



3 0307 00025 1556

This document is made available electronically by the Minnesota Legislative Reference Library as part of an ongoing digital archiving project. <http://www.leg.state.mn.us/lrl/lrl.asp>
(Funding for document digitization was provided, in part, by a grant from the Minnesota Historical & Cultural Heritage Program.)

Minnesota Voyageur Trails

Minnesota Department of Conservation,

Division of Parks and Recreation

320 Centennial Building

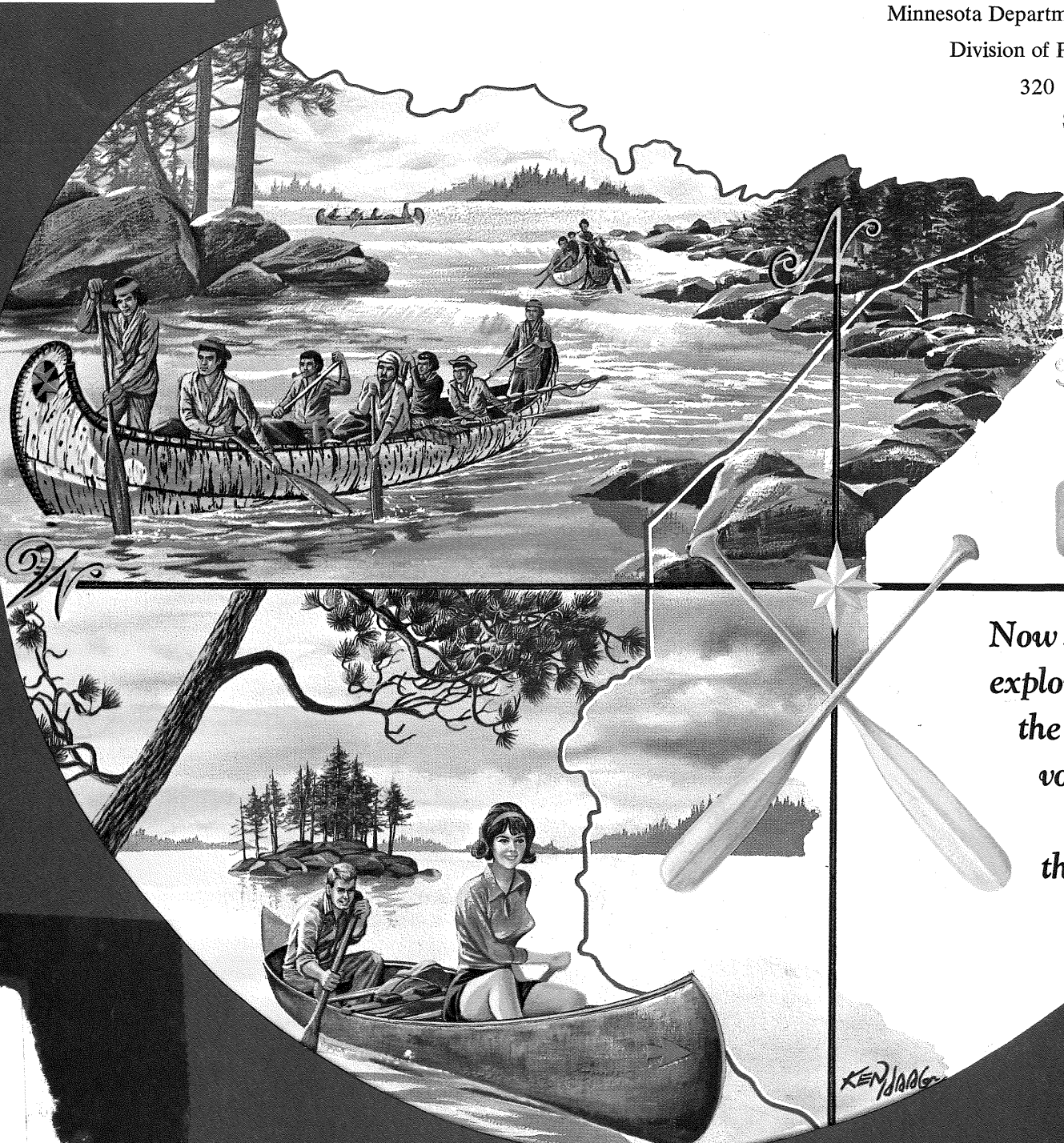
St. Paul, Minnesota

55101

LEGISLATIVE REFERENCE LIBRARY
STATE OF MINNESOTA

OFFICIAL COPY

Now... follow the paddle swish of the early explorers, traders and trappers. The way of the daring and intrepid French-Canadien voyageurs; Du Lhut, d'Esprit, Groselliers and countless others who journeyed this very water highway in the 17th and 18th centuries in search of fame, fortune and adventure or, perhaps, simply the solitude of the vast wilderness...



