Forte Ojibway people managed to retain some of the land in the area through

the Nelson Act of 1889 that forced the Bois Forte to give up group ownership in the reservation and take up private ownership of up to 160 acres per family head or 80 acres per individual, as allotments on or off the reservation (NPS 2000). According to census data, by the 1940s only few families were still residing on the Rainy, Kabetogama, and Namakan lakes and most families had moved their residence to the Nett Lake Reservation, local towns or regional cities (Richner 1993). Census data of the first half of the twentieth century by county of residence show the following Ojibway population densities (GIC 1952: 34):

Table 10.1 Ojibway Population by County (1920-1950)

County	1920	1930	1940	1950
Koochiching	99	154	175	147
St. Louis	459	595	608	698

These data, however, are only relative to stable residence and do not consider Ojibway utilization of specific features or sites within Voyageurs National Park area, nor do they include information concerning Canadian groups who are related through kinship ties to people who historically resided or utilized the park area. Taking into consideration these factors would considerably increase the number of Ojibway who were active within the park boundaries in the first half of the twentieth century.

Changes in Subsistence and Resources. Until the early 1900s, subsistence patterns followed a seasonal rationale. Spring brought fish runs up the creeks and rivers, and hosted the crucial maple sugar season. In the summer, various types of berries were collected, supplementing fishing and hunting activities. Small gardens were also planted. In autumn they gathered wild rice, while fish and berries were dried and stored for the winter. Bois Forte Ojibway continued to live according to these cycles well into the twentieth century. This is documented by oral histories and ethnohistorical documentation provided both by the Ernest Oberholzer's collection and by the writings of Albert B. Reagan, who served as Superintendent and Special Dispersing Agent of the Bois Forte's Nett Lake Reservation from 1909 to 1914 (Richner 1993).

Before the construction of dams at International Falls and Kettle Falls, much of the shallow bays and backwaters of the Rainy Lake chain, including the Ash River, the Moose Bay, and the Black Bay was very rich in wild rice, a fundamental staple food for the Ojibway not only for its nutritional value but also for its cultural significance. In Voyageurs National Park wild rice has been identified from phytoliths (microscopic deposits of silica formed in plant cells) from archeological samples in prehistoric and historic contexts (Lynott, Richner and Thompson 1986). In addition, ricing jigs have been found in various locales in the park. Oral history accounts confirm the focal importance attached to this plant by the Ojibway (Adams 1979). In 1940 the Koochiching Sportsmen's Association began a wild rice restoration program; the plants were brought from Leech Lake and transplanted in Black and Cranberry Bays on Rainy Lake and in Lost and Daley Bays on Lake Kabetogama. Additional planting occurred in the 1950s and 1960s. The park started a wild rice restoration feasibility project in 1988, but this was not successful due to continuing water level fluctuations. Rice is currently found in small quantities in Black Bay (outside the park), Cranberry Bay on Rainy Lake and in Tom Cod Bay on Kabetogama. Rice harvesting is permitted for non-commercial use when sufficient quantities of rice are available. Recent changes in water level regime should provide more optimal conditions for the survival of wild rice (NPS 2000).

Other floral species were of considerable importance to them as well (Densmore 1974; Hickerson 1967; Reagan 1928; see Chapter Five). Numerous berries were abundant in the region. As far as the most widely collected blueberries are concerned, Reagan (1928**)** stated that the Bois Forte "go far and near and

gather them to sell at so much a box." At the turn of the century, the Ash River represented an important harvest area for blueberries. Extensive traveling to gather various types of berries continued well into the twentieth century (cited in Richner 1993d).

Maple sugar represented yet another major food source for the Ojibway. Families traveled to the maple groves as part of a seasonal round that began when "the first crow appeared" (Reagan 1928) approximately the middle of March. Peter Adams of Nett Lake recalled maple sugaring with his family in the late 1910s, while other contemporary oral histories indicate that Cutover Island on Kabetogama Lake constituted a favorite "sugar bush" for the Bois Forte occupying Moose Bay on Namakan Lake (cited in Richner 1993d: 439) (Figure 10.3).

In addition to the construction of dams in the earlier part of the twentieth century, intensive logging of the forests, mining, and homesteading impinged on the resources on which Ojibway people were subsisting, making the traditional lifestyle unfit for the new ecological and economic situation. The following sections capture contemporary knowledge and perceptions about traditional resources, change in resource conditions, and change in lifeways as expressed by Native American consultants who came to the site visits.

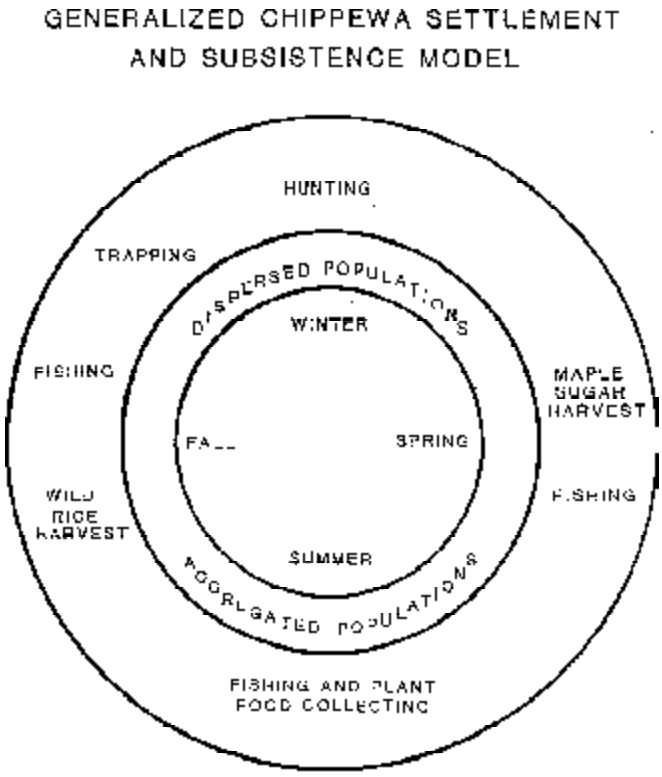

Figure 10.3 Schematic representation of Annual Cycle (from Lynott et al. 1986: 271)

Contemporary Resource Significance in Voyageurs National Park

American Indian consultants from Bois Forte-Nett Lake Bands (2), Red Lake Band (2), and three Canadian First Nations, Kouchiching (1), Lac La Croix (3), and Seine River (3), Ontario were interviewed over the course of four days at various locations in the park. The following text summarizes their responses to site-specific questions.

Chief Woodenfrog Island on Kabetogama Lake

Kabetogama Lake is situated to the south of Rainy Lake and connected to the Black Bay through Gold Portage. The lake is rich in fish, especially walleye, northern pike, smallmouth bass, and yellow perch (DuFresne 1986). The ecology of the lake is a complex one, encompassing bogs, marshy lands, extensive rock outcrops, as well as stands of deciduous forests on the islands and the shores (Figure 10.4). The island is also part of a group of islands also called "Chief Wooden Frog".

Chief Woodenfrog Island is located in front of Gold Portage, on the extreme west end of Kabetogama Lake. Nine consultants were interviewed on the island, on a circular clearing next to the main boat landing. A group of six elders were interviewed together due to the necessity to have Ojibway translators. Because responses were long, intense, and discussed at length in the Ojibway language and then translated, the interviews took a long time and taxed the elders. Therefore, most of the interviews focused at length on the first three topics of the interview form. These constraints explain the lack of information regarding the archeological resources and the geological features.

Ethnic Group Use History. Ojibway people from Nett Lake, Seine River, and Lac La Croix shared their knowledge of the place with the ethnographers (Figure 10.5). Despite the presence of the international border, the Ojibway groups from both sides are closely interrelated through family ties, and common land use history; in fact, at least one Canadian consultant has double tribal affiliation at Nett Lake and Lac La Croix. Consultants reported that the area surrounding Chief Woodenfrog Island was densely populated by Ojibway Indians in the earlier days of their memories. The island belonged to a large band that occupied the entire area all year-round for different purposes. According to the elders, the island constituted in historic times a crucial location for ceremonial purposes of the *Midewiwin* society.

Seasonality. The consultants felt that Chief Woodenfrog Island is part of a larger regional landscape (or "cultural landscape") and of local ecoscapes. This island was used in a complex annual complex cycle that included ritual and mundane activities. The patterns of resource use stretched throughout the year, with seasonal specification for different activities: hunting in the spring, ceremonies in the spring, fishing and berry picking in the summer and trapping in the winter. An Ojibway elder also told of a legend where it is narrated that this area constituted good fishing grounds. Fishing activities were integrated with wild rice collection, maple sugar production and hunting activities. The abundance of food sources over the course of the entire year enabled the settlement of a large band of Ojibway people. Moreover, the band would move and thereby regularly use a larger territory.

Regional Connections. Chief Woodenfrog Island constitutes a unique place within the larger cultural, geomorphic, and ecological landscapes of Kabetogama Lake. The island has been recognized for its historic use, which is documented until roughly the 1930s (Richner 1995b) and broad regional ceremonial use by *Midewiwin* religious society, which was mentioned by the consultants. Elder consultants from Canada remember having visited and camped on the island as children and teenagers; they also remember fishing, trapping, and traveling through Kabetogama Lake. Consultants who are also *Mide* priests, pipe carriers, and/or drum keepers, indicated that the participation in the ceremonial cycle to which the island belongs

vFigure 10.4 Chief Woodenfrog Island

Figure 10.5 Ojibway Consultants discuss the history and resources of the island

extended to members of Ojibway communities from as far as the Sault Ste. Marie, Madeline Island, Vermilion Lake, Nett Lake, and other places. The strategic position of the island made it a convenient place for a variety of activities, from short-term camping while traveling along the Kabetogama Lake canoe trail (see Chapter Eleven) to permanent habitation. One consultant asserted that the rice paddies on the north part of Chief Woodenfrog Island are connected, by use and travel through waterways, to the Crane Lake and the Vermilion River.

Ojibway consultants feel that their presence and care for this location is fundamental to retain the ecological, physical, and spiritual balance of the place. One person commented that the island is connected to other places because the same plants and rocks are found in other places. According to another consultant, the island is also connected to other places through animal migrations and movements from one location to another (see Chapter Eleven for regional information).

Resource Use Patterns. A summary of the Ojibway consultants' opinions about natural and cultural resources present on Chief Woodenfrog Island are presented here organized by resource type.

Water

Ojibway consultants interviewed at Chief Woodenfrog Island highlighted the physical importance of water as a vector for regional movements as well as its importance in the ceremonial and life cycles of the Ojibway people. Two consultants, in particular, explained the spiritual nature of the water at this location. The following statements elucidate their views and stress the significance of water as connector between realms:

> *There are spirits that live in the water and everything is interrelated and connected. If we don't have water we wouldn't have the trees or anything else.*

> *There are water beings all around here, and the strongest important water beings were part of ceremonies, together with water animals like the turtle or the loon.*

Plants

A variety of plants found on this island has been identified by the Ojibway consultants interviewed and a summary of their uses is presented below. Plants used in medicine vary according to the place in which the plants grow and their use is a function of a complex system of significance that only the respective medicine men know. One Ojibway consultant reported that people would come to this island to pick raw materials to make bundle carriers for medicine, as well as to collect maple sugar. Ojibway people commented on the necessity to go to different islands for different types of medicine, stressing the fact that the people need to take care of these gifts and reciprocate for the things received. In addition, the presence of trees that grow "out of the rocks" makes this island a powerful spot and the trees powerful beings.

The following associated uses of plants or parts thereof have been reported by Ojibway consultants interviewed at this location:

Birch bark	To make canoes, dishes, as fire-starter, to make wigwams, suitcases, boxes and trunks.
Balsam	Used as fire wood

Ash	To make hunting tools
Birch	Boiled and mixed with other elements and used as medicine
Spruce sap	Used to heal infected cuts
Mosses	Used to heal cuts
Poplars	Used to make whistles
Wikay	Medicine for throat (unknown English name)

Animals

Ojibway consultants reported that the area where Chief Woodenfrog Island is located supported a large bear population and therefore bear hunting constituted a major activity. Ojibway people used to closely observe the animal's movements so that they could easily find them during hunting expeditions. Consultants also emphasized the role of animals in "giving" medicine to humans. Medicinal knowledge could be acquired in dreams, by eating the animal, and by observing animal behaviors in particular body statuses. The following statement illustrates this point:

> *We used to watch the animals and see what they eat when they are sick in order to understand medicines. We also watched the mother ducks that only have three months to train their chicks. Moose, for example, eat medicinal weeds, and when people eat moose they get the medicine through their diet. But medicine can come to you in dreams as well. The skunk in earlier days was a powerful medicine animal.*

The following animals or parts thereof have been identified by Ojibway consultants interviewed on Chief Woodenfrog Island:

Bear	Medicine, tools, ceremonies, and food
Raccoon	Food
Rabbit	Food
Birds	Food, and bait for snares
Hides from different animals	To make drums
Sinews	For sewing
Bear fat	To make pemmican, and for flavoring
Turtle shells	Used in ceremonies
Deer	Food and bait for bears
Skunk	Giver of medicine

Fish

Consultants interviewed emphasized the fact that fish also migrate, and that often Ojibway people used to follow their migrations which were a function of the depth of waters at different locations on the lake. Accordingly, Ojibway would catch walleye, northern, sturgeon, and trout at different depths of the water.

For Ojibway people fish constitutes an important element for the clan system which is structured according to the elements of land, air, and water. Fish also figures prominently in the Ojibway ceremonial and medicinal cycles.

As indicated above, due to the constraints of translation, interviews could not be completed. Thus little information has been collected on archeological and geological features of the island. Information

about the presence of a Midewiwin lodge and the ceremonial use of the island by the Grand Medicine Society has been summarized in the introductory text to this site (p. 413-414).

Namakan Lake

The crescent-shaped lake measures 17 miles from its west end where it joins Kabetogama Lake at Old Dutch Bay to the Namakan River in Canada at the east end. It is almost 3 miles at its widest point and contains roughly 146 miles of shoreline. The American side to the southwest comprises numerous islands that make up a variety of channels. In 1914 dams were built at Kettle Falls to control the water flow from Namakan into Rainy Lake (Nute 1950).

Nine interviews were conducted on Sweetnose Island in the Moose Bay area (Figure 10.6). Prior to the interviews, the Park Service personnel led the group on an extensive tour to some of the most salient locales on Namakan Lake–Moose Bay, Cemetery Island, Big Sky Island and Namakan Island. Although the interviews were conducted on a specific island, they reflect Ojibway knowledge and concerns about the larger area visited. Consultants from Nett Lake, Seine River, Kouchiching, and Lac La Croix participated in these field visits. All the consultants reported to be related to this area through family ties, use history, and/ or through individual connections to natural or cultural features (Figure 10. 7).

Ethnic Group Use History. Moose Bay is an extension of Namakan Lake formed by the outlet of the Moose River. Prior to the flooding caused by the construction of the 1914 dam, much of the southern end of the current bay was a flat, grassy floodplain fed by the Moose River. Archeological and ethnohistoric records collected by Richner indicate that the Bois Forte Ojibway occupied the Moose Bay region during the late nineteenth century and early twentieth century. Occupation also has been recorded along the main-land and Kabetogama peninsula shorelines (Richner 1992c: 118).