MINNESOTA

F
604.3
.M53x

MINNESOTA VOYAGEUR TRAILS

Prepared by the . . .
Division of Parks & Recreation
— in cooperation with the —
Bureau of Engineering
Bureau of Information & Education

COOPERATING ORGANIZATIONS

Aitkin County Park Commission
Big Fork River Trip Committee
Chippewa National Forest
Crow Wing Trail Association
Midwest Planning and Research, Inc.
Minnesota Canoe Association
Muller Boat Company
Pine County Soil Conservation District
Root River Canoe Trail Association
U.S. Geological Survey
Sierra Club, North Star Group
Superior National Forest

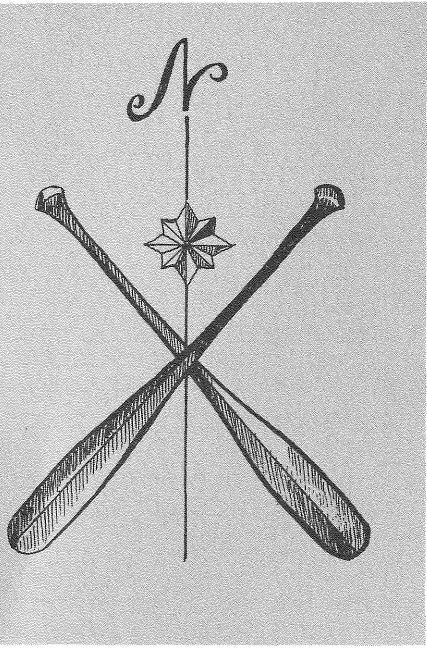
The information contained in this publication is accurate to the best of our knowledge.

Price \$2.00 per copy (sales tax included)
Documents Section
140 Centennial Building
St. Paul, Minnesota 55107

CONTENTS

FOREWORD	2
THE FACES OF MINNESOTA	3
TRIP TIPS	4
LET'S GO CANOEING	8
1. Big Fork River Canoe Trail	9
2. Canoe Country, U.S.A. — The Boundary Waters Canoe Area — Superior National Forest	12
3. Canoeing the Cannon	14
4. Cloquet River Route	14
5. Crow Wing Country	17
6. Des Moines River Trail	17
7. Kettle River Canoeing	20
8. Little Fork River Canoe Trail	22
9. Minnesota River	22
10. Mississippi River, Father of Waters	24
11. Crow River Route	36
12. Red Lake River Route	36
13. Root River — pride of the Hill Country	39
14. Rum River Canoeing	42
15. Snake River Canoeing	42
16. St. Croix River — wild river of the North	44
17. St. Louis River — wild and majestic	47

LEGISLATIVE REFERENCE LIBRARY
STATE OF MINNESOTA



FOREWORD

Minnesota has outstanding natural resources. One of these is water including 25,000 miles of streams and rivers.

An unusual thing about water is that it is indestructible if properly used.

The main threats to water are pollution and destruction of banks and shorelines.

So, boaters and canoeists who read this, please remember two things:

First, if you use the water right, it will last forever.

Second, your children and grandchildren will probably need it more for recreation than even you do.

COMMISSIONER OF CONSERVATION

THE FACES OF MINNESOTA

A Liquid Heritage

Minnesota, "the Land of Sky-tinted Waters" is rightfully proud of its water. About 2.6 million acres or about five per cent of the state's area is covered by this liquid heritage. To this we add 1.4 million acres which is Minnesota's portion of Lake Superior. Our inland waters cover an area equal to that of the combined area of the states of Rhode Island and Connecticut.

The lakes which dot the landscape are of many kinds, shapes and sizes. Exactly how many there are depends on the size at which counting begins. There are 15,291

lake basins of 10 or more acres. But if we include all the smaller waters, ponds and wetlands, perhaps 100,000 would be too small a number.

The Mississippi, Minnesota, St. Croix, Red and St. Louis rivers, together with hundreds of tributary systems, make up more than 25,000 miles of flowing water. Like the lakes, the streams differ greatly. There are the rock-bottomed, rapid streams along the forested North Shore with their beautiful waterfalls; there are placid streams winding through prairie farmland; and many gradations between. In northwestern Minnesota, many streams have their origin in the "Big Bog" that lies in the basin of the immense, extinct lake of glacial time — Lake Agassiz. The Big Bog, in this ancient lake basin, is a muskeg wilderness of tamarack, black spruce, low shrubs and springy sphagnum moss. Much of it is inhabited by moose. Streams originating in this boggy wilderness feed the Red River and by it, their waters eventually reach Hudson Bay.