Richner's research shows that the community of Moose Bay remained in place until about 1940, when its last documented inhabitant, Joe Whiteman, moved to the reservation due to a terminal illness, later dying on Namakan Lake (1941). One of the Ojibway consultants interviewed at the Moose Bay reported that two individuals today resident in Kouchiching (Percy Adams and Raymond Adams) are originally from the Moose Bay area, and that the data collected through the 1920 population census did not register all the people in the area, and should have included the number of Ojibway people who were still resident within the park area. Despite the difficulty to reconstruct a chronology of occupation of the Moose Bay area, the triangulation of archeological evidence, ethnohistoric documents, census records, oral histories and other sources of information allow an estimation of the Ojibway presence in the area from 1770 to the mid-twentieth century (Richner 1992a: 118-119). According to Indian Agent Reagan, there was a Mide lodge at Moose Bay (NPS 2000).

A series of maps and archeological investigation have allowed Richner to reconstruct the pattern of occupation of the Moose Bay area, which he described as "not a densely occupied single site, by rather a series of loosely clustered sites consisting of single or multiple houses" (Richner 1992c: 119). The settle-ment to which Richner (1992a: 119) refers here was recorded by Superintendent Reagan in the 1920s. Eyewitness accounts, published and unpublished documents, and maps, indicate that the village consisted of traditional birch bark and log houses scattered within and outside the bay. The Moose Bay interviews, however, emphasize occupation and use of the area by Canadian Ojibway from Seine River, Lac La Croix, and Kouchiching.

As indicated earlier in our summary of Richner's research, early surveyors maps and fieldnotes show not only the historic Indian settlements but also a series of land and water trails connecting villages

Figure 10.6 Moose Bay

Figure 10.7 Ojibway consultants give an interview at Namakan Lake

within the park's current boundaries and the communities at Vermilion and Nett lakes. In addition, it shows a local trail that leads form Ash River to the Indian settlement at the mouth of the Moose River. Some trails are also shown on the "Map of country inhabited by Vermilion Lake Indians" but not is as much detail as on Shepard's map. Other maps from 1913 and 1914 of the Moose Bay area, drawn by the International Boundary Commission Surveyors, located additional villages on the northwest edge of Williams Island and one on the adjacent point of the mainland across Blind Indian Narrows (Richner 1992c: 120-122). Additional maps from the International Joint Boundary Commission Survey conducted in 1926 and 1928 (sheet 39) document the existence of seven structures and other features on Williams Island. The tip of Tar Point, furthermore, found within Lot 4 of the allotment to an Indian named Bego, can be interpreted from archeological evidence and oral history as having served for both everyday and ceremonial activities (cited in Richner 1992c: 123-124).

Regional Connections. The Moose River served as a local transit route for the Moose Bay people. Moose Bay was an important stopping place in the Namakan Lake canoe trail that connected the Rainy Lake region to Lake Superior. This route was preferred to the one along Rainy Lake because the narrows protected travelers from strong winds that blow on the latter lake. Moose Bay is located on a water trail that connected the area north of Rainy Lake (especially Thunder Bay) to Ely and Grand Portage. Types of connections between Moose Bay and other places include waterways, kinship ties, and ceremonies conducted in spring and autumn. In addition, land and water trails are particularly significant to Ojibway Indians because they often buried their people along them.

The following statement by a male Ojibway consultant summarizes important information about regional connections:

> *People used to come this way avoiding the big Rainy Lake and depending on the winds would use the north or the south shore. They used a portage connecting the Black Bay with Chief Woodenfrog Island on Kabetogama[Gold Portage, ndr]. Then through narrows they would go to the Moose River to Namakan, and from there to Ely or Kettle Falls. There was a portage connecting Namakan and the Kettle Falls [Bear Portage, ndr].*

Seasonality and Resource Uses. The wealth of natural and cultural resources present in the Moose Bay and Moose River areas make this place an important one for Ojibway people of both the United States and Canada. A continuity of usage of the area well into the twentieth century for picking berries, rice, and maple sugar has been reported by groups of both countries. Particular importance is vested in the painted rocks at the mouth of the Moose River for spiritual, ceremonial, and cultural reasons (Figure 10.8). The lake was visited in dreams by many people who would recognize it without having been there before physically. Furthermore, the association of eagle nests and pictographs makes this a particularly sacred place for Ojibway people (Figure 10.9).

Ojibway consultants reported that in the area around Moose Bay people used to pick berries, gather wild rice, and maple sugar, especially in the spring. The Moose River instead constituted a better source of fish, since various species used to spawn there at different times of the year, and because fishing at the narrows was more efficient. In deeper areas of the Moose Bay, given the presence of aquatic plants, Ojibway people fished for northern, rock bass, and walleyes. In addition, the river was used as a transportation route during the winter months when it was frozen.

Figure 10.8 Painted Rock near the Moose River

Figure 10.9 Eagle perched atop tree at Namakan Lake

Several consultants stressed the fact that this area was an important stopping place when traveling on the lake. Because of the narrow size of the river and the presence of tall trees, this travel route was preferred during storms when winds blew strong.

Water

Consultants interviewed emphasized the importance of water in ceremonial, medicinal, fishing, and recreational activities in this area. Water is medicine itself. It is used as a component in other medicinal formulas as well. As reported by Ojibway people at other locations, women hold a special responsibility for the water. At particular ceremonies, furthermore, water needs to be taken from Namakan Lake to fulfill its functions.

Plants

The Moose Bay area has been identified as an important source for medicinal plants. According to Ojibway consultants, in fact, many medicinal plants were traditionally collected in marshlands.

The following associated uses of plants or parts thereof have been identified by the consultants interviewed at the Moose Bay area:

Cedar	Used as purifier of the body, to make crafts, and as medicine
Cedar bark	As substitute for birch bark, for canoe covers, and dwellings
Milkweed	Used to cure warts
Mushrooms	Used as food
Swamp mosses	Mixed with cattails and used as diapers for baby cradles

Animals

A large variety of animals significant to Ojibway culture in this area have been identified by the consultants interviewed. Among these duck, geese, moose, bear, loons and partridge or grouse were used for food.

Ojibway consultants reported the following associated uses of animals and parts thereof at this location:

Deer fat	To cure cuts
Duck and bear fat	To improve hair growth
Big game	Used for food
Big game bones	Used to make tools
Deer, moose and bear hides	To make drums, clothing for winter, and moccasins
Deer and moose antlers	To make tools
Goose and duck feathers	As ornaments

A consultant reported that Ojibway people used one island in the Moose Bay to collect eagle feathers. His account helps explain the relationship between humans and the non-human world in this area:

> *When my father went out trapping he would save beaver body. When he had extra he would take the bodies to the birds on an eagle island. They would give him feathers back as part of that exchange. There is a hierarchy in birds, with the eagles at the top.*

In addition, consultants reported that animals would lead people through the territory and teach them and that people would choose places to stay according to the presence of fish and animals. Children would be taught how to recognize the animals through practical instruction, and the killing of animals at specific locations would mark the territory indelibly for the individual. The following excerpt clarifies this last point:

> *The land also has a lot of memories. I can remember where I got my first deer. I have a lot of experience but it is all connected to places on the land. The place would be a place where my father took me hunting. Next year he would take me to another place. After years and years he would take me to all of his areas. The same would happen with going trapping. He knows one area very well. I don't know the names and places but I know how to get there and how to hunt and trap there. He began to take me into the bush when I was 4 or 5 but wasn't able to hunt until I was 13 and 14/15 when I began to trap. He trapped and hunted on Rainy Lake - everything he needed was on that lake so he never had to go very far. When I did my first kill ceremony I brought the meat home and it went to various families until it was all gone. I told each one that it was my first kill. My first kill was one of the areas where my father had success but not the area where he did his first kill. Dad drove the deer to me and I was able to kill. As a young boy it gave me a sense of pride. It was good to give away the meat. People would make you feel very good and say you are a hunter now. We hunted anywhere we wanted on Rainy Lake and didn't have to go too far. Then the numbers of game decreased and we had to wait longer. The park will increase the number of animals because it prohibits hunting within the park. Hunting rights go all through Treaty 3 Area, but I go out of that area. The laws have kept me out of my traditional hunting territory and the park is in my traditional hunting territory.*

Fish

Fish constituted the major staple food for the Ojibway people in this region. In particular, one male consultant indicated that sturgeon was found at the mouth of the Ash River and also near Kettle Falls. As indicated above in the section on water, the mouth of the Moose River was a good fishing ground because its narrows were used by various species in different season to spawn. In addition to providing a fundamental source of nutrition, Ojibway people used fish in ceremonies and in medicine.

The following associated uses of fish and parts thereof were reported by the consultants interviewed:

White fish	Medicine
Sturgeon fat	Medicine
Fish skins	Used to make medicine bags
Fish bones	Used to make tools and needles for sewing

Archeology

Comments on archeological features at the Moose Bay focused primarily on the red paint pictographs found at the mouth of the Moose River. One Ojibway medicine man of the Grand Medicine society interpreted the site as a powerful spot. According to him, ancient people used a particular type of paint to ensure that the place remained visible for long time. The same paint was obtained from a given root, and was also used on the face where it would penetrate and remain under the skin. The presence of this type of paint at this location was interpreted as a marker for a site used for ritual purposes, especially puberty rites and

fasting ceremonials. The paint found at this location, furthermore, has been interpreted as connected to the pictographs at Namakan narrows and at Nett Lake.

One male consultant spoke about this location as follows:

> *The pictographs are very important spiritually. They tell of something that happened and carry different meanings. They can be read and they tell of the prophecy as well. The pictographs are sacred ground where one should not hang around. There are some also in the Namakan narrows. In Nett Lake there are some with powerful symbols. People would stop there to offer tobacco and other offerings but not stay.*

Geology

According to Ojibway consultants, the geo-morphology of this area is intrinsically represented in the name of Kabetogama Lake, which in Ojibway means "a path in between." This route, in fact, continued on to the said lake and was used when the Rainy Lake was rough.

Interviews on the geology of the place at this location focused on the meaning and the presence of "forbidden places." The information was elicited independently in more than one interview. The following passage from an interview with a male consultant elucidates the significance and meaning of "forbidden places" for Ojibway people:

> *There are lots of places where people wouldn't stop because forbidden. Sometimes because they are sacred and the ground cannot be disturbed, sometimes because the place is evil. These spiritual places are all over the islands and shore line. You must go around them and cannot point at certain islands. Pointing with fingers brings bad weather and delays. These places are remembered by look and location but don't have specific names.*

Rainy Lake

Rainy Lake is the largest lake in the park area, extending for about 12 miles in width and 60 miles in length. The lake contains 2500 miles of shoreline with an impressive rocky coastline along the southern part of the lake, and about 900 islands. In the past, wild rice grew in most of the current park area; with the construction of the dam the rice beds flooded and today only remnant beds can be found in sections of Cranberry Bay and few other places. Pine, oak, and a variety of other trees grow on some of the islands and along portions of the shoreline (DuFresne 1986). Only the southern shore of Rainy Lake are in the park (see Figure 10.1).

Interviews were conducted on Arden Island, in the Cranberry Bay area, northwestern portion of Rainy Lake. Before approaching the chosen site for the interviews, the group visited Oberholzer Island, since one of the elders had worked for him in his youth and knew trapping and hunting stories associated with that island and his owner. Thus, the responses given in the subsequent interviews reflect the geography, and the cultural and natural resources of the entire Rainy Lake rather than a specific location such as Arden Island or Cranberry Bay (Figure 10.10).

Ethnic Group Use History. From the analysis of the ethnographic work conducted on Rainy Lake, Cranberry Bay emerges as an important place for Ojibway people for its abundance of natural resources (especially wild rice, blueberries, cranberries, fish, game, and useful plants). The presence of eagle nests struck a deep chord in the Ojibway consultants. The presence of trees that grow out of the rock was also deemed particularly significant in their interpretation of the place.

Consultants reported that a large village was located at the portage near the Black Bay. Although Rainy Lake was occupied primarily in the warm months of the year, Ojibway people from various locations used to come to this lake for hunting, trapping, and fishing also in winter. When the lake froze, portions of it were used as ice routes and people traveled on it by horse, dogsled, or on snowshoes. Consultants also reported that the beaver population has systematically declined in the twentieth century and this impacted the already feeble Ojibway local economies.

The Cranberry Bay area, furthermore, has been interpreted by Ojibway consultants interviewed as a major location for ceremonial gatherings, pow-wows, and games. One female consultant stressed the interconnection of the Ojibway material and ceremonial way of life, by pointing out that all activities geared towards subsistence were accompanied by ceremonial rituals. She recalled participating in food ceremonies, naming ceremonies, ceremonies for dancers' outfits, for the "first feather," and for the sick people. In conjunction with the last ceremonial type, consultants noted that the boggy areas present in this portion of Rainy Lake provided an abundant source of strong medicinal plants, as this statement by a female consultant reveals:

This area is full of plants used for medicine. There is medicine all around you…

Seasonality. This place functioned as a gathering place for people from June to September/October. Some of the consultants interviewed had been through this area in their youth with their elders. They came to pick various types of berries which were extremely abundant in July and August. People from various bands also came to pick rice, and one consultant form Nett Lake reported that Ojibway from there used to go to the Black Bay to pick rice because it ripened earlier than at home.

Regional Connections. Cranberry Bay's location along the major travel route on Rainy Lake connects it to other locations within the lake, to Kabetogama Lake and to the Black Bay. Broader connections between Cranberry Bay and other places include Crane Lake, Vermilion Lake, Dryweed Island, Chief Woodenfrog Island, among others.

The places are connected to each other through the water trail but also through kinship ties of people living in different places but belonging to the same families or clans. Places are also connected as part of travel routes used to move around the territory and through traveling songs and stories. In addition, groups of Ojibway people from both the US and Canada used the area in the past for a variety of activities, including ceremonies (Figure 10.11). Finally, water constitutes a major connector of places, as the following statements summarize:

Water never ends. Since the water flows everywhere, then everything is connected.

Water is the main connection: where there is water there are connections.

Resource Connections. The following is a brief summary of the resource commentaries elicited through the site-specific instrument.

Water

Comment on Rainy Lake's water reflected general Ojibway conceptual and epistemological representations of the water. According to these views, water in general has been interpreted as a giver of life, a cleansing agent, a ceremonial item, and as medicine. In regards to the last characteristic, one consultant

Figure 10.10 Rainy Lake shore

Figure 10.11 American and Canadian Elders at Arden Island

reported that Rainy Lake's water was used for common purposes, whereas only spring water was utilized in curative processes.

Plants

Ojibway consultants interviewed asserted that the following plants found at Rainy Lake are integral parts of their cultural tradition: cedar, cranberry bush, balsam, bulrushes, "muskrat roots (cattail rhizomes)", lily, sumac, white pine, blueberry, raspberry, chokecherry, black oak, Rabbit bush (unknown species), Norway pine, elm, poplar, red willow, *mosquatch* bush, sugar maple, and wintergreen.

The following associated uses of these plants and parts thereof were elicited through the site-specific instrument at Rainy Lake:

Bulrush stems	For food
Muskrat roots	For food
Cranberry bush	For bladder infections
Cedar	To make water used to purify babies and fasting people; to make seating pillows for the *Mide* lodge; for construction material
Lily pads	Make tea for various illnesses and cuts
Sumac	Used for stomach aches
White pine bark	Used for medicine and as firewood
Balsam	For medicine
Black oak	To make tools because of its consistency
Rabbit bush	Mixed with tobacco and smoked with pipes
Pine	For medicine
Blueberry roots	For medicine
Wintergreen	For medicine

The following excerpt from an interview with a male Ojibway consultant explains how the Norway pine was used in medicine:

> T*he bark of the Norway pine […] is also used. The trees heal after the bark is taken. If you put tobacco, you don't leave scars. You need to take off the top of the bark and use the middle bark then scrape it into four bunches. You boil it in a gallon of spring water for ten minutes then let it cool down. It is used for ulcers and other illnesses like heartburn.*

As indicate above, consultants reported that the area is of particular importance for the collection of medicinal plants. Because some of the plants are only found on the Rainy Lake shores, people from various bands and locations used to come to this lake to collect them. An elder from Nett Lake asserted that:

> *We also use the bushes growing by the shore rocks with pink seeds on top for the heart. They don't grow at Nett Lake so we need to come here to get them.*

The presence of plants that grow on a very shallow layer of humus above the pre-Cambrian rocky shield has been unanimously interpreted by the consultants interviewed as a sign of particular strength that plants acquire from this location. For this reason and from a pharmacological point of view, the same item collected in specific locations on Rainy Lake is intrinsically different from the same specimen obtained from another area.

Animals

The following associated uses of animals and parts thereof were elicited with the interviews at Rainy Lake:

Turtle	For medicine
Turtle oil	As mosquito repellent
Rabbit skins	To make blankets
Moose	For food and hides
Deer hides	To make moccasins, mittens, snowshoes, and hats
Beaver	For food, ceremonies, and medicine
Eagle and hawk feathers	Used as protectors and helpers
Loon feathers	Used in ceremonies and as ornaments
Fat from deer, skunk, and bear	For medicine
Hawk	For ceremonies

In addition, one consultant reported that porcupine, skunk, fox, marten, mink, weasel, rabbit, moose, deer, bear, beaver, and muskrat were used for food, although deer and beaver were the major items. In addition, the Black Bay and Cranberry Bay areas were known as good hunting ground for moose, because the moose were greatly attracted to the lily pad filled bays. The roots are a delicacy for moose.

Ojibway consultants reported that people learned medicines from the animals by looking at their behavior when sick. An elder from Nett Lake asserted that:

> *Beaver dig out roots of different types from the river and lodge around that root. When they are wounded they go there to heal. They also put bark. Dogs instead, look for a type of grass to chew and cleanse themselves.*

Another consultant, however, asserted that only medicine men know what animals to use for what health related problem. This would support the idea that two different medicinal strains exist in Ojibway culture, one common to all members and one restricted to particular individuals. Medicine, in fact, can be given to the individual directly from the animal in dreams or in visions. From the interviews at Rainy Lake it emerges that beaver must have occupied a special position in the range of animals used for medicine. Consultants expressed great concerned over the present unsatisfactory health of beaver. Beaver health impacts Ojibway capacity to use the animal in medicine as indicated by this consultant:

> *There is also beaver, which we used as medicine, but now we can no longer use them because they're sick.*

Fish

Fish was the main staple of the people living in this area, and for the people traveling through here to different locations. One consultant reported that long ago Ojibway people had fisheries at Cranberry Bay, and that fish obtained from Rainy Lake was used ceremonially and in medicine. A prominent place is occupied by the sturgeon, for which Ojibway people conducted ceremonies in the spring spawning season. Ceremonies existed for all fish species and were conducted at different times at least once a year per species. Sturgeon, furthermore, was used to make glue, for medicine, and to make tools such as combs.

Archeology

Little information has been collected on the archeology of Rainy Lake due to the large amount of time dedicated to the analysis of possible recommendations for the park management. A major constraint was also the fact that no archeological remains were visible during the survey. Ojibway consultants, however, asserted that despite the lack of material evidence, many people from different areas have used this place, and that the voices of the people who passed and lived here are still here and can be heard during the full moon.

Geology

Various places along the coasts of the western portion of Rainy Lake have been interpreted by Ojibway consultants as locations for communication with spiritual beings, especially during fasting periods. High points, instead, (Ober's island, for example) were used as watch-out locations and as navigational markers. Consultants analyzed the meanings of rocks. They asserted that rocks at this place are sacred and were used in ceremonies. In particular, one white rock that withstands high temperatures and does not crack was used for sweat lodges and to heat up the tipis. Rocks, furthermore, have medicinal power. They can manifest themselves to people. Similar to other forms of medicine, knowledge of their properties is restricted to specific people.

CHAPTER ELEVEN

OJIBWAY CULTURAL LANDSCAPES IN THE WESTERN GREAT LAKES

This chapter presents the responses of Ojibway Tribal representatives who were interviewed during the summer of 1998 at each of the four parks. Interviews on regional land and resource use issues were conducted using the landscape instrument (see Chapter Six). The chapter summarizes park-specific and regional information that is fundamental for addressing the cultural interests of contemporary Ojibway people within a cultural landscape framework.

The analysis of interview data suggests that the concept of cultural landscape can best be studied and discussed as a component of land management policy whenever a preconceived geographic area does not bound the study. Said in a more positive way, cultural landscapes can best be studied if it is assumed that they will greatly reach beyond the NPS unit of interest. This analysis further suggests that the optimal methodology for collecting data on cultural landscapes is somewhat different than that typically used for identifying and evaluating culturally significant places. Place and landscape studies are different and should be conducted according to appropriate methodologies, data collection instruments, and geographical scales.

Before discussing the specific Ojibway definitions of landscapes and their relative cultural significance to these people today, it is important to define more clearly the concept of landscape as it has been used elsewhere. The next portion of this essay will serve to contextualize their cultural landscape issues. This following section contains descriptive and multiple-choice responses to questions in the landscape instrument. The chapter concludes with a brief and very preliminary ethnographic commentary on Ojibway cultural landscapes and how these fit the Western Great Lakes ecoregion.

Spatial and Temporal Dimensions of Cultural Landscapes

The idea of a cultural landscape as a meaningful way to organize cultural data has emerged in anthropological thinking over the past 75 years. According to Evans and Roberts (1999):

> The formal study of the transformation of natural landscapes into "cultural" landscapes began in geography, and is usually attributed to the work of Carl Sauer in cultural geography, (Sauer 1925, 1931). Sauer was a proponent of a morphological method of studying landscapes, where the observed "landscape" is broken down into its constituent parts, each then individually examined to see how they contribute to the whole. This method allows the parts, and their relationships to each other, to be objectively identified, classified, and measured. Sauer's definition of "cultural landscape" as being the material artifacts of human interaction with the natural environment has remained a constant for geographers (Winberry 1997:7).

During the last third of this period, the UofA ethnographic team worked with more than 80 Indian tribes to identify and find ways to protect natural and cultural resources. Probably the basic tenets of what constitutes the concept of a "cultural landscape" were always part of the discussions with Indian people but largely ignored (at least not given appropriate emphasis) in technical reports and professional publications. This was the result of anthropologists' focus on projects geared towards, and limited to, the evaluation of places, or because of the anthropologists' inability to understand what Indian people explained in culturally different terms. Concerns about the need to focus on cultural landscapes were expressed vividly by an environmental study team who worked for the Navajo Nation (Kelley and Francis 1994: 102-104; 151-169). As a consequence of this critique, our team deliberately began to record and to present in our reports information on larger cultural phenomena collected through interviews with tribal members. Today, we refer to these larger, integrated, and more abstract interpretations of the territory and its physical and spiritual resources as cultural landscapes.

Because the concept of cultural landscape was introduced earlier in this report (see Chapter Three), we will focus here on a discussion of some technical features of the cultural landscape concept. This concept derives from the notion that the land that is mapped in people's minds; this image or cognition of the land they hold is shared at a given point in time, and transferred through generations. All human groups develop and come to share cultural landscapes. The concept implies that many cultural or ethnic groups can hold different and even conflicting images of the same land. The resulting "landscape" is the result of direct experience, received ancestral knowledge (Zedeno et al. 1997), and other culturally self-reflexive perceptions.

Cultural landscapes are nested (Stoffle et al. 1997). They exist at different scales but are integrated into a whole. For many American Indians these levels include, from broadest to narrowest scale, a Holy Land, songscapes, regional landscapes, ecoscapes, and landmarks. The topographic criteria for defining these categories of landscapes range from their fit with the natural terrain (i.e., an ecoscape) to a spiritual landscape that exists in terms of endogenous criteria with minimal reference to the topography of the land (i.e., a songscape).

In Chapter Three it was also suggested that the concept of a cultural landscape fits well with new federal initiatives to understand and manage the land and resources. These approaches have actually stimulated many federal agencies, and in particular the NPS, to have their various park units to design, conduct, and respond to cultural landscape studies. Currently such studies tend to be bounded by past studies of place and park, and thus are often conceptually and spatially narrow. On the other hand, this study argues for a broader multi-park regional approach, which better fits the ways that American Indian people view the lands within which the parks are located.

Landscapes and Places

A cultural landscape differs from a special place to which one or more human groups have attached specific cultural meanings. Special places are often referred to as Traditional Cultural Properties (TCP) (NPS n.d.: Bulletin 38). Central to the concept of a cultural landscape is the notion that not all places within it share the same value. The places within a landscape may derive their value from different sources. Viewed in its entirety and from the perspective of a human group, a cultural landscape should make sense as a kind of culturally defined area. It is also important to remember that a people may attach more than one cultural landscape to a place. We call this "cultural landscape layering." Layered cultural landscapes may have very different cultural meanings. One landscape layer may be composed of places visited by a spiritual being during its life. Another landscape layer may involve a forced march following military conquests such as the Trail of Tears for the Cherokees, the march to Bosque Redondo for the Navajos, or the march to Fort Independence for the Owens Valley Paiutes and Shoshones.

The layering of landscapes can involve the incorporation of one or more areas/places into a plurality of landscapes shared by a cultural group or a sub-set of it. However, the argument can be taken into an opposite direction at the supra-group level. In this instance, places and areas (or connections among these) can be important for diverse cultural groups who may or may not share the same system or meaning and value. Hence the recognition that the same places or areas belong into distinct cultural landscapes constitutes an important policy step toward the process of determining cultural affiliation.

Non-Indians often calculate the value of cultural landscapes in terms of the aggregate sum of the significant places within it. This procedure resembles the process for establishing an archaeological district (King 1998). Federal guidelines recognize the fact that the aggregate value of a district can be greater than the sum value of the individual parts, and only few districts are recognized as containing no scientifically significant sites (http://www.cr.nps.gov/nr/bulletins /nr16b.htm). It is probably a valid assumption that the larger the space between significant places, the more difficult it will be to successfully nominate an archaeological district. From an American Indian perspective, however, the space between places directly contributes to the value of the places and the overall value of the associated cultural landscape.

The Meaning of Spaces Between Places

A cultural landscape has meaning because it contains valued places are mutually connected by the spaces between them. In addition, the spaces between the places can have culturally specified meanings. Before turning to the meaning attached to space between places, it is important to note that even the foremost scholars on American Indian sacred geography, such as Basso (1996), do not acknowledge that this "in-between" space category has meaning attached to it. And yet he cites Hiedegger's (1977:332) statement about the meaning of space(s):

> [s]paces receive their essential being from particular localities and not from "space" itself[,]

which we interpret as indicating that spaces derive their meaning from the very fact that they link two or more places, progressively, to form that more abstract network we call "cultural landscape."

Spaces and Trails. Culturally significant spaces may exist where people or spiritual beings passed along trails from place to place. Sometimes these trails are still visible on the ground, such as Paiute trails in the Mohave Desert, while at other times the trails may exist today only in the minds of people. This may occur because the older trails have become the paved roads of another time and society. Sometimes, instead, trails were only vaguely demarcated in the physical domain. Water trails, for example, were often established as the shortest points between islands on big lakes, along shorelines, and along interior rivers and streams. Although water trails leave no material mark, they still vividly exist in the minds of the people who established them, as in the case of the Ojibway.

Trails to the Afterlife. Many American Indian peoples have a trail to the afterlife. The Chatinos in Oaxaca, Mexico, for example, have what they call a trail of departed spirits (Greenberg 1981: 101-107). Most Mesoamerican native groups possess this idea of a physical trail to the afterlife. The Chatino spiritual trail is about 60 kilometers in length and all departed spirits travel on it on the way to the afterlife. The trail is marked by nine physical places, each of which is visited by the departed spirit at the end of various ceremonies. The physical body of the departed spirit is taken by the living to the first set of places as part of the ceremony. Later places along the trail to the afterlife are just visited by the departed spirit after the

ceremonies have been performed. Eventually, the spirit arrives at an actual cave that constitutes the entrance to the afterlife.

The Chatinos and other Native American groups, such as the Hopi (Zedeno 1997), have another set of trails that mark the ritual boundaries of their territory. The "House of the rain gods" is located on a mountaintop near a marsh that is a door to the rain god house – La Cienega. The Chatinos leave offerings and conduct ceremonies along a path that contains a series of places on the way to the House of the rain gods at the end of the rainy season, and they reverse the sequence of visitation six months later**.** The Chatinos also engage in ceremonials at the solstices when they trek along sacred trails to various places to conduct ceremonies related to birth, death, and marriage. Each person is supposed to visit all of these places at least once a year, although officers of the ceremonial cycle repeat the visitation more frequently. Curing ceremonies take place at these places, and travel along the trails themselves is associated with the curing process.

The Chatino define places as houses, which are metaphors for bodies. They are nested in increasingly larger houses of bodies. Hence the house of the rain god is a mountain that is the body of the rain god himself. There is a meta-logic that organizes all of these places and gives each one of them meaning relative to the others. Here, landscapes are organized in terms of progressively larger metaphors.

Line-of-Sight Spaces. The space(s) between important places may contribute to the overall cultural significance of the cultural landscape. Southern Paiutes believe that large sacred mountains stand up so they can see each other, and the mountains find joy and power in that experience. While the mountains are themselves places of power, they derive their power from the surrounding space.

The O'Odham people, on the other hand, believe that the mountains in their area are connected by powerful forces. These are the forces that hold the earth together. If anything breaks the connections among these forces, such as electrical power lines built on top of the mountains, the forces will be disrupted and the earth will fall apart.

Vista Spaces. A vista space is somewhat different from line-of-sight space. Vista is a term used to explain the power a place derives because of its view. From certain locations people can see at great distances and observe a variety of things. Indian people often use such vista points as sites for vision quests and spiritual renewal. Clearly, the open, unrestricted spaces surrounding such places contribute to its power.

Narrow and Wide Spaces. The morphology of spaces can also contribute to the meaning of spiritual and physical trails and to the significance that people associate with traveling those trails. Thus, a trail that passes over great open space or through a tightly enclosed space may acquire value due to the environmental aesthetics derived from the journey. The Iditarod is a thousand-mile long dog sled trail in Alaska (http://www.iditarod.com/) that derives value from its passing through extensive high mountain ranges, snow covered and wind-blown tundra, as well as frozen rivers and sea. Similarly, Southern Paiute ceremonial trails to and along the Colorado River follow hundreds of miles of water and land associated with elevated plateaus and steep canyons. These ceremonial trails do go to culturally important places but also acquire value from the powerful places they pass along the route, such as the Grand Canyon and the Black Canyon.

A space can be celebrated by being identified as part of the origin of a place. Origin stories often identify the meaning of specific places from the culturally significant spaces wherein they exist and vice versa. Thus while rivers have great significance to American Indian people, they derive even more significance when they pass through volcanic narrows where some mythic event occurred. Thus, there are South-

ern Paiute origin stories that talk about the relationship between the river and the canyon for both Grand and Black Canyons. Similarly, for the Ojibway the cultural significance of a Great Lake increases when it pours over a rapid or a waterfall and into another Great Lake at a location where mythic events occurred (e.g., the Sault Ste. Marie). In fact, it is almost a universal fact that flowing water acquires power from the places located along its course. Mythic events exist for most places of great power.