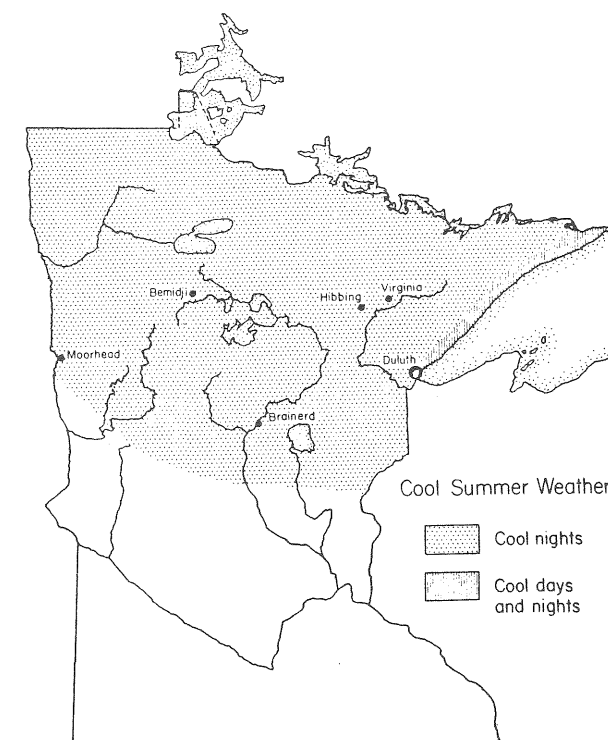
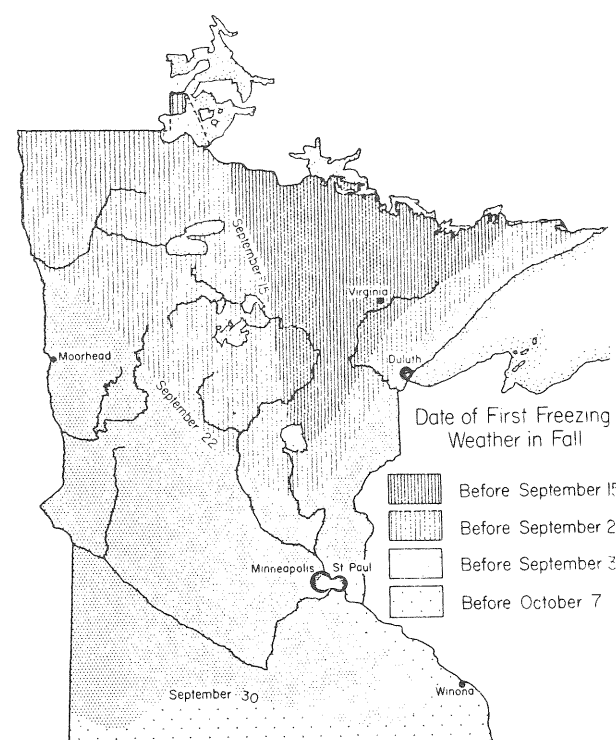
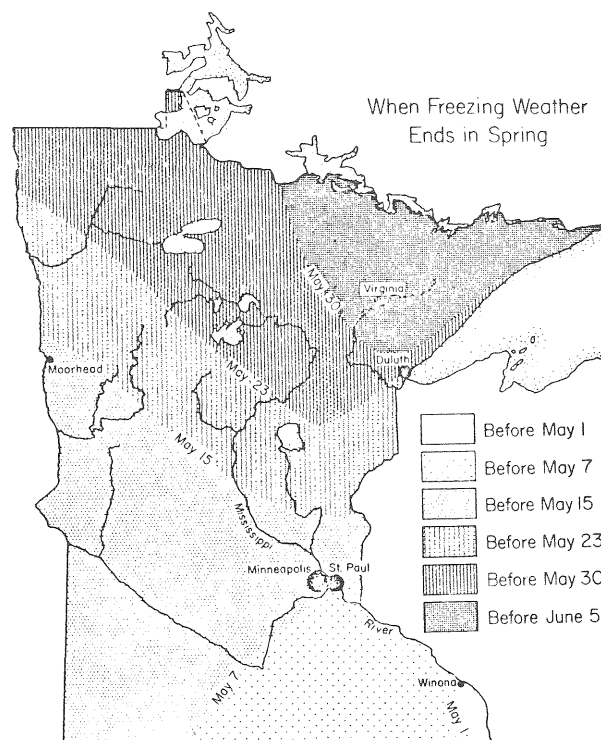
Near the Twin Cities, the Minnesota, St. Croix and Mississippi rivers join to mark the beginning of the Mississippi as a large river. Below this junction are seven dams stretching between Minnesota and Wisconsin. The pools formed by these dams impound about 119,000 acres of water, including Lakes St. Croix and Pepin and numerous backwater lakes.

The Weather

Minnesota's vast area is characterized by temperature extremes. The coldest month is January, the hottest, July. The average annual temperature is 42 degrees F, and the range from —30 degrees F, and lower, to 90 degrees F, and higher. The greatest extremes occur in the northwest. The greatest precipitation falls from April to September. The southwestern part of Minnesota has the smallest number of rainy days, the northeastern the greatest.

Wildlife

Of the native mammals originally present, all still abound in Minnesota except the grizzly bear, caribou, antelope and bison. Moose are found in the coniferous forests of the north and northeast; white-tailed deer are in every county and especially the north and northeastern one-third of Minnesota; black bear are found in the extensive northern forests; a few elk still linger in the Red Lake area. Eighteen species of mammals provide about 12,000 trappers with about 600,000 animals annually. The largest remaining concentration of timber wolves in the contiguous United States inhabits the border lakes region. Gray, and red squirrels,





Our Waterways Need Your Help

Your help is needed to maintain the natural character of Minnesota's Voyageur Trails. The Rules below are designed for safety and to keep the areas unspoiled for you and for those who follow.

- Minnesota laws prohibit cutting or mutilating live trees, and fires left unattended. They also prohibit dumping trash, cans, bottles, ashes, or garbage into public waters or on public lands.
- Standing deadwood is the best firewood. Always secure it away from shore.
- Leave your campsite neat for those who come after. It's a

- Use an air mattress or foam pad instead of cutting boughs for a bed—it's more comfortable and quicker to use.
- Garbage: burn everything possible, in small quantities. Place unburnable items in a litterbag and carry to the nearest receptacle. Cans should be flattened, scorched and carried out, or to a receptacle. Rinse and carry bottles out.
- Boil all drinking water.
- Some routes will take you through bear country. Bears can be dangerous and are attracted by food odors and garbage. Seal your food in containers and hang high between two trees, beyond the reach of wild animals.
- If sanitary facilities are not provided, dig a temporary toilet some distance from the campsite and water; fill with dirt when you leave.

Prevent Forest Fires

A good woodsman always practices deliberate fire prevention.