Less is known about the impacts of open or confined spaces on other major forces of nature and the resulting impact of these on trails. Wind, for example, is perceived as a living being by most American Indians. Southern Paiutes have different names for kinds of winds that blow across open spaces and through narrow canyons. Wind, like water, is influenced in special ways by being fully released in an open space or being confined in a narrow space. Wind contributes to the meaning of trails by being a powerful being that visits the traveler at various wide and narrow spaces during the journey. Wind is also related to echoes that derive from narrow canyons, raising the issue of studying soundscapes or what Feld (1996) calls the acoustemology of place. Wind and soundscapes are related to trails and landscapes but, being largely un-studied, their relationships remain to be more fully described in future studies of space and place.

Interaction and Landscapes

Cultural landscapes are, by most definitions, created by humans and even though they may be mapped on the ground there remain portions of information and connections that only exist in people's minds. The possibility that landscapes are self-voicing must be considered, although such a theory is beyond the scope of this analysis and perhaps beyond the reach of science. Most American Indian people believe that the land and all it contains are alive and thus fully capable of talking with Indian people today as it was in the past. Thus, for Indian people the meaning and definition of cultural landscape may fully derive from itself: it tells people who and what it is; it and its components are self-voiced.

Human interaction is seen as a critical variable in the identification and maintenance of a cultural landscape. This occurs because people must be in a place or series of places that compose a landscape in order to understand what it is. In other words, to develop a cognition of the landscape. Once this cognition of a cultural landscape is established and shared among a people, they develop beliefs, values, and norms that structure their behavior vis-à-vis the cultural landscape and all of its components. Future generations of these people must in some way interact with the cultural landscape in order to make it real. Often the various beliefs, values, and norms specific to the proper interactions of humans with the cultural landscape are taught to youth at appropriate places within the landscape.

Perhaps the most direct way interactions between people and landscapes occur is by people having physical access to the landscape. Many Indian people maintain that they do not have to teach their youth about the landscape, they simply instruct the youth and place them in places where the landscape can talk to them like it did to their ancestors through time. Ojibway people receive place information in premonitory dreams.

When nested cultural landscapes are studied in terms of the frequency of human interactions it is apparent that there is an inverse correlation between size of landscape and frequency of human interaction. More abstract and spatially larger landscapes are rarely visited and so they are more distant from the human experience, whereas landmarks and ecoscapes are richly lived and renewed through regular human-place interactions.

Some aspects of a cultural landscape can be maintained without the physical interaction of people and place. Certainly, the Ojibway talk about where they once were and the meanings of those places today

without actually taking their children there. People also talk about landscapes that exist in other times and even other physical dimensions. Even though such landscapes can be maintained through time, physical separation from landscapes will weaken, and may even destroy, the connections between place and people.

Frequency of interaction and access are thus important reasons for conducting this study because various forces over time have made it difficult or even impossible for Ojibway people to interact with their cultural landscapes. Such outside interventions on a cultural phenomenon have increasingly, but in largely undocumented ways, impacted the overall Ojibway culture and society. The Ojibway would add that the land and its resources live for interactions with Indian people and without these they become less than what the Creator intended them to be.

Ojibway Cultural Landscape Responses

The next portion of this chapter summarizes the responses of Ojibway consultants collected in field interviews during the summer of 1998. A copy of the interview instrument is presented in Appendix A. Summaries are presented by the NPS unit where the interviews occurred.

Sleeping Bear Dunes National Lakeshore

The landscape interviews took place on Pyramid Point. This place was chosen because it supplies a commanding view of the dunes, Lake Michigan shoreline, and Manitou Islands. Five male Ojibway consultants responded to the interview questions.

Settlement and Subsistence. Consultants agreed that the Ojibway and the Ottawa settled in this area. One male consultant mentioned also the presence of Potawatomie Indians. Villages were located near the dunes but not on them—generally to the north or south. One consultant mentioned specifically a village located behind the dunes by Glen Lake. Usually in the summer people used birch bark wigwams and in the winter they used cedar and skins.

Indigenous activities in the park area included political gathering, mining, farming, clay digging, sand, bark, and plant collecting, gambling, ceremonies discussed below, fishing, hunting, and team sporting. Fishing activities occurred extensively in the spring and in the fall, following species' migratory and spawning habits. A male consultant mentioned that there was a small black rock in the dunes, which was considered sacred. This was the mild extent of their mining activities. Ojibway also dug clay from the area for pottery according to the same male consultant.

Hunting and other similar subsistence activities took place within the park, around the park, and also along the trails to and from the park area. Animals taken included wolf, fox, moose, deer, bison, raccoon, beaver, otter, and birds. Wood plants taken included various berries, acorns, nuts, *Zizania aquatica*, and maple sap. According to a male consultant, farming was a later activity after logging had cleared land in the area.

The area was also considered to be a social and ceremonial gathering place. When together, ceremonies were performed. Recreational gambling was a pass-time. The park area also served as a gathering place for chief meetings.

Seasonal Mobility and Migration. Trough travel and migration the park is connected to other places across the shore. For example, one male consultant mentioned that the park is connected to the **Manitou** Islands. From Sleeping Bear Point, one is very close to South Manitou Island. This point is the logical place to depart the mainland. He also mentioned that the island and the other connected islands constituted a trail

to the Upper Peninsula of Michigan. The area was not only an Ojibway gathering site but also an intertribal gathering site and trading center. One consultant expressed that Sleeping Bear Point was connected to Old Peshabe town on Beaver Island, Cross Village, and Heart Village. Connections were established by people moving from one village to the next, fishing, hunting, visiting and marrying, and also looking for cures.

To effect travel and migration, the Ojibway and other peoples had established land and water trails. Travel by canoe was the more important form of travel than by foot according to consultants. Water trails therefore became very important. It can be assumed that most navigable rivers are trails to some lake or larger river that will lead to a larger body of water. One consultant said, "the water trails went along the edge of the lake or the shorter points between land and island." An important water trail mentioned was "a natural waterway from near Traverse City that goes to Cheboygan (via Indian River) comes out just north of East Jordan." Another important water trail would follow the Manitou Islands to the Fox Islands to the Upper Peninsula, then follow the Whitefish Trail.

When canoes were not useful, land trails were used. One of the consultants mentioned land trails on Manitou Island. There was another trail that began at the base of Pyramid Point where the interviews took place and led to Suttons Bay. Another trail used by the area's inhabitants consisted of the Mackinac trail, through the strait to Sault Ste. Marie. This was used when water trails were frozen over. There was also the Hiawatha trail from Enqadine to the Comodam River, and the Whitefish trail that runs along side the Whitefish River to Au Train and Grand Island.

The Sleeping Bear Point had another significance in reference to the water trails. The point was used as a lookout. Canoes could be easily spotted in the lake from the promontory. When traveling as Ojibway approached a village, they would sing trail songs to let the village know that they were there. Singing such songs was also a sign of respect to the village.

Ceremonialism. The Sleeping Bear Dune was a special ceremonial place. As an intertribal gathering place, the park area was used for "powwow". When the area was used as a spot where chiefs gathered for meetings, the usual ceremonies and prayers were performed. Consultants describe the dunes as sacred ground, as close to the creator. Through spiritual and physical trails this ceremonial place was connected to other ceremonial places.

Some ceremonies took place in the park in the spring and in the fall. These coincided with spring and fall fish harvesting on the north side of the park area. According to one consultant there were "feasts to give offerings to the spirit world" in the spring and fall generally, but they could occur anytime. People would come here from as far as Lake Nipissing and Bad River.

The dunes, like high points, are a central place to the local Ojibway and Ottawa and a great place to fast and seek visions. Fasting could take place anytime of year, however, winter fasting was not common. "People came from other areas to know themselves here at the dunes," said one consultant. The same consultant also mentioned the Shaking Lodge ceremony. In this ceremony the medicine man would call the spirit of the person to be healed to travel to the medicine man in the dunes. Then the medicine man would send the spirit back cured. Weddings and naming ceremonies also took place along the dunes. The sand from the Sleeping Bear Dunes was also used in some ceremonies. Another ceremony that could take place at the dunes was performed before traveling on the lake, which is also sacred.

According to consultants, Sleeping Bear Dune is connected to other ceremonial sites. Sugarloaf Mountain is such a place. This mountain is the highest point on the Leelanau Peninsula. "Ceremonies would

be conducted near high points," according to one consultant. Such places may have medicine or "thunder" rocks. For ceremonies involving a large amount of people, according to the same consultant,

> *You need a large meadow that is flat – free of rocks – like on Frank's Farm … [and] below Pyramid Point. They would have a ceremony on a prominent point and then go back to the flat meadow to celebrate.*

The park is also connected to Mackinac Island, which once was "the turtle that brought up land to create the world."

Pictured Rocks National Lakeshore

The landscape interviews in the Pictured Rocks took place at Grand Sable Dune. This spot was chosen for its commanding view of the Au Sable Dunes, Twelvemile Beach, and Grand Island. Five female and three male Ojibway consultants responded to the interview questions. Additionally, landscape interviews were conducted with two female consultants at the Munising Falls.

Settlement and Subsistence. According to Ojibway consultants, the people who settled around the park were Ojibway. One female consultant specified the Lake Superior Bands of Chippewa as main occupants. The consultants also mentioned that other peoples who lived in or visited the area frequently were the Ottawa, Potawatomi, and Dakota. Another female consultant pointed out that the Ottawa, Potawatomi, and Ojibway were once all one people. This would explain the frequency of responses that include the Ottawa and Potawatomi peoples. There were villages on the north and south ends of the park, and on Grand Island. Beyond the park area were other villages scattered all around Lake Superior. One female consultant elaborated upon this by saying that there were no villages, however, on the dunes.

For the Ojibway, the Pictured Rocks area was important for several reasons. One of those reasons is fishing. Fishing is one of the central subsistence strategies for many Ojibway bands. Spawning grounds are good areas to catch fish. Here fishers could easily catch large amounts of fish during spawning season. Regarding land trails, a consultant observed that people would "follow natural bends in the land and set up nets." After fish are caught, they are salted and smoked. A male consultant remembers that in his childhood he and his family would catch large amounts of perch in the eastern side of the area. He also expressed concern about the lack of perch today. In the same area were vast amounts of whitefish until commercial fishing seriously depleted the species.

West of the Pictured Rocks area are wild rice beds. A female consultant mentioned that wild rice sustains the people if the people protect the rice. The same consultant spoke of birch bark baskets used to store the wild rice. Apparently there was a small amount of farming by Ojibway within the park area. But that farming was not considered to be very important. It can be assumed that other hunting and collecting activities occurred in the park area as well. East of the park are extensive berry patches, toward Whitefish Bay. Bay Mills, in fact, was famous for its berry patches and people from all over, including Pictured Rocks, and would come to gather there.

Social activities also took place in the park area. One female informant, for example, mentions recreational gambling and other games like the shell game and the moccasin game. Another female consultant mentioned that warrior society meetings might have been held nearby. This "could have been the connection to our Canadian nations."

Subsistence activities and travel rely upon the weather. Within many Native American cultures there have been developed folk wisdom systems regarding weather and weather prediction. One of the female consultants mentioned that her uncle would come to this area in Pictured Rocks to "read the rocks [that were washed up along the beach] and tell how the winter was going to be."

Seasonal Mobility. The Ojibway followed the seasons every year, moving to different areas where they could collect the resources they needed. According to a male consultant, Ojibway would gather in this area during the spring and fall for fishing. The same consultant observed some Ojibway from as far away as Lake Nipising. Also in the spring, some Ojibway from the Pictured Rocks area would travel to the other side of Keevenaw Bay to gather. These people would head inland in the winter.

Central to mobility for Ojibway are land and water trails. Many of these trails are quite old. And others have been turned into roadways by state and local governments. Land and water trails connected villages within the park area to other villages around Lake Superior, on islands within the great lakes, and villages further inland. All rivers lead to a lake or larger body of water. This makes all rivers potential water trails. In order to use water trails, some form of canoe was used, mainly birchbark. But at least one consultant mentioned that a large dugout canoe could hold eight rowers. The shoreline itself can be seen as a trail. These trails would be good for trading activities.

Trails were not merely roads. They were the physical manifestation of the links between people, places and resources. They facilitated the movement of the people to different areas for hunting, fishing, trading, and collecting resources. Moreover, ceremonies and/or other rituals were performed along a trail. On land trails, "ceremonial lodges were built along the way also they would plan to have ceremonies in appointed places" a female consultant said. Also, Ojibway people would hide stashes of tools along trails to be used to build camps.

Migration stories speak of the Ojibway following the megis shell. The consultants when speaking about seasonal mobility and why they moved around for hunting, fishing, ricing, and ceremonial activity sometimes made reference to the megis shell and its presence on particular shores of particular bays and islands or along certain trails. One female consultant mentioned that Ojibway would have come to the park area or any area looking for megis shell, which are still used ceremonially.

Ceremonialism. The Au Sable Dunes according to Ojibway consultants is also a sacred area. According to one consultant, the rocks and the dunes were "former lake animals." Such a transformation being mysterious by nature points to the possibility that medicine power would be quite strong in this area. Moreover, the sites at Pictured Rocks are remembered as ancestral sites, making them places to go for ceremonies. The Pictured Rocks area is also a spot along the migration path, which for the Ojibway is linked to the creation stories. A male consultant expressed the dunes were close to the Creator, making it a spot for ceremonies.

The presence of megis shells on the shores of Pictured Rocks also increases the importance of the area. One female consultant noticed the presence of Grandfather trees in the park area. As there are not many stands of Grandfather trees left, the park becomes even more important in preserving these trees. Another significant issue stems from the use of the area for meetings among the various chiefs of the Ojibway. One Ojibway consultant also mentioned that there are many burial sites in the area.

Various ceremonies took place in and around the vicinity of the park. Such ceremonies included water ceremonies, healing ceremonies, drum ceremonies, Mide ceremonies, ceremonies for fishing, hunt-

ing, gathering, and for the seasons. Other ceremonies included women's ceremonies; these were for women only and required special lodges. Fasting and puberty ceremonies, coming of age ceremonies, seclusion, birth, and naming ceremonies occurred also in the park. One male consultant said, "There was a trail running up the edge of the dunes, like in Sleeping Bear Dunes. It was a test for puberty."

Nearby mountains also figured into ceremonial landscape. For example a female consultant mentions both White Pine Mountain and Old Baldy Mountain south of Bad River. Both mountains were used as strategic lookout points and as places for spiritual fasting. Another female consultant mentioned the Porcupine Mountains and the Pinocchio Mountain Range as an area for "living for vision" and fasting. When speaking about other connections that the park enjoyed, a female consultant said, "In certain places you go to, you receive signs that help guide the people. This place is one of them." Another consultant asserted that the Ojibway of Lake Superior were all created on Mackinaw Island. This would connect all points of Lake Superior Ojibway settlement and ceremony to Mackinaw Island.

"There are plenty of stories associated with this place [Pictured Rocks] and its trails and people who lived in the area," one male consultant said of the Pictured Rocks area. He also said that there were songs associated with the Au Sable Dunes and the pictured rocks themselves. Unfortunately the consultant could not remember any of those songs.

Madeline Island is a special ceremonial place. It is a sacred site that draws people from all over the Great Lakes region. One female consultant spoke of Madeline Island that "all the people came from there." Though the Pictured Rocks area is not directly adjacent to Madeline Island, Ojibway peoples traveled frequently around the Great Lakes area. In canoes, following the south shoreline was a major trail between the Pictured Rocks area and Madeline Island.

Apostle Islands National Lakeshore

Landscape interviews were conducted at Oak and Outer Islands. A total of six female and three male consultants responded to the landscape questions. Two elders visited the islands on the first field day but, due to ill health, were not able to complete this interview.