- If you smoke, extinguish your match; break it in two before discarding.
- A safe place to smoke is at the water's edge. Stamp out your smoke on mineral soil or rock—never in dry grass, leaves or needles.

out; never leave a campfire unattended.

- Don't trust sparks to snuff themselves out.
- Build your campfire in a safe place. Fire can spread deeply in moss and humus and break out hours or even days later.
- Drown your campfire. Turn the sticks and drown them. Make sure the fire is out.
- Keep your fire small. (Small fires, or a good bed of coals, are best for cooking.)

REMEMBER — ONLY YOU CAN PREVENT FOREST FIRES

These are commonsense rules. Please observe them. They assure a natural, safe and clean campsite and will prevent forest fires.

Preparing

The first step in preparing for a canoe trip is *planning* — where you want to go, how far, what to take and what you want to do along the way. Also, consider the length of the portages you intend to cross. How many? How fit are you and your family? Planning is necessary, but don't plan too rigidly. Leave some time for the unforeseen and plan to your ability.

A vital point to consider is water level. Parts of many river routes may be dry at certain times of the year, or extremely dangerous during spring run-off. Check points are listed with each route in this publication. Contact by mail, phone or in person before starting your trip. Local Conservation Department personnel (park managers, game and fish managers, foresters, conservation officers), resort operators, or other knowledgeable people in the area, are good contacts.

If you are planning more than a day's outing, besides your canoe, you'll need a rainproof shelter, a warm bed and nourishing food. Everything you take must be stowed securely in the canoe. If you portage, you must carry all of your gear and the canoe! So keep everything down to a minimum weight and bulk. Stick to the bare essentials for safety and comfort.

Learn to canoe before you start off on a river trip. Trial runs on a lake near home will pay handsome dividends.

Don't plan to cover more than 12 or 15 miles per day if you're new to the sport of canoeing. Experienced canoeists from the Sierra Club, Minnesota Canoe Association and the American Youth Hostels will be glad to help you get started. These groups sponsor frequent canoe outings on Minnesota's rivers.

Prepare a menu for each day of canoeing. Bring more food than you eat at home. Outdoor living increases your appetite. The economy-minded will find many convenience foods at the local super market which are light-weight and suitable for camping. Try unfamiliar camp foods before the trip. The food you bring may well be all you will have until the end of the trip. A word to the wise: Don't count on fish for any one meal.

Equipment

A sturdy aluminum or fibreglass canoe with a carrying yoke is recommended. A 15- or 16-footer may be suitable for two people, but consider a 17- or 18-foot model if you are taking children or heavier gear. The preference is yours, but consider the canoe as the most important item in your outfit.

Attach ropes on both ends of your canoe. Twenty or 25 feet of clothesline or nylon rope will suffice for lining your canoe or pulling it through shallow water. And bring some white cloth adhesive tape in case your canoe needs repair.

Take sturdy paddles for bow and stern plus a spare (it's easy to break or lose one). Ash and linden are good wood paddles for river canoeing. *Approved and properly fitted life jackets are a must for each person. Wear them, don't risk a life!*

Keep your packs light. Overloaded canoes are dangerous and everything you take goes on your back over portages. Put your food and equipment in waterproof bags to protect against rain or dunking.

Iceboxes or coolers are a practical convenience on shorter river trips. The tent must keep out rain and insects. Be sure that it will sleep all of those in your party. As there are few portages in river routes, weight is not too critical.

Be sure to bring a complete change of clothes. An unforeseen dunking is mighty uncomfortable without a complete change. Good quality tennis shoes are ideal for river canoeing as they are lightweight and dry quickly. A note to keep insects away: Blue jeans attract black flies. Almost any other color seems less attractive to insect pests.

Shorts are fine, but beware of sunburning. Bring a windbreaker; it's light and good in case of cool or windy weather.

Compass and maps are essential.

Put your matches in a waterproof box.

A pocket knife is essential and don't forget a flashlight. Stumbling around in the dark can be dangerous. *Equipment Check List*—This general list may be altered according to the time you intend to spend on your trip and where you plan to go.

- | | |
|-----------------------------|------------------------------|
| • canoe | • ice box |
| • paddles (3) | • fuel |
| • maps | • clothing (complete change) |
| • life jackets | windbreaker |
| • bailing bucket and sponge | rain gear |
| • packs or duffle bags | brimmed hat |
| • rope (50 feet) | underwear |
| • tent | long-sleeved shirt (2) |
| • sleeping bags | flannel shirt or sweater |
| • air mattresses | sweat shirt |
| • tarpaulin | slacks (2 pairs) |
| • candle lantern | shorts |
| • insect repellent | tennis shoes |
| • pocket knife | socks (2 pairs, wool) |
| • folding saw | • camera and film |
| • shovel | • flashlight |
| • compass | • plastic bags |
| • matches in waterproof box | • fishing equipment |
| • first-aid kit | • suntan lotion |
| • camp food | • sunglasses |
| • cook kit | • toilet tissue |
| • fire grate | • soap |
| • gas stove | • towel |
| • water jug (2 gal.) | • safety pins |

Packing

The Duluth packsack is an old standard for canoe trips. It has a seemingly limitless capacity, and wide carrying straps that do not pinch the shoulders. Properly

packed, it is ideal for carrying gear over portages, and stows upright in the canoe. Actually, most any pack-sack or duffle bag can be used for river canoeing. Many are adopting the Cruiser Packframes and bags to canoe camping.