Settlement and Subsistence. Consultants interviewed using the landscape instrument reported that all the islands were used and had seasonal camps but were not permanently inhabited. Madeline Island, on the contrary, constituted the major inhabited center of the region and functioned as the ceremonial, political, and economic fulcrum for the region. In particular, consultants reported that regional councils for ceremonial and political purposes were held on Madeline Island every spring. People from various bands would then stay on for the summer in the Apostle Islands area. Madeline Island played an important role also in the history of Ojibway relations with the government of the United States of America, because it was there that the Treaty of 1854 was signed.

Responses evidenced a pattern according to which the islands closer to the mainland were generally inhabited for longer periods of time than those further from the shore. This is consistent with the location of burial grounds that were usually placed on islands immediately along the mainland. Consultants also stressed that environmental constraints and uneven resource distribution both spatially and temporally, forced Ojibway people to constantly move from island to island, to the mainland, and to places further in the interior. The islands, for instance, constituted a good source of various berries, although gathering activities started here later (August) in summer in respect to the mainland (July). Different berries, however, ripened at different times of the year, so Ojibway people came to the islands to gather strawberries earlier in the summer and other berries in the later summer months. All consultants stressed their ancestors' role in maintaining the berry patches flourishing by practicing annual controlled burning.

In addition, Ojibway people utilized the Apostle Islands for fishing activities, the collection of medicinal plants, wild rice, hunting, and quarrying. A female consultant recalled that her grandfather used to come to the islands for medicinal plants. Consultants reported that not only Ojibway but also Menomonee and Potawatomie people used to come to the islands for berries in historic times.

Seasonal Mobility and Migration. Because of the large number of resources utilized for their subsistence, resident Ojibway people traveled long distances in order to obtain them. A consultant recalled that in her husband's family, people used to go to Ontario, Leech Lake, various places in Minnesota, and to the Bad River sloughs to gather rice. Consultants' ancestors traveled until recent historic times on a trail that led from Lac Courte Oreilles to Odanah every year, as well as on a trail that went from the Bayfield to Lac du Flambeau and to the Fourteen Mile Point that functioned as a burial site for band chiefs. On the other hand, numerous Ojibway bands from the entire Lake Superior region utilized the Apostle Islands especially in the summer for berries. Interestingly enough, one of the consultants delineated a pattern of residence for Ojibway people where geographic features were used to establish societal structures. According to this interpretation, every headwater around Lake Superior corresponded to a band, and riverways constituted major settlement areas for Ojibway people as well as major venues of transportation and connection between places. Furthermore, a focal item in Ojibway religious practice and ritual life, copper, was extracted from certain areas such as the Ontonagon River, Wisconsin. Once consultant told us that the people who lived on that river were the keepers of the copper boulders and that when their chief revealed their location to White miners and allowed them to take the copper away the community disintegrated.

Ojibway consultants emphasized the regional and seasonal movements undertaken by their ancestors. Of particular importance from the point of view of their historic migration, Ojibway consultants stressed the role of Ishpanim, Mackinaw, Sault St. Marie, and Kiwadin as stopping places and milestones of Ojibway westward progression. In addition to the places mentioned above, consultants reported that resident Ojibway people were connected with the Fox River and the bands living on the St. Croix River by a combination of land and water trails. Many of the original land trails have been transformed into the contemporary road system. Different roads were used at different times of the year. In winter Ojibway people used ice roads between the mainland and the islands, while in the summer a series of water trails connected the camps and the other places on the islands and along the coast. Water trails were often marked by net-setting patterns, as well as by particular features on the shoreline of the mainland and of the islands such as peculiar rocks and trees along the shoreline. An example of this latter category was reported by a consultant who reported the existence of a particular tree at Grand Portage named "witch tree," used in navigation along Lake Superior. Trails, furthermore, would be different at different times of the year, and would vary in conjunction with safety issues linked to weather patterns and to warfare activities in various areas.

The interviews also show different dimensions of the migration lore. These dimensions are expressed ceremonially and through songs where intrinsic characteristics of the place and connections between places are chanted. Consultants reported that numerous songs existed about the Apostle Islands as well as about particular portions of each island, and that some songs expressly mention sites such as Madeline Island or the Frog Basin. Songs often relate to specific physical trails while at other times they refer to spiritual paths, and Ojibway people know of trails used by spiritual beings called "Little People" who travel on a route from Nova Scotia to the present location of Ojibway people.

Ceremonialism. An analysis of Ojibway consultants' responses to the questions elicited through the landscape instrument highlights the ways in which Ojibway have historically conceptualized the territory and its morphology, as well as a divine path that legitimizes Ojibway occupancy of particular portions

of the land. According to Ojibway cosmology, the Apostle Islands are the result of a battle between two of the primordial beings: Nanabozho and Beaver. For reasons not explained, Nanabozho was very mad and chased Beaver throwing at him chunks of earth and pieces of the dam that Beaver had built. Those chunks of earth became the Apostle Islands.

Once the land existed, Ojibway began following the movements of the Megis shell that appeared in several areas bringing to the people specific messages. According to the consultants interviewed at Apostle Islands, the shell appeared for the last time at Turtle Island and at Madeline Island, and the latter became the center of the Ojibway nation. Madeline Island, however, not only became a ceremonial, political and economic center, but also constituted the place from which Ojibway people further penetrated into the interior in all directions. Consultants also pointed out that the migration from the east of the continent was a continuous movement of people that generated a fragmentation of Ojibway bands into smaller units. One consultant reported that 83 bands originated from the "hearth of Madeline Island" as a consequence of this fragmentation. This ethnographic interpretation is consistent with Hickerson's (1974) interpretations of historical documents.

Consultants reported that the last portion of the westward migration occurred along the shore of Lake Superior. The coastline morphology and the natural peculiarity of given places such as Grand Island, the Pictured Rocks, and the Sault St. Marie, are interwoven in Ojibway cultural history as an intricate narrative of people's connections with specific places, their landforms, and the associated resources. In this cultural landscape, coastal peculiar landforms acquire the power of markers of common Ojibway identity by constituting the major gathering centers at specific times of the year in conjunction with particular resources offered by each location. Many of these connections between people and the land are celebrated in songs, several of which refer to the Apostle Islands and Madeline Island, as well as by the spirit of the drum that, being the heartbeat of the earth, links the land with people and other beings. One female consultant reported that Midewiwin songs were connected to the Apostle Islands, and that people are connected to particular places through language, stories, and songs.

Interviews with consultants at the Apostle Islands highlighted the primary role of Madeline Island as crucial center for the ceremonial life of Ojibway people of Lake Superior. One consultant asserted that the drum utilized by the Midewiwin society came originally from Madeline Islands, and that Madeline Island represents the center of Midewiwin religion because the ceremonial lore was given to the Ojibway people on this island when they first settled there. On Memorial Day a four-day long ceremony is held on this island for the ancestors, and prayers are given to the seven directions (north, south, east, west, down, up, and inside).

Various ceremonies were held at that location especially in the spring and in the summer, although other islands were used for specific ceremonials. Little information has been elicited about the ceremonial use of the Apostle Islands, although one consultant reported that Stockton Island was associated until recently with particular rituals, and that islands closer to the mainland were used as burial sites.

Voyageurs National Park

Landscape interviews were conducted at Sweetnose Island. Seven male and four females participated in the interviews.

Settlement and Subsistence. Although in later historical times most of the people inhabiting the current park area and its surroundings were Ojibway people, consultants reported that their ancestors had to contend the territory and its resources with other tribal groups. The Cree occupied portions of land north of

it, and Dakota people lived in the region southwest of Rainy Lake. Consultants reported that the latter group used to inhabit the park's area but was pushed westward during the Ojibway expansion.

According to consultants' information, Ojibway population density was higher along the southern shore of Rainy Lake, although people constantly moved from place to place in a vast range of land. The information provided by Ojibway consultants evidences a linear pattern of migration, at times circular visiting the same spots at different times of the year, and at other times utilizing resources from places not necessarily on a regular basis. Because some of the areas around the park were often contested and unsafe, it is understandable that traveling routes and seasonal migration patterns would be subject to a certain degree of variation. Consultants reported that such patterns were also influenced by climatic variations that rendered certain areas impracticable at given times of the year.

The park area was used by Ojibway people for many types of resources. As argued in the historical analysis of Ojibway occupation of this park, not only the band, presently called Bois Fortes, drew its subsistence from this portion of land. In addition to the band from Nett Lake, Ojibway people from Seine River, Lac La Croix, Vermilion Lake, Red Lake and Lake Superior have historically used the area comprising the current park. The activities drawing Ojibway people thither depended on the seasons. Sugar camps were set up in the spring in conjunction with fishing activities and the spawning season. Ojibway people would fish in shallow waters using spearing techniques and then dry their catch or smoke it. Types of fish caught included walleye, northern, white fish, suckers, bass, walleye, northern pike, and perch. In the summer people came to collect berries, and at the end of each season controlled burning was carried out, while wild rice was gathered in the fall especially at the Rat Root River in the Black Bay and at Cranberry Bay. Earlier in the season rice would be ready for collection at Nett Lake, Crane Lake, and Vermilion Lake where clay jigs for rice can still be found today, while later, people would come north to this area.

Deer, moose, beaver, mink, otter, marten, and fisher were hunted in winter, a season when dogwood was also collected. Dogwood is an abundant resource locally used to make wigwams. Consultants also reported that some farming was also carried out, although its importance in the general subsistence cycle was minimal. Ojibway people also used some mineral resources present in the area, and in particular a local soapstone or steatite used for the production of ceremonial pipes. At times, however, resident Ojibway would travel to southwestern Minnesota to obtain this material. In that region they would also trade with Dakota people for horses.

As extensively indicated in the analysis of specific sites in the park, various places were used by Ojibway people as ceremonial sites, both for large gatherings as well as for family rituals such as naming ceremonies. In particular, it is important to stress the relevance of the Rainy Lake area for the Midewiwin ceremonial gatherings with particular attention to Chief Woodenfrog Island.

Seasonal Mobility and Migration. As indicated above, Ojibway people inhabiting or using the park area and its vicinity traveled extensively and sometimes to very far destinations. Interestingly enough, one male consultant asserted that the Ojibway language possesses a term to define their life style, *babamadis*, which can be translated as "going around living." Ojibway people would move from the Seine River to Wisconsin, a trip that would last an entire month on average. One of the elders interviewed remembered traveling from Lac La Croix to Nett Lake, and to gather rice at Crane Lake. Various travel routes would lead north into Canada, to Red Lake, North Dakota, Michigan, and Wisconsin, Grand Portage, Thunder Bay, while others connected the Rainy Lake region to Lake Superior, and yet others would go to the Lake of the Woods as well as to the Mississippi and the St. Croix area. The watershed divider in northern Minnesota marked in general the two major travel directions towards the Arctic Sea and the Atlantic Ocean.

Travel occurred primarily along waterways in combination with portages and portions of land trails. In order to be good venues of transportation, trails were supposed to be practicable all year round, using canoes in warmer months and horses and dog sleds in the cold season. Along the waterways, a series of landforms and morphological characteristics of the territory were utilized for orientation purposes. These included rocks and trees, narrower or wider straits, and the stars. Trees were helpful not only when they stood out for particular features (e.g. when growing out of rocks), but also because the degree of exposure on the bark indicates the position of the sun and thus the directions. In addition, the typology of dominant vegetation itself was used as an orientation marker. The moon and the color of the trees, instead, were used to determine the season and the time of the year. Ojibway people deduced their position and their directions by looking at the stars and the movements of birds following those celestial bodies that shift on a north-south axis.

Ojibway people had shared trails (both land and water ones) but also possessed trails and portages that were known only to the members of a particular group, band or family. Ojibway people also followed animal trails in their hunting and trapping activities. Trails followed by animals such as bears are predictable. They follow regular patterns, whereas other game never returns on the same route as in the case of moose. Animal trails would often determine Ojibway people movements on the land, although the general pattern was the ultimate result of a combination of variables among which weather patterns, resource distribution patterns, and seasonality figured as most prominent. Similarly to the hunting trails, Ojibway people also followed fishing patterns according to specific fish species' movements. Some trails, furthermore, were laid out in ways to avoid particularly sacred or prohibited places.

All this information about trails, navigation, and traveling, was handed down to younger generations from a very early age. Children would be taken on the trails and taught how to recognize places, the stopping locations, the directions, and the modes of predicting weather changes. A consultant reported that the inclination of the moon, for example, was indicative of the amount of snow that would fall, whereas a red sunset would be followed by warmer weather. Signs of weather changes were obtained from particular features of the sun: a halo around the sun would mean the arrival of bad weather, and when the rays of the setting sun were distinctively going upward in the sky, cold weather would ensue.

Stories about all these features as well as songs constituted primary instructional instruments for educating children. Specifically, various consultants asserted that they were taught songs related to particular trails and stories about the directions. Several songs are associated with lakes and places in the park's area. They are traveling songs and stories in which particular words are used to distinguish places, and some of them are connected to ceremonial sequences, and others to hunting stories. Stories could not be told in summer and the appearance of the first leaves from the tree buds and the lake opens up (*Sagibagam* in Ojibway) would signal the end of the story-telling period. Story telling would resume when leaves begin to fall (*Binaqui* in Ojibway).

Ojibway people also possess stories about mountains, water features (lakes, rivers, falls), and specific types of rocks. A male consultant asserted that particular stories are connected to the Sleeping Giant Mountain at Stargee, and to certain types of rocks found at Kouchiching. Consultants reported that there are not only legends about these features, but that there are also certain locations functioning as receptacles of traditional teachings and language (among which a chain of mountains near Duluth). One of the stories reported by a male consultant refers to a sand bar that connects Mt. McKay in Canada to the prairies. In this story it is told that people from Thunder Bay walked all the way to the western grasslands before they had canoes, and that along that sand bar they fished and hunted. This story constitutes a fine instance of how

landforms such as post-glacial moraines were used by Ojibway people as trails. The particular morphology of a moraine in conjunction with fish and venison along the way must have constituted an important avenue of westward travel.

Ojibway people also traveled extensively in order to visit relatives, to participate in ceremonies and social and political gatherings, as well as to exchange commodities with relatives, other indigenous groups, and Euroamerican settlers. In winter, in particular, trading activities were important sources of items such as flour, sugar, and tea.

Songs and stories combined in a unique narrative inform about the place, the animals, the plants, the associated ceremonies, and the spiritual aspects connected to a trail or a stopping location along the trail. This is consistent with the information provided by a male consultant who referred to particular ceremonies that had to be conducted at sites where rock paintings were found, features that would be used as well as points of reference when traveling. At times also water drums were used to represent specific trails or routes, although drums may have been used as references for other people traveling.

Ceremonialism. The Ojibway ceremonial life cycle was very intense and included personal, family, clan, and larger group ceremonies. Ceremonies conducted in the park's area included water ceremonies, rock ceremonies, and harvest of wild rice ceremonies; drum ceremonies, purification ceremonies, and rituals conducted when a child was first taken hunting. Ceremonies are central to Ojibway understanding of their connection to the land and its resources, as illustrated by the following passage extracted from an interview with a male consultant:

I could have one eagle feather and you could have another one, but it is how you use them that make them sacred. And that goes the same for the land: it is how they use it that makes the connection.

In addition to the centrality of Chief Woodenfrog Island for the Midewiwin ritual cycle, other places in the park area constituted important ceremonial sites. Various islands were used

for fasting purposes and for Midewiwin ceremonies, among which the island of Nishgongdegon on Rainy Lake (Canadian side) for springtime vision quests, Blackstone Island (Canadian side of Namakan Lake), where pipe stone was gathered, and Little American Island. Ceremonies were also held at various other locations on Namakan Lake and at Kettle Falls, as well as Pow-wows on Rainy Lake and in particular at Cranberry Bay.