Here are a few packing pointers:

- **Form a cushion by positioning soft items on the inner back of the pack. Try to get weighty items high and close to your shoulders.**
- **Organize the packs so that one or two contain clothing, sleeping bag and toilet articles and another contains food. A cardboard box slipped inside the pack will give it rigidity; a couple of plastic liners insure dryness.**
- **Arrange the contents so that the most-needed items are readily available. (For example, pack noon lunches near the top.) Tents and cooking kits don't have to be inside of a pack.**
- **All small items should be in a pack—don't have loose items. Many experienced canoeists tie their gear in the canoe. In the event of a tip-over, nothing will be lost.**

Camping Food

If there's a fussy eater in the group, wait until he's had 24 hours under the sun and stars and he gets a whiff of bacon sizzling over a wood fire!

Fresh foods are the most tasty, but they spoil easily without proper refrigeration and present weight and bulk problems. They are good only on the first day out unless you have room for an ice-box.

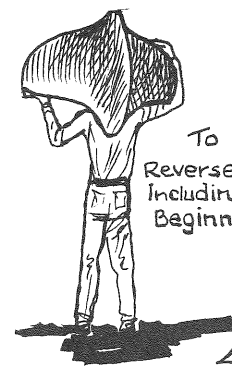
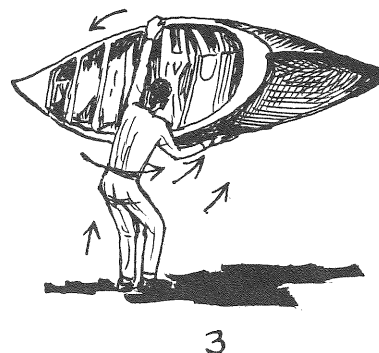
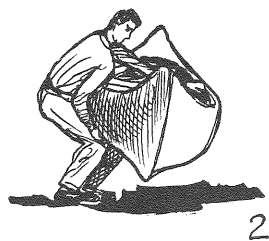
Canned foods are close to fresh foods in flavor and bulk. The major disadvantages are weight and packing problems. *Dehydrated foods* are fully or partially cooked so that the moisture is drawn off by heat. The advantage is that they are easily reconstituted by adding water or by boiling. Compared to canned food, they are very light and easy to pack. Many varieties are available at reasonable prices.

The *freeze-dried* and *instant foods* are easily prepared by adding water and have a rather true taste. Freeze-dried foods are frozen, then the moisture is removed, retaining the bulk and flavor of the food, yet reducing the weight to a fraction. There is a wide variety in cost and products available. Stores specializing in camping gear have a wide assortment of foods, but with a little imagination, much of your own menu can be found at the super market.

Portaging

Along some routes, there are rapids, waterfalls and other obstacles such as dams. Many of the portages have been used in these places since Indian and voyageur days so that journeys could be safely continued.

You can usually see a portage by a break in the tree



To Unload—
Reverse Procedure
Including Arrow Direction
Beginning with Step 4

line, or a well-worn surface at the water's edge. Use the portages. Don't take chances with rapids unless you are an expert who has carefully checked the rapids first. The voyageurs and Indians used portages, and they were expert paddlers.

There's a trick to carrying the canoe. First, place the yoke on a thwart at the point of balance, or lash the paddles under the thwarts so that the blades rest on your shoulders. Here are four steps to use for the one-man lift:

- **Tip the canoe on its side, keel facing you. Reach toward the center and grasp the yoke.**
- **Bend knees, lift canoe and slide it over your knees to your lap.**
- **Grasp the far side of the yoke with your left hand.**
- **Lift . . . and roll the canoe over and ease the yoke onto your shoulders.**

Or use the two-man lift. One man raises the inverted canoe by the gunwales at the bow seat, and the carrier slips underneath the yoke. In the three-man lift, one man at the bow and one at the stern raises the canoe for the carrier.

Don't tax your strength. Rest when tired.

When you reach the water's edge, have someone grasp the bow, and pass the canoe along your thighs and into the water, or unload it straight from your shoulders. Keep it off the ground to avoid damage. Be sure it floats free. Hold it by the gunwales while the passengers get in.

When loaded, the canoe should ride on an even keel. With weight evenly distributed, paddling is easier.

In Camp

All your perspiration, planning and preparation pays off at your campsite. The success of your canoe-camping trip hinges upon your blending into a natural en-

vironment safely and comfortably, using the least amount of effort and equipment. An early arrival will give you time to make camp, prepare dinner, enjoy the evening and perhaps some fishing. As you unpack, try to remember how items were arranged.

Don't Forget:

- **To select an open site.**
- **To leave a clean campsite.**
- **To be sure your fire is dead out — cover the fire with earth.**
- **To respect the property of others — you may want to use it again.**
- **To use dead wood, not live trees.**
- **To chop breakfast wood the night before.**
- **To keep the food pack out of the reach of wild animals.**

Use poles left by the previous camper to support the tent, or use nylon rope stretched between two trees. Try not to pitch the tent tightly; adjust the guy ropes just enough to remove wrinkles to prevent the tent from stretching. Use a few heavy rocks around the base, if the site is too rocky to use stakes.

Keep the insect netting closed except when going into or out. Sleeping bags and clothing, when taken from their waterproof bags, should be aired. It's a good idea to remove footwear before entering the tent to prevent dirt from being ground in.

A sudden wind gust could stretch an unattended tent and tear it. Close the door flaps if you know you're going fishing or exploring. . . . And extinguish that fire!

The secret when cooking outdoors is to have a hot, clear-flame fire, *kept small*. Start the fire with scrap paper and dry pine needles or fine twigs, and add larger pieces.

If fireplaces are not provided, build your fire on solid rock or sand. Never light it on duff, moss, or against a tree or log. To extinguish the fire, stir in water until the

ashes are cold to the touch. Be sure there are no hidden sparks!

If you are not skilled in using an axe to cut firewood, use a folding saw. It is safer and quicker to use for this purpose.

When you've broken camp, the packs are packed, and the canoe is ready to launch, take one last searching look around the campsite. Tent poles propped for the next camper? Did you leave a supply of firewood? Any personal property lying where it shouldn't be? All litter (even gum wrappers and cigarette packs) picked up, even if it's not yours?

That fire? You're certain it won't reduce hundreds of years of growth to ashes?

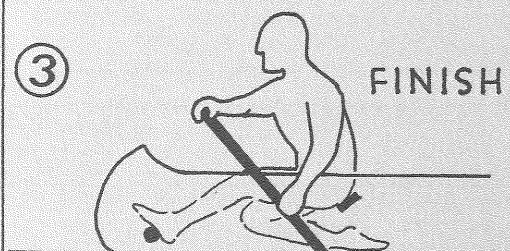
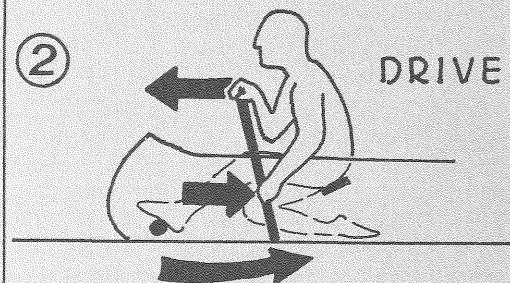
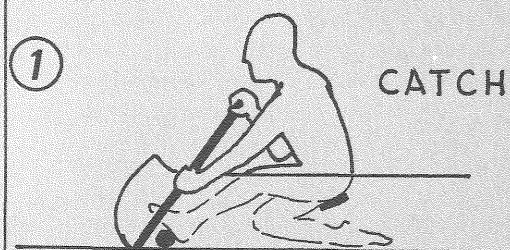
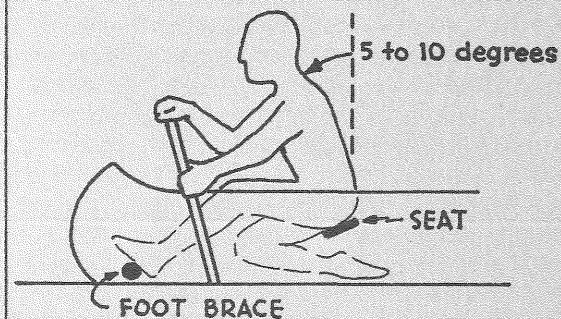
Paddling Tips and Techniques

- **Choose a paddle to suit your height and position (approximately to your nose when standing.)**
- **On flat water, the bowman is the pacesetter, the sternman is in command. The sternman paddles on the opposite side of the canoe except when turning or in crosswinds.**
- **Reach forward with each stroke and do not allow your lower hand to pass your side at the end of the stroke. The canoe may rock a little until both sternman and paddler are "tuned-in." The sternman may have to use his paddle as a rudder to prevent zigzagging.**
- **Change paddling sides periodically to prevent quick tiring of your muscles.**
- **Strokes should be rhythmic, each paddler in unison.**

The following paddling method is recommended by the Minnesota Canoe Association.

Position in the canoe — Place one foot forward and one back and under the seat to give a braced position. The angle of your back should be about 5 to 10 degrees forward. Sit in the center of the seat. A trim canoe should ride level.

THE STROKE



Paddling — Switch sides after each 20 or 30 strokes. The lower hand is the key. Swing the paddle blade forward so you are ready for the next stroke on the new side. Besides giving you a chance to rest your muscles and to maintain a maximum of strength, switching sides makes steering easier. The path of the canoe will be a slight zigzag (less than 2 or 3 feet in 50 feet).

Stroke — These are the features of the basic deep water stroke.

1. **Starting position** — Top hand is near your chin (shoulder back), lower hand extends forward (shoulder forward). Reach the tip forward.

2. **Drive** — Maintain an erect position. The top hand pushes straight forward and across and down. The bottom hand pulls back (bending your elbow). Your shoulder will rotate into the stroke. The pressure should be on the tip of the paddle.

3. **Recovery** — The blade is sliced out to the side when the lower hand is near the hip, then brought forward parallel to the water. Turn the blade back to the starting position, your lower hand reaching for the start of the next stroke.

The sternman should maintain a good rhythm and must follow the bowman's stroke and pace except under very special conditions. The total team stroke should be smooth and relaxed.

River Canoeing Techniques

There are rocks, riffles and rapids on many routes listed in this publication. They vary considerably in degree of difficulty, but even the most innocent-looking rock can mean a collision, swamping or tip-over if you are not prepared. To avoid this, the Sierra Club offers these tips.

- Pick a course and use your paddles to maneuver the canoe safely down the river.
- This means steering from the stern and the bow.
- In slow water, simple steering can be done by using the stern paddle as a rudder. Minor course changes can be quickly made from the bow by holding the bow paddle forward in the water.
- Fast water and real rapids require the quick response provided by the three strokes described below (the draw, pry and sweep strokes). To be effective, these strokes must be applied with vigor!