Ojibway understanding of the sacred entails particular landforms and features such as islands, mountains, rivers, falls, high rocks, and low rocks. High rocks become important when plants grow on them. Such plants acquire a particular power. People from various areas use them. One consultant reported that mountains are directly connected to Mother Earth and therefore sacred. Because everything in Ojibway worldviews is connected, the holistic sacredness of Mother Earth is extended to all substances that participate in it. In this context, water assumes a crucial role of connector between all elements of creation.

A Summary of Ojibway Cultural Landscapes

It is tempting to characterize a people by the simplest criteria and to then enrich this image with detail. Were we to do that, the Ojibway probably would be called the "water people," because of the central place that water occupies in Ojibway culture. They are the people of the lakes, rivers, and the streams. These were not only the highways of commerce, but these types of water existed as living partners who nourished and informed the people themselves. For them water is alive, personal, knowledgeable, and

there to help the Ojibway forever. Bedaamwewidan (David Mosey Sam), who is an elder of the Mille Lacs Band of Minnesota Chippewa, explains this relationship as follows:

There is a reason why we live close by the water. By the water, that's the way we had to survive all our life, fishing and hunting (Mille Lacs Museum exhibit).

Ojibway consultants, young and elderly, who came to the parks in the summer of 1998 to share their knowledge with us elaborated on Bedaamwewidan's statement:

> *Water is life and in the olden days to drink water you would say: "Sacred water of life, have piety on us who want to live." This [interview conducted on a lake] is a very sacred place. By the water a person can sit and get a feeling of peace that comes from nature, creation, and the good spirits. The earth has natural rhythms and so does the water waves. In a big city you lose touch with the rhythm and even with food. The lake feeds you and this has to do with balance, while the sound of the water has a voice. There are different beings in the lake from the swamp or the river as well as animal species and spirits.*
>
> *The river was used as a road for canoe travel. Water was also used for working purposes such as chipping arrows. Water was also used for medicine — taking tree bark out and making medicine with headed small stones. In sickness, water is mixed with bark, leaves, roots, or poured on stones for the sweat lodge. It was also mixed with ashes to remove hair from hides. Water is the blood of the earth that gives us the life/blood. All things that give us life are medicine. Water is one of the strongest medicines that there are. Water is one of the four basic things in the world: water, sky, fire, and earth. Water is one of the strongest things in creation.*

Perhaps the most fascinating quality of water the Ojibway consultants spoke about is its multiplicity of meanings and uses, which in turn derives from the different places where water originates:

> *Water can be a part of the medicine and it is sacred. A particular medicine man may have a particular source of water that he would use in his medicine. He has a dream, which tells him what water is to be used for. Some cases require Lake Michigan water, other medicine need spring or river water. I use medicine and water from a place - a very specific place told to me by a medicine man. Medicine men are very specific about the source of water.*
>
> *Anishinabe are connected to water. Water was used for transportation. Water was used both as dilutant and as medicine itself. We have teachings about the water itself; how sacred it is, how it connects with yourself as a being; and how it helps you to live. The water goes up in the sky like when it is foggy and then it goes back into the ground when it rains. When we have ceremonies, we cannot get the water from the tap but only from the lake. The women have a responsibility for the water, whereas men have responsibility for the fire.*

This human-water relationship, born out of an ancient way of life, has already been noted in the anthropological literature that talks about Ojibway land and resource use. For example, Laura Peers' (1994) synthesis of Ojibway life and history in western Canada concludes that

> *To a canoe-oriented people, the Winnipeg River, the Manitoba lakes and the rivers that surround them were highways rather than barriers to movement. With no physical barrier,*

and no enemies in that direction, families from the east side of Lake Winnipeg may have customarily harvested resources on the western or southern shores long before 1780 (Peers 1994: 30).

Peers (1994: 30) summarizes European eyewitness accounts of extensive Ojibway travel by water. In the winter of 1789-1790, for example, Alexander Mackenzie reported that "Algonquins from the country between the Red River and Lake Superior (the Boundary Waters?) were frequenting trading posts around Lake Winnipeg by the winter of 1789-1790. This observation refers to Ojibway who in that season were moving northwest from their southern territories. Mackenzie, the Ojibway would travel alone or in group, the latter ranging from seven to more than forty canoes (about 40-100 individuals per canoe). Among these travelers were the Ottawa, known traders who would come from as far as Lakes Michigan and Huron into the western Canadian wilderness. These were journeys of more than 1,500 miles per canoe (Peers 1994: 31). Peers' analysis of the Ojibway' s extensive use of waterways is corroborated by John Tanner in his captivity narrative (Tanner 1994). This is just one example of how dependent these people were on navigable waters: given that they spent a great deal of time traveling, waterways were not only seen as roads *to or from* a place, but as living places in their own right.

Components of Ojibway Cultural Landscapes

Simple characterizations of a people are appropriate if the people themselves generally concur with them and if they help us move beyond archetypes to understand how the general patterns of life were and are locally manifested. In other words, characterizations should not mask variability but circumscribe it. To begin this more detailed reconstruction of Ojibway cultural landscapes the special features of Ojibway culture and society in relation to their ecosystem must be first discussed, as we have in the previous chapters.

"The earth is alive," and with this premise much of what the Ojibway say about the earth may be understood. For a living earth responds to the Ojibway much as they are expected to respond to it. A living earth knows its peoples, and will help or fail to support them depending on their expressions of respect. This respect takes many forms, from offering tobacco whenever visiting water to talking with plants that are to be picked. Respect can also be shown by removing bark from birch trees without harming them, burning berry patches responsibly, or seeking wisdom during spiritual quests at isolated locations. The Ojibway consultants who participated in this study say that when they live respectfully with the earth it sustains them.

Holy Land

The Ojibway Holy Land begins where they were created on the Atlantic Ocean, extends up the St. Lawrence Seaway where they lived during their great migration, and ends in western Canada near Lake Manitoba. The Creator, who manifested itself visually as the sacred Megis shell, gave these lands to them. The last specific place where the Megis shell appeared and talked to the people was Madeline Island in Lake Superior. All the places along the Great Migration connect the Ojibway people who scattered through the western Great Lakes region and beyond. They serve as contemporary reminders of the migration itself and the cultural identity derived from it: the sacred scrolls depicting the migration route attest to the mnemonic character of places (Figure 10.1).

The Holy Land is an area that contemporary Ojibway people may not have visited in whole. Although some bands currently reside in portions of the place chosen for them by the Megis shell (and thus the Creator), other portions of the Holy Land are more inaccessible and not visited often or at all today. Nonetheless, all portions of the Holy Land are culturally significant, from the Atlantic Ocean where they were created, to the St. Lawrence Seaway along which they traveled, to the places along the lower Great Lakes where the Ojibway lived during their holy journey. The Holy Land, unlike other Ojibway cultural land-

scapes is not defined by day-to-day interactions but is instead a place largely visited in ceremony and oral history. As such, it is much like Jerusalem for the Jewish, Christian, and Muslim peoples who today live far away from their land of origin.

distinguished from other places. And finally, landmarks can be places where mythic or historic events occurred even if no archeological remains exist at these places. And this brings us to the last lesson learned: all culturally significant resources, whether they are tangible or intangible, are connected with places and spaces. To identify and evaluate these resources, the first step is to ask, from the appropriate group of people, questions about cultural and historical connectedness.

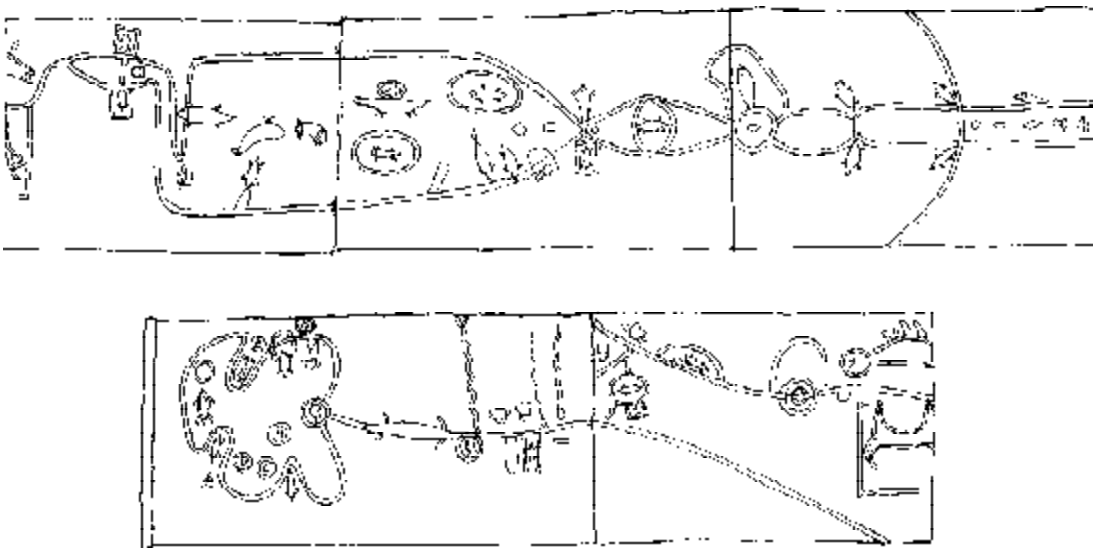

Figure 11.1 Redsky's Sacred Scroll of the Ojibway migration, from Three Rivers (upper right) to Fond du Lack (lower left) (from Dewdney 1975: 62).

Storyscapes and Songscapes

Song and stories move often along water and land trails (e.g., Densmore 1979: 178-181). So there is a close relationship between the patterned movements of an Ojibway group. The stories they tell speak about events and places along those trails. Songs may come to people in dreams or may be obtained animals or initiated people (Dewdney 1975: 5). Ritual songs and the ceremonies they belong to also have a regular movement; contemporary drum circles (pow wows) do have a regular pattern and people—pipe carriers, drummers, singers, dancers, and spectators—move from circle to circle around the Lake Superior watershed. In this modern context, songs and stories still have the power of integrating widely dispersed Ojibway peoples. It is important to remember that, while the song and story trails often lacked physical manifestations on the land or water, they were and are very real in Ojibway culture. Also important, but largely unstudied, is the correlation between trails and the stars, horizons, and forest landmarks that guided travelers.

Ecoscapes

Ecoscapes are characterized by frequent [probably many times per year] interactions between the people and places of a common ecosystem. The data provided in this and previous chapters suggest that Ojibway lifeways closely matched the resources of the bigger lakes and rivers of the region. So, in many respects, the people were held together by the lake system, economically, politically, and ethnically. For example, today there are a number of tribes who call themselves "Bands of the Lake Superior Chippewa," to indicate their belonging into a once large and powerful nation. Ojibway riverine ecoscapes, such St. Croix National Scenic Riverway, are currently under study and should provide useful contrasting data against the lake ecoscapes. A final note on ecoscapes is their being shared by several ethnic groups who derived their livelihood from it. The Ottawa and the Ojibway, for example, shared land and resources on Lake Superior for hundreds of years. Currently they continue to do so on Lake Michigan.

Regional Landscapes

If we accept the dual premises that the Western Great Lakes region is a water-centered ecosystem and that the Ojibway are a water-centered people then it logically follows that biology and culture match here. Regional landscapes tend to connect Ojibway home communities with distant places hundreds of miles away and involve multiple Great Lakes, rivers, and peninsulas. Regional landscapes are connected to each other through annual group activities, ceremonial cycle, and individual pilgrimages. In the recent past, regional landscapes were a few weeks of canoeing away and now only a few hours of driving from a central village. Sedentary reservation life and modern jobs in and out of the reservation has almost eliminated the primary need to move (subsistence). Nevertheless, traditional seasonal activities that tie people from different regions, such as ricing, fishing, hunting, berry picking, drumming, dancing, and story telling, are still a central part of Ojibway culture.

Landmarks

There are hundreds of specific places that continue to be culturally important to the Ojibway people. For this study we have restricted our discussions of such places in the Western Great Lakes. Landmarks, we learned, are places where unusual natural features (meaning those that break the forest or plain monotony) or concentrations of a particular resource occur. For example, water forms, such as lakes, rivers, streams, waterfalls, springs, and bogs, may be used as landmarks. Inland forms, such as mountains, cliffs, promontories, caves, old growth, and dunes, appear consistently as landmarks in the interviews. In addition to natural landmarks, places modified by an activity, such as burned berry patches, or cleared forests may be readily

CHAPTER TWELVE

CONCERNS AND RECOMMENDATIONS FOR RESOURCE PRESERVATION AND MANAGEMENT

As part of the site visits and interviews Ojibway consultants were asked to express their concern for each site and resources within a park unit and to suggest management recommendations that could aid NPS managers in making decisions that may affect ethnographic resources identified in this report. This chapter summarizes general and park-specific concerns and recommendations for each resource under evaluation. The reader should note that the following concerns and recommendations were made by people who do not have access to NPS documents, technical reports, or scientific studies that usually do not circulate broadly among the general public. Therefore, perceptions expressed by consultants may be oblivious to such studies. Also, at the time this study was being conducted none of the parks had produced updated General Management Plans.

The information summarized below, and elsewhere in the reports, might be useful for refining public information, park interpretation, and outreach strategies so that a better and more accurate image of the parks' efforts to preserve natural and cultural resources are made known to the public and specifically to the culturally affiliated tribes. For example, a list of technical and nontechnical reports and other pertinent documentation should be made available to the tribes so that they know what types of information regarding resources (e.g., bear or eagle studies, fish restocking, rice restoration, etc.) already exists. Of note is the additional fact that the general public, which includes tribal members, who visit the parks generally only read the brochures and interpretive signs and derive their perceptions about park efforts from these media; perhaps this report will provide the opportunity to incorporate more detailed management and preservation information in brochures and interpretive signs that is currently available to the public.

Finally, many of the Native American consultants who came to the parks no longer live in the vicinity of NPS lands, so they were unaware of certain issues of access which neighbors usually know, for example, the fact that dead and felled wood can be collected in the park. Given that each park may have different rules and regulations regarding access to resources, it will be useful for both parks and tribes to have these issues made explicit in some documented form so that they can be referred to these documents in the future.

This report was intended to provide a general, but not exhaustive, survey of ethnographic resources in regional and park-specific contexts. Issues that require more detailed information, such as kinship and descent in the case of the cultural affiliation of burial grounds, or systematic distributional information of medicinal plants within park ecozones, will require additional research. Park managers might want to keep in mind that this was in most cases the first effort at implementing government-to-government consultation with certain U.S. tribes and Canadian First Nations, and thus in time a closer relationship with such communities could be developed out of this positive response to consultation.

General Concerns

Ojibway consultants expressed this category of concerns repeatedly. They identified issues affecting all resources in the Western Great Lakes region wherein the four park units as well as tribal reservations are located.

Water

The greatest concern in all parks was pollution. Consultants agreed that pollution has made waters unfit to drink in some areas. The pollution in the water eventually finds its way into all other life forms because water is life. If life is to be pure then water must be pure. The other major concern akin to pollution was the presence of plastics and other forms of trash that people have left in the waters. In all of the parks consultants expressed concern over the disruptive presence of boats and other motorized water vehicles. These boats contribute to pollution as they dump sewage and other trash, disturb wildlife, and leak petroleum by-products.

Plants

Pollution of all forms can affect the plants. Industrial waste, trash, and other pollutants can be found in all the parks. Ojibway consultants mentioned that many times, people are the main concern because of their ignorance and disrespect of plants and other natural resources in the park. People through pollution and habitat depletion have affected the plants. Ojibway consultants also noticed the effects of drought and acid rain on plant life within the parks.