Draw Stroke — This is a powerful stroke (bow or stern) to move the canoe sideways. This stroke pulls the canoe toward the side that the paddle is on. Begin the stroke as far out from the gunwale as you can reach, and with the blade parallel to the gunwale, draw the paddle

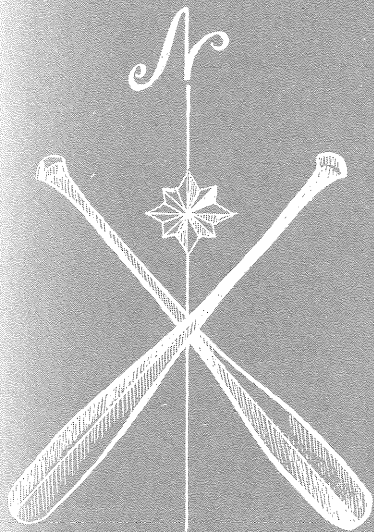
toward you. Do not cramp this stroke; hold the upper hand high and the lower arm well-extended at the start.
Pry Stroke — Another powerful stroke (bow or stern) to move the canoe sideways. This stroke pushes the canoe away from the side that the paddle is on. Start with the paddle blade close and parallel to the gunwale. Force the blade outward with the two arms in opposite motion. This is the stern's most effective stroke for movement to the side or for turning. The blade, working well toward the stern, has a powerful leverage. The pry in combination with the draw can be used to move the canoe either way without changing sides with the paddle. This is important in heavy water where maintaining stability is important.

Sweep Stroke — Used for combined power and turning, this stroke follows a wide arc. For a forward sweep in the stern, begin well out from the gunwale and swing the paddle back to finish close to the boat. The stern forward sweep traces the rear segment of the arc and in the bow, the forward sweep traces the forward segment of a similar arc beginning close to the gunwale and ending wide. The back sweep is the reverse of the forward sweep for that position.

On-the-Water Tips

- In swift current, maintain control by paddling faster than the current or back paddling to go more slowly than the current. The current can then be used to help you turn. Keep the canoe aligned with the current.
- In rapids, head for the middle of a "V" pointing downstream, but avoid the middle of a "V" pointing upstream. The first is a chute, the second a rock.
- When you hang up on a rock, and swing broadside, act fast. Shift your weight to the downstream gunwale and using your paddle, push off the rock. If that is not immediately effective, jump out on a rock or in shallow water on the upstream side. That is the best way to free the boat and prevent swamping. Don't hesitate to get your feet wet. It could save your canoe.
- Don't overload the canoe (never more than three people). Two is the limit if you're in fast water.
- Always wear a lifejacket when on the water.
- If your canoe tips, hold onto it. If it overturns, stay with it. It won't sink and you'll be glad you remembered to wear a lifejacket. Another tip if your canoe tips, keep your feet heading downriver to lessen the chance of head injury.
- Always check the rapids. "Line" your canoe down the rapids if you do not portage.
- Don't exceed your capabilities. If possible, draw into a sheltered bay in case of strong winds and heavy waters.
- If you do get caught in a heavy wind on open water, head into the waves, or go on a slight diagonal — never broadside! If you're heading into the wind, keep the bow and stern low.
- Keep the center of gravity low. Kneel if you are in rough water, otherwise use the seats.