Animals

Consultants mentioned that people are affecting the animals in the parks. Too many tourists have upset the animals. Some species have adapted to people, where others have not. Consultants specifically mentioned the problem of pollution as adversely affecting the animals also. Acid rain and pesticides in some areas are making the animals sick. Moreover, when the waters and plants become polluted, the animals cannot avoid the poisons of pollution.

Fish

Just as the previous categories, the consultants expressed concern over the problem of people affecting aquatic life. Consultants noticed pollution as a major cause of damage to fish causing disease and malformation. In all the parks but the Apostle Islands, overfishing was considered a problem. In the Apostle Islands there was some concern over the quotas allowed to sport fishermen. In all the parks sportsmen and sport fishing were mentioned as damaging to the fish. Another major threat to the fish population and habitats is the introduction of exotic species.

Archaeology

There was no one category of concern over archaeological remains that were expressed in all parks. However, there are many instances of consultants wanting to be consulted about archaeological discoveries. Consultants want NPS to share with the tribes the knowledge and data collected in the past before consultation became a legal requirement for conducting archaeological excavation and collection.

Geology

There was no one category of concern about geology that was expressed in all parks. However, erosion and pollution were often cited as concerns.

Park-Specific Concerns and Recommendations

Park-specific concerns and recommendations are summarized below by resource under evaluation and by site, whenever the Ojibway consultants provided information.

Resource Concerns at Sleeping Bear Dunes National Lakeshore

Water. One consultant observed that the water is cloudy in some areas due to sediments from erosion. Another consultant mentioned the presence of carelessly discarded plastics.

Plants. One consultant felt that "urban sprawl" was affecting the plant life of the area. Another consultant suspected the depletion of the ozone layer as a possible condition effecting plants in the area. Yet another consultant suggested that there might be an imbalance in the insect populations that could be adversely affecting plants. But that consultant expressed that they were not sure if the situation was a natural phenomenon.

Animals. In this park, one consultant expressed concern over pollution. This pollution spreads from the plants to animals that eat those plants and so on down the food chain. Another consultant hopes that development will not increase in the area. If it does, then the animal habitat is reduced and overpopulation ensues. These animals (e.g., beaver and deer) then compete unfavorably with humans.

Fish. Consultants expressed several concerns. One of which is the loss of spawning grounds due to development. Overfishing is also a concern. One consultant, observing the presence of physical deformities in some fish in the area, attributes these malformations to pollution. Yet another consultant specifically mentioned PCB and PDB as contaminants threatening the fish of the area. This same consultant mentioned that the introduction of foreign and exotic species of fish into the environment has affected the indigenous species of fish. Specifically mentioned are the gobi from Russia and the zebra mussel. Also exotic species introduced by sports fishermen for their own recreational purposes are placing habitat pressure upon the indigenous species.

Archeology. In this area consultants mentioned a few conditions affecting archaeology. "Any ground disturbing activity" affects the archaeology. People are another concern. Another consultant mentioned the disturbance of burial sites.

Geology. People are affecting the geology. Specifically, consultants noted, tourists trample and destroy the Sleeping Bear Dunes, even though it is considered a form of recreation. Another consultant said that the area was not being used the way it was supposed to be used.

Management Recommendations for Sleeping Bear Dunes National Lakeshore

Platte River Basin. People who visit the site must be educated to use the resources properly and to not cause harm to the plants, animals, fish, water and land. People should remain on the trails as much as possible. Access to the top of the dunes and to the beaches should be limited. Restrictions must be placed upon motor vehicles including jetskis, cars, boats, snowmobiles and quads. These vehicles not only disturb the natural environment but also disturb the spiritual integrity of the site. The numbers of people and tourists visiting the site and using the resources should be controlled. Finally, the National Park Service

> *should allow Indian people to use the dunes for fasting at different times of the year, usually when snow has fallen on the ground.*

Bass Lake. No motorized vehicles or motor boats should be allowed at the site. Non-natives should stop interfering with everything, for example, tagging animals. Catch and release policies should be in

effect. No excavations should be allowed. Numbers of visitors and their activities should be limited. The pH of the lake should be monitored. Hunting should also be limited.

North Manitou Island. Due to the spiritual importance of the site, the numbers of people and their activities must be limited at this site. The quality of the water should be monitored. The people visiting must be educated about the importance of the fish, the cedar, and the sacred plants. Possible overfishing of trout in the area needs to be brought to people's attention. Motorized vehicles such as boats, quads, and snowmobiles should be altogether eliminated. Foot traffic on the island should be sharply reduced.

Resource Concerns at Pictured Rocks National Lakeshore

Water. One of the specific concerns at the Pictured Rocks is the presence of an overabundance of algae in the springs and streams. This same consultant also felt that "people riding boats and throwing trash into the lake" was a problem.

Plants. A female consultant in this park felt that the plants should be shown respect by not throwing trash around. The problem of trash exists due to ignorance, to lack of education about the delicate environment, and to the dominant view that the park is primarily for recreational use. A possible solution to these problems suggested by one of the consultants is to limit access to the park. Another female consultant observed that the "blueberries are dry this year and there is a lack of burning. … Berries need to be burned." This statement reflects an intimate knowledge of plant resources and management. Yet another female consultant concurred that the berries need to be burned.

Animals. Several concerns were expressed over animals. Deer have been poached. A female consultant mentioned that noise pollution combined with the "intrusion of society" caused the animals to emigrate.

Fish. Affecting the fish of the area are too many sportsmen who damage or steal (Ojibway) nets. One consultant felt that overfishing was a problem. However, another consultant felt that the fish population was high.

Archaeology and Geology All consultants that responded to this question in the Pictured Rocks cited erosion as a major concern. One consultant felt that changing atmospheric conditions are causing problems with the tidal cycles. The same consultant also felt that dams affect archaeological site condition as well as people using the area. Another consultant mentioned the Sault Ste. Marie locks and dams specifically as the culprits. Yet another consultant observed many stones have been uncovered due to the erosion caused by the rising and falling water levels caused by the locks.

Management Recommendations for Pictured Rocks National Lakeshore

Hurricane River. The NPS need to be sensitive to the pollutant levels in the area. Logging should not be allowed. One Ojibway consultant would like a study conducted to ascertain the cause of the declining perch population. An archaeological study of sensitive areas should be conducted, and the information should be shared with the tribes. Tourists should be controlled, and all development stopped.

Sable Falls. Here human traffic should be limited; motorized vehicles and development stopped.

Beaver Basin. Water quality should be tested and monitored. Acid rain and DDT were considered threats to the site. People who visit the site should be educated about the sanctity of the site, animals and plants. Their ignorance and disrespect are destroying the site. Woods where medicine is collected should not be labeled for fear that others would strip the plants. Trees should not be cut or destroyed.

The presence of graffiti at the Beaver Basin caused dismay among the consultants, who recommended that this practice be banned and the graffiti removed from the site.

Miners Beach. No debris or refuse from industry should get to the site. Controlled burning is necessary for the berry species. Raspberries should also be pruned. If the NPS cannot do this, then Ojibway should be allowed to come in and conduct such management activities. Commercial fishing should be severely restricted for a few years. Sport fishing should be reduced. Bear and large cat hunting should be reduced at the site. Development should be banned, and human traffic controlled. No camping grounds on the coast. Do not improve trails. Prevent increase in human traffic. Access to the shore should be limited.

Miners Castle . Erosion needs to be prevented, sandstone is very delicate. The NPS should contact the tribes directly regarding management of resources. Native American input should be sought and heeded and steps toward NPS-tribal co-management taken at the earliest possible time. The Sault Ste. Marie locks directly impact on erosion processes here. Traffic on the rocks should be restricted. Also, consultants noted the lack of Native American history of site use in the interpretive sign at Miners Castle. They would like to see signs changed to reflect their view too.

South Bay-Munising Falls. Reduce the amount of fish caught to allow natural re-population. Stop factories from discharging any waste into the lake on both sides the U.S. and Canada. Stop graffiti. Do not allow fires or bicycles in the area. Reduce the number of people visiting the site.

Overall consultants felt that the neighboring tribes should be more actively involved in the management of park land and resources. Consultants expressed that they have already established resource management relationships with the US Forest Service, specifically the Hiawatha National Forest, and that similar co-management initiatives should be pursued by NPS.

Resource Concerns at Apostle Islands National Lakeshore

One consultant acknowledged the improved condition of the park due to the efforts of the National Park Service, commenting that without the Park Service that condominiums would dominate the landscape.

Water. One consultant said that the waters were affected by air toxins. A female consultant mentioned water pollution concerns over dumped gasoline, oil, mercury from the White Pine mine 70 miles to the east and other mines in Canada; presence exotic species of plants and animals, garbage, lakeshore development, depletion of fish, and. acid rain.. Another consultant mentioned exotic species like the lamprey and the zebra mussel as problematic. She also mentioned the presence of illegal dumping, development, sewage, and the placement of cabins near the rice beds.

Plants. Consultants mentioned that air and water pollution is affecting the plants of the area. Again the presence of cabins near the rice beds was mentioned. Also the paths that were built in the park are considered unnatural and adversely affecting the plants. Another consultant observed that the ecosystem was quite different before intense logging. Furthermore, waves created by boats disturb the rice beds and tear up the root systems of wild rice

Animals. People are affecting the animals. One consultant noted that there are not many animals in the islands. This may be due to migration from the presence of too many people. The same consultant felt that tourism was to blame. “Tourism should be monitored,” a male consultant said. Another consultant mentioned toxic sludge sites that are affecting the deer and the human population. Another consultant ob-

served that squirrels have become too tame due to human influence. Lack of selective hunting within the park causes overpopulation; bear, for example, are very small in the islands.

Fish. Concerns over fish ranged over issues of pollution, toxin levels in the fish, underwater logging, sportsmen, and the introduction of exotic species. One consultant spoke of the condition of specific fish species. In her opinion, the whitefish are well. Walleyes are doing poorly due to the fact that mercury from copper smelting has accumulated in their muscle tissues due to their carnivorous appetites. On the other hand, the trout is a fatty fish. High levels of PCB accumulate in the fat of this fish. Exotic fish species "are affecting the entire fish population and their habitats, especially the sea lamprey, the gobi, the zebra-small mussels that come over [with] big ships," one female consultant said. The same consultant also alluded to sports and boats as cutting fishing lines.

Another consultant expressed concern over underwater logging. This situation is interrupting the natural cycle of fish reproduction. Moreover, there are people who are cutting fishermen's nets. However, the consultant was quite upset that in the name of preservation, the best fishing areas were lost to the Ojibway because the rights were given to the sports fishermen. Access to fish is part of Ojibway sacred cultural heritage and not merely a method of survival. "There are sacred foods – fish, wild rice, berries, bear, turtle meat and eggs," the same consultant said. Ojibway want full access and rights to their traditional fishing waters despite the perceived priority enjoyed by sportsmen.

Archaeology. Affecting the archaeology of the Apostle Islands are people, air pollution, and atmospheric changes. The consultants did not provide much specific information in this resource. Yet, one female consultant expressed that she could not bury a relative in the traditional way near the park for fear that people would come and disturb the grave, thus suggesting disturbance of remains is a cause of concern.

Geology. Consultants expressed concern over unnatural erosion caused by rising and falling water levels due to the locks of the Sault Ste. Marie. One consultant observed damage to sea caves in the islands that are also affected by the rising and falling of water levels. The same consultant cited shoreline development and mining as detrimental. The developers put holding tanks near the lake. Sewers also contribute to erosion.

Management Recommendations for Apostle Islands National Lakeshore

Stockton Island. Again one of the main concerns was the threat of pollution. Tailings are washing up on the shore. A problem specific to this island is the health of its bear population. They are undersized and cannibal. Culling should be managed by Native Americans. Archaeological inventories should be made in consultation with the tribes. One consultant said, "stop all recreational and sporting activities." People's access to the island should be restricted.

Manitou Island. Medicine men and other natives need to have access to the site for ceremonies and for collecting medicine. There needs to be a controlled burn. Pollution, overuse, and sport fishermen are threats to the site, must be reduced or eliminated. Logging, erosion, tourists and their garbage are also hurting the island. Boats need to be reduced.

Oak Island. Pollution from factories and industry must be stopped. The locks of the Sault Ste. Marie should be destroyed. Large ships should not be allowed in Lake Superior at all. Stop air pollution and acid rain. Stop sport harvesting of fish and animals. Document and survey all species of plants and animals in the park. Allow trips for tribal members for ceremonies. Have a native traditionalist on staff (with NPS). Inform the tribes about archaeological data collected from the island.

Raspberry Island. Tourism should be reduced. Closed sections of the island need to be open to inspection by natives so they can see what is there and what can be used. These areas should also be opened to see if they are suitable for ceremonies. The purpose of the ceremonies would be to redress to the spirit world any damage caused by all humans. Boats should not be allowed to dock anywhere but only at a specific location. Trails must be clearly marked, and tourist must stay on the trails only. Make an inventory of the island's resources. Have a heightened awareness of pollution. Clean up the tailings are washing up on the shores.

Outer Island. Stop pollution from mercury used in copper smelting. Berries should be burned to improve their condition. Interpretive programs and brochures need to be rewritten to acknowledge the significance of the Anishinabe, their history and their culture. Non-commercial, non-sport fishing should take place here.

Resource Concerns at Voyageurs National Park

Water. The consultants mentioned pollution and contaminants produced by the mills that are affecting the condition of the waters. The Ojibway lament that they must drink bottled water and cannot drink directly from the lake as in the past. "Inhabitants and industries are affecting this lake's conditions," said one female consultant. Major weather changes and other global influences are changing the conditions of the water according to one of the consultants.

Plants. Two consultants mentioned that acid rain was drying out the maple trees that, as a result, have no leaves. The acid rain is giving the maples an ashen appearance. In the year of the data collection there was a strong drought also. These dry conditions made the forests quite susceptible to fire. One consultant mentioned that plants had less chlorophyll due to the action of UV rays. A consultant also noted the accumulation of dead wood in the park, which could cause a catastrophic fire. This could be avoided if people were allowed to selectively collect wood.

Animals. Three main conditions are affecting the animals of the park area. First of these factors is pollution. Second, a consultant remarked that the park was very crowded. As a result few animals could be seen. The park is too crowded and the animals do not like that. And third is the lack of respect for the animals and the environment that many visitors to the park express through their misuse and littering.

Fish. Fish are impacted by environmental pollution. One specific source mentioned was the neighboring paper mill. The Ojibway consultants have observed a startling decline in the fish population. They attribute this to pollution from the industry and from the gasoline of motor boats. Consultants identified contaminants from the air and from pesticides. The decline is also the result of overfishing, especially during the spawning seasons when fish are naturally trying to increase their populations. "Too many people are taking fish out," one male consultant said.

Archaeology. No specific concern was mentioned.

Geology. Affecting the geology of the area are droughts, fires, acid rain, and contaminating discharges into the lake, and lower water levels.. "Fires, tornadoes and catastrophes are a way for the creator to regenerate and clean up certain spots."

Management Recommendations for Voyageurs National Park

Rainy Lake. Pesticides are a problem and should be avoided at all costs. Such poisons contaminate the water then the plants then animals and people. Campers must pack out their garbage, especially plastics and cigarette butts, which were seen in the campgrounds. Access to sacred areas should be banned to tour-

ists and visitors. Natives should work side-by-side with rangers. Erosion should be monitored and prevented. Reduce boats; enforce the Jet Ski ban; prevent further gasoline contamination of the waters. Limit resources taken from the sites. Limit number of animals taken. Increase the number of rangers. The site needs more informative signs. Elders should select native peoples that the NPS should hire to help monitor and manage the lake sites.

Chief Woodenfrog Island. Here consultants felt that wolves and bears need to be returned to the islnd and hence reestablish and continue natural and spiritual cycles. There should be prevention of overharvesting of animals and fish. Fishing should be stopped every two years to allow the population to reproduce. Canoeing should be encouraged and boating discouraged. Sacred sites and areas should be off limits for those not qualified. The NPS should hire more native people. Prevent mining in the area. Monitor water quality. Monitor campfires. Surveys of plant and animal species should be conducted.

Namakan Lake. There needs to be heightened levels of awareness of natural resources. Encourage more canoeing and much less boating. Continue not allowing people to camp in sacred areas and on sacred islands. Leave the paintings alone. Leave archaeological sites alone. Decrease fishing. Conduct studies of the fish populations. Put up signs to stop wakes from motorboats near and at the rice fields. Resources need to be used as well as preserved, for example, the dead wood in the forest could be removed and used by Native Americans.

Summary of Management Recommendations for All Parks

Ojibway consultants offered a number of management recommendations common to all parks, which can be summarized as follows:

Visitor Access. Consultants perceived (and in many cases observed directly) that the parks sustain a high volume of visitors during the summer months. They suggest that visitor access to the most fragile sites could be subject to restrictions.

Visitor Education. Consultants noted that much of the impact to resources comes from the visitors' ignorance about the value and cultural significance of such resources. NPS should make every effort to educate these people about each of these parks so that they may appreciate them more.

Ranger Monitoring. Consultants recommended an increase in the number of park rangers so that visitors' impacts may be avoided and resources may be better protected.

Resource Interpretation. Consultants suggested that interpretive signs, brochures, and programs should be revised to include the Native American perspective on places and resources.

Native American Access. Consultants would like NPS to facilitate their access to remote areas and resources in the parks so that they can conduct ceremonies and collect sacred plants and medicines. Often, access is not possible due to high fees and lack of transportation.

Native American Monitoring. Consultants recommended that NPS hire Native American personnel with knowledge of traditional management practices to help monitoring and managing resources.

Information Sharing. Tribes would like to have access to information on natural and cultural resource management that has been conducted in the parks before consultation became a requirement under federal law.

Co-management. Ultimately, the desire of the Ojibway tribes consulted for this project is for NPS to establish a policy of land and resource co-management. In the opinion of consultants, NPS could benefit from tribal knowledge on resources and expertise on co-management of public lands, which has been acquired over years of interacting with federal agencies and the states.

Recommendations for Further Research

The following recommendations for further research may be suggested:

Archival Research

Tribal and local county archives need to be researched to complete the information on history of park uses that we have outlined here.

Resource Inventories

In addition ot botanical and animal studies, inventories of topographic features should be stimulated alongside archaeological research; it is our belief that Ojibway people used topography selectively and differentially and thus close attention to even the subtlest of topographies may aid in locating archaeological sites and in documenting traditional land uses.

Field Research

Given constraints of time and funding only a few tribal representatives were brought into the parks to consult about land use and resources. Perhaps the parks could take advantage of the initial contact and visit to continue bringing elders and cultural experts to the parks on a regular basis, so that the information base contained in this report may be expanded, refined, or modified as needed in the future.

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APPENDIX A

LANDSCAPE QUESTIONS

ETHNOGRAPHIC INVENTORY OF OJIBWA NATURAL RESOURCES IN THE WESTERN GREAT LAKES

University of Arizona Interview Forms
Interview Number _____ Date _____Respondent Name _____

Ethnographer's Name_____ Tape Number _____ Study Areas Site Number _____

(1) Were there Indian villages in relation to this PARK AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(2) If yes, were the villages in this park connected with villages elsewhere in the GREAT LAKES AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(3) If yes, how were these connected?

(4) Do you know what Indian people lived at or used the villages at or near the PARK AREA? (Ethnic group)

(5) Do you know what the Indian people did when they were at or near the PARK AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(6) If yes, what kinds of activities -

* fishing
* hunting
* farming
* mining activities
* gathering plants
* Gambling
* Ceremonies
* Political meetings
* Others (specify)

(7) Do you know of Indian land trails that were connected with the PARK AREA?

1 =Yes 2 = No 8 = Don=t Know, 9= No Response.

(8) If yes, can you tell me something about those trails - like

* where did trails go,
* why did Indian people travel these trails,
* were these trails somehow special to the Anishinabe? How?

(9) Do you know of Indian water trails that were connected with the PARK AREA?

1 =Yes 2 = No 8 = Don=t Know, 9= No Response.

(10) If yes, can you tell me something about those water trails - like

* where did the trails go,
* why did Indian people travel the trails,
* were these water trails somehow special to the Anishinabe? How?

(11) Do you know of any song trails or story trails associated with the PARK AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(12) If yes, can you tell me something about these songs and / or stories - like

(13) Do you know of any migration places or stories connected with the PARK AREA?

1 = Yes, places 2 = Yes, stories 3 = Yes, Both 4 = No, 8 = Don=t know 9 = No Response.

(14) If yes, can you tell me something about those migration places or stories?

(15) Do you know of any ceremonies that were conducted at or near the PARK AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(16) If yes, can you tell me something about these ceremonies?

* Ceremony #1 - place _____, when _____, why _____
* Ceremony #2 - place _____, when _____, why _____
* Ceremony #3 - place _____, when _____, why _____

(17) Do you recall or have hard about events in Anishinabe history that occurred at or near the PARK AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(18) Will you tell me something about those events?

* Event #1 - date _____, place _____, what happened?
* Event #2 - date _____, place _____, what happened?
* Event #3 - date _____, place _____, what happened?

(18a) Is there a connection between the PARK AREA and the Mountains in the GREAT LAKES AREA?

1 = Yes, 2 = No, 8 = Don't Know, 9 = No Response

(19) If yes, what mountains and how are they connected to PARK AREA?

* Mt. #1: name in English _____, name in Anishinabe _____, how connected?
* Mt. #2: name in English _____, name in Anishinabe _____, how connected?
* Mt. #3: name in English _____, name in Anishinabe _____, how connected?

(20) Is there a connection between the PARK AREA and the river and lakes in the GREAT LAKES AREA?

1 =Yes, Rivers 2 = Yes, Lakes 3 = Yes, Both 2 = No, 8 = Don=t Know, 9= No Response.

(21) If yes, what river or lake is connected to the PARK AREA and how?

* River / Lake #1: name in English _____, name in Anishinabe _____, how connected?
* River / Lake #2: name in English _____, name in Anishinabe _____, how connected?
* River / Lake #3: name in English _____, name in Anishinabe _____, how connected?

(22) Is the PARK AREA connected to the Anishinabe creation place/story?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(23) If yes, how is it connected? And where is the creation place?

(24) Are there any connections between the Anishinabe creation place and other places in the GREAT LAKES AREA?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(25) If yes, where are those places and how are they connected?

(26) Is the PARK AREA connected to any places or events in the GREAT LAKES AREA that we have not already talked about?

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(27) If yes, what other connections would you like to talk about?

* Connection #1 - place _____, event _____, connection _____

* Connection #1 - place _____, event _____, connection _____

* Connection #1 - place _____, event _____, connection _____

(28) Is the PARK AREA connected to any places or events in traditional Anishinabe history that we have not already talked about? (Use Traditional Map here)

1 =Yes, 2 = No, 8 = Don=t Know, 9= No Response.

(29) If yes, what other connections would you like to talk about?

* Connection #1 - place _____, event _____, connection _____

* Connection #1 - place _____, event _____, connection _____

* Connection #1 - place _____, event _____, connection _____

APPENDIX B

ETHNOGRAPHIC INVENTORY OF OJIBWA NATURAL RESOURCES
IN THE WESTERN GREAT LAKES REGION

University of Arizona Site Interview Form

NOTE: You must record a response for every question asked in order for data to be correctly coded

Interview Number: _____ Tape Number _____

Ethnogrpaher's Name _____

1. Date:_____

Respondent's Name: _____

Tribe/Organization: _____ 3a. Ethnic Group: _____

Gender: Male Female

Date of Birth: ___/___/___ 5a. Age _____

Place of Birth (Town, Reservation): _____ 6a. U.S. State of Birth _____

Study Area Site Number (ethnographer fill this in): _____

8. What is the name of this place in English? 8a. What is the name of this place in Anishinabe (Ojibwa)?

_____

_____

Please describe the geography of this area or elements which stand out.

Would Indian people have used this area? 1= YES 2= NO 8= Don't Know 9= No

Response

10a. (IF YES) Why or for what purpose would Indian people have used this area?

1= [permanent]LIVING 2= HUNTING 3= FISHING 4 = GATHERING FOOD 5 = [seasonal]CAMPING

6= CEREMONY/POWER 7= OTHER

8= Don't Know 9= No Response

10b. What characteristics make this place good or suitable for the activities you just mentioned? (OR Why did Indian

people perform these activities at this specific place?)

LIVING

HUNTING

FISHING

GATHERING FOOD

[seasonal] CAMPING

CEREMONY/POWER

OTHER

Is this place part of a group of connected places (Is this place connected to others?) 1=YES

2= NO

8= Don't Know 9= No Response

11a. (IF YES) What kinds of other places might this place be connected with and where are they? 1= Comment given

8=Don't Know 9= No Response

11aa. (IF ANSWERED 1 to 11a.) Comments given:

11b. (IF COMMENT GIVEN) How is this place connected to the others you mentioned? 1= Comment given

8= Don't Know 9= No Response

11bb. (IF ANSWERED 1 TO 11b) Comments given:

PLACE FEATURES (Explain you will now begin asking questions about the physical features of the place)

Which, if any, of the following features is an important part of why this place is significant to Indian people?

Feature Type 1= YES 2= NO

List and Describe each specific feature, like Waterfall, Wild Rice, Bears

12a. Source for Water 12aa.
12b. Source for Plants 12bb.
12c. Source for Animals 12cc.
12d. Source for Fish 12dd.
12d. Evidence of Previous Anishinabe Use e.g.- archeological remains, historic structures 12dd.
12e. Geological Features e.g.- mountain, spring, landmarks 12ee.

FOR EACH FEATURE PLEASE FILL OUT APPROPRIATE FEATURE PAGE

FEATURE TYPE A: WATER SOURCE (List specific feature from table on page 3)

_____

Would Indian people have used this __(Name the feature)_ ? 1= YES 2= NO 8= Don't Know 9= No Response

14. (IF YES) Why or for what purpose would Indian people have used this __Feature(s)__ ?

1= FOOD/DRINK 2= MEDICINE 3= CEREMONY 4= OTHER 8= Don't Know

9= No Response

14a. Comments:

How would you evaluate the condition of the ___Feature(s)__? 1= EXCELLENT 2= GOOD 3= FAIR

4= POOR 9=No Response

Is there anything affecting the condition of the __Feature(s)__? 1= YES 2= NO 8= Don't Know 9= No Response

16a. (IF YES) What in your opinion, is affecting the condition of _____?

FEATURE TYPE B: PLANT SOURCE (List features from table on page 3)

_____

Would Indian people have used the plants at this particular site? 1= YES 2= NO 8= Don't Know 9= No Response

(IF YES), Why or for what purpose would Indian people have used these plants?

1= FOOD 2= MEDICINE 3= CEREMONY 4= MAKING THINGS 8= Don't Know

9= No Response

18a. Comments (if given):

How would you evaluate the condition of these plants? 1= EXCELLENT 2= GOOD 3= FAIR 4= POOR

9= No Response

Is there anything affecting the condition of these plants? 1= YES 2= NO 8= Don't Know 9= No Response

20a. (IFYES) What in your opinion, is affecting the condition of the plants?

FEATURE TYPE C: ANIMAL SOURCE (List features from table on page 3)

_____

Would Indian people have used the animals at this place? 1= YES 2= NO 8= Don't Know 9= No Response

Why or for what purpose would Indian people have used the animals in this site?

1= FOOD 2= MEDICINE 3= CEREMONY 4= CLOTHING 5= TOOLS 6= EXCHANGE/TRADE

7 = OTHER 8 = Don't Know 9= No Response

22a. Comments:

How would you evaluate the condition of these animals/habitat? 1= EXCELLENT 2= GOOD 3= FAIR

4= POOR 9= No Response

Is there anything affecting the condition of the animals/habitat? 1= YES 2= NO 8= Don't Know 9= No Response

24a. (IF YES) What in your opinion, is affecting the condition of the animals/habitat?

FEATURE TYPE C: FISH / MUSSEL SOURCE (List features from table on page 3)

_____

Would Indian people have used the animals at this place? 1= YES 2= NO 8= Don't Know 9= No Response

Why or for what purpose would Indian people have used the animals in this site?

1= FOOD 2= MEDICINE 3= CEREMONY 4= CLOTHING 5= TOOLS 6= EXCHANGE/TRADE

7 = OTHER 8 = Don't Know 9= No Response

22a. Comments:

How would you evaluate the condition of these fish/habitat? 1= EXCELLENT 2= GOOD 3= FAIR

4= POOR 9= No Response

Is there anything affecting the condition of the fish/habitat? 1= YES 2= NO 8= Don't Know 9= No Response

24a. (IF YES) What in your opinion, is affecting the condition of the fish/habitat?

FEATURE TYPE D: EVIDENCE OF PREVIOUS OCCUPATION OR USE (Specifically)

_____

29. Would Indian people have used this site and/or artifacts? 1= YES 2= NO 8= Don't Know 9= No Response

30. Why or for what purpose would Indian people have used this site and/or artifacts?

1= LIVING 2= HUNTING 3= GATHERING 4= CAMPING 5= CEREMONY/ POWER 6= EXCAHNGE/TRADE

7 = OTHER 8= Don't Know 9= No Response

30a. Comments:

31. How would you evaluate the condition of this site? 1= EXCELLENT 2= GOOD 3= FAIR 4= POOR 9= No Response

32. Is there anything affecting the condition of this site? 1= YES 2= NO 8= Don't Know 9= No Response

32a. (IF YES) What in your opinion, is affecting the condition of this site?

FEATURE TYPE E: GEOLOGIC FEATURES (specifically _____)

33. Would Indian people have visited or used this __(Feature)__ ? 1= YES 2= NO 8= Don't Know 9= No Response

34. Why or for what purpose would Indian people have used this __(Feature)__ ?

1= SEEK KNOWLEDGE/POWER 2= COMMUNICATE WITH OTHER INDIANS 3= CEREMONY

4= COMMUNICATE WITH SPIRITUAL BEINGS 5= TEACHING OTHER INDIANS

6= TERRITORIAL MARKER

7= OTHER 8= Don't Know 9= No Response

34a. Comments:

35. How would you evaluate the condition of the __(Feature)__? 1= EXCELLENT 2= GOOD 3= FAIR 4= POOR 9= No Response

36. Is there anything affecting the condition of the __(Feature)__? 1= YES 2= NO 8= Don't Know 9= No Response

36a. (IF YES) What in your opinion, is affecting the condition of __(Feature)__?

MANAGEMENT AND ACCESS RECOMMENDATIONS

37. How would you evaluate the condition of this place? 1= EXCELLENT 2= GOOD 3= FAIR 4= POOR 9= No Response

38. Is there anything affecting the condition of this place? 1= YES 2= NO 8= Don't Know 9= No Response

38a. (IF YES) What in your opinion is affecting the condition of this place?

Above you identified specific features at this site. What would be your recommendation for protecting each specific feature?

39. Water Source:

40. Plant Source:

41. Animal / Fish Source:

42. Traditional Use Feature:

43. Geological Feature:

44. What would be your recommendation for protecting this place?

45. Do you think Indian people would want to come to this place? 1= YES 2= NO 8= Don't Know 9= No Response

45a. (IF YES) Why would Indian people want to come to this place?