LET'S GO CANOEING



U.S.G.S. MAPS

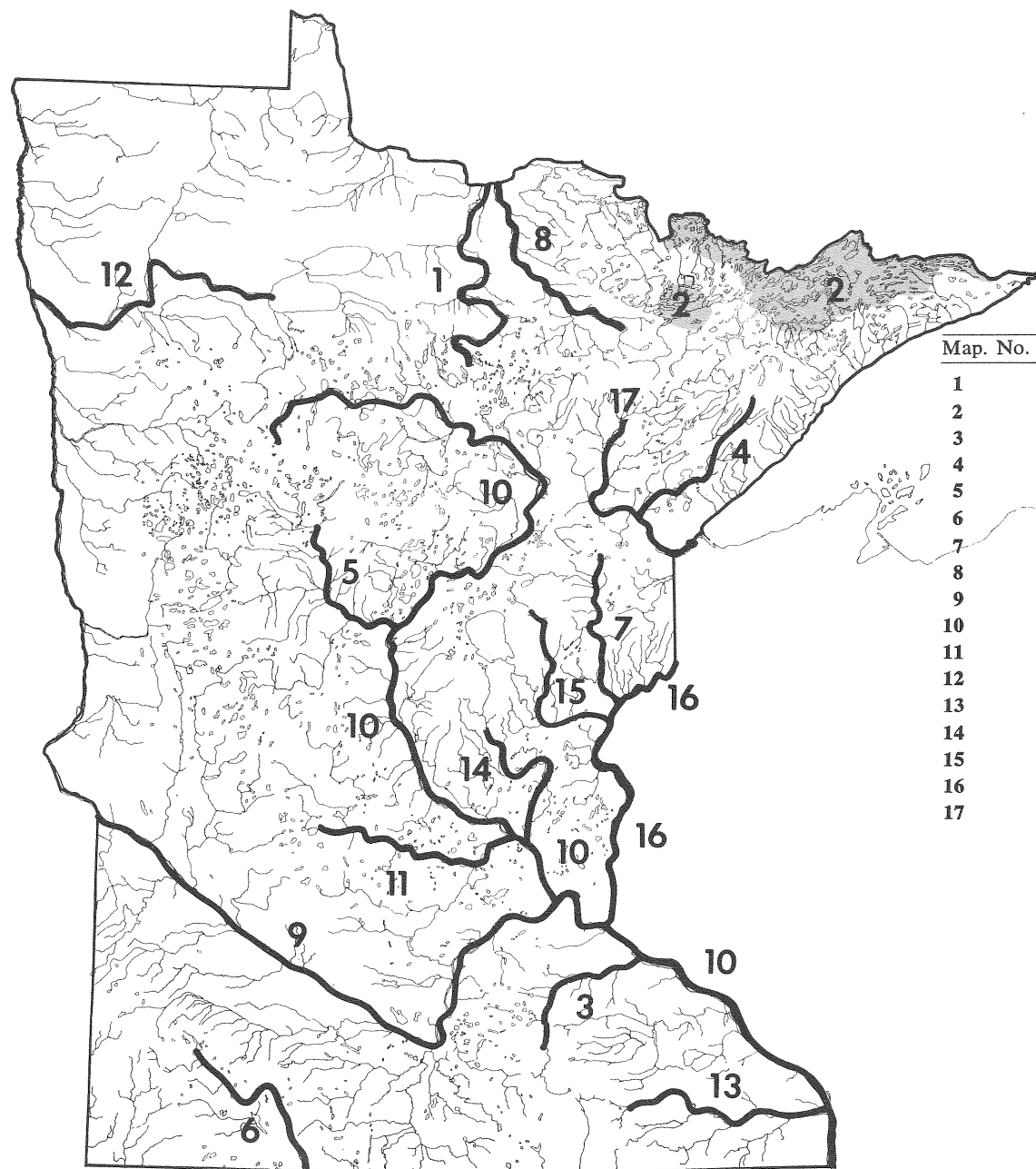
Topographic maps are available from the United States Geological Survey (U.S.G.S.) covering most of the routes in this booklet. An "Index to Topographic Maps of Minnesota" is available free from the U.S.G.S., Federal Center, Denver, Colorado, or from the U.S.G.S., Washington, D.C. Order instructions are given in the index. The maps sell for 50 or 60 cents per map depending on the size.

FURTHER SUGGESTED READING

The Sierra Club Wilderness Handbook, David Brower
Ballantine Books, N.Y.
Paperback, 75c

A White Water Handbook,
John T. Urban
Appalachian Mountain Club
Boston, Mass., 1965
\$1.50

Canoeing, The American Red Cross
Washington, D.C., 1956
\$1.50



KEY

Map. No.	Route
1	Big Fork River*
2	Boundary Waters Canoe Area
3	Cannon River*
4	Cloquet River*
5	Crow Wing River*
6	Des Moines River*
7	Kettle River*
8	Little Fork River*
9	Minnesota River*
10	Mississippi River*
11	Crow River*
12	Red Lake River*
13	Root River*
14	Rum River*
15	Snake River*
16	St. Croix River*
17	St. Louis River*

MAP LEGEND

(for detailed maps following)

- RIVER CHANNEL
- RIVER FLOW
- MILE MARKER
- ACCESS
- BRIDGE
- EXISTING CAMP SITES
- STATE PARKS
- WAYSIDE PARKS
- POINTS OF INTEREST
- HISTORICAL SITES
- GENTLE RAPIDS
- STEEP RAPIDS
- PORTAGE RIGHT
- PORTAGE LEFT

HIGHWAYS

- U.S.
- INTERSTATE
- STATE
- COUNTY
- TOWNSHIP

Where rapids are indicated on the following route, the difficulty will vary with the stage of the river and should be scouted before a run is made. Please use the contacts listed with each route for accurate and up-to-date information on river conditions. The starting and stopping points given for these routes are subject to individual choice and variation.

*Legislative designation as canoe and boating route rivers. Except for the Des Moines River map, the maps for these rivers are based on those which appeared in a special study report entitled "Recreational Study of Rivers of Minnesota" compiled by Midwest Planning for the Conservation Department.

BIG FORK RIVER CANOE TRAIL

A canoe trip down the Big Fork River is a journey into the past; retracing the route used by the Indians, fur traders, loggers and early settlers. No spot on the American continent is better endowed with the wonders of nature than the Big Fork River Valley.

Heavy stands of stately pines, massive hardwoods, somber spruce, and fragrant balsam shade the banks of the Big Fork from its source to its mouth. Sugar maples profusely cover the ridges of the Bowstring area; on the upper reaches of the Big Fork are vast fields of wild rice.

Furbearing animals including beaver are on every tributary, large or small. Waterfowl still darken the sky during migration. Although the caribou are gone, this is still moose country.

There are two portages that are mandatory at all times — Little American Falls and Big Fork Falls. The current in most places will provide moderate travel speed and paddling gives good opportunity to travel leisurely and quietly to see wildlife. There are many rocks and submerged snags.

Because water depth and rate of travel are subject to rainfall and season of the year, it is impossible to predict time between two points in advance. To help the canoeists, mile signs have been erected on the river banks.

Other contacts:

Arthur Enis, Big Falls; Woodrow Nixon, District Forester, Effie 56639, phone 218-653-2691; District Forester, Big Falls 56627, phone 218-276-3351; Albert Al-mendinger, District Forester, Loman 56654, phone 218-279-3313; Scenic State Park, John Helgersen, Bigfork, phone 218-743-3362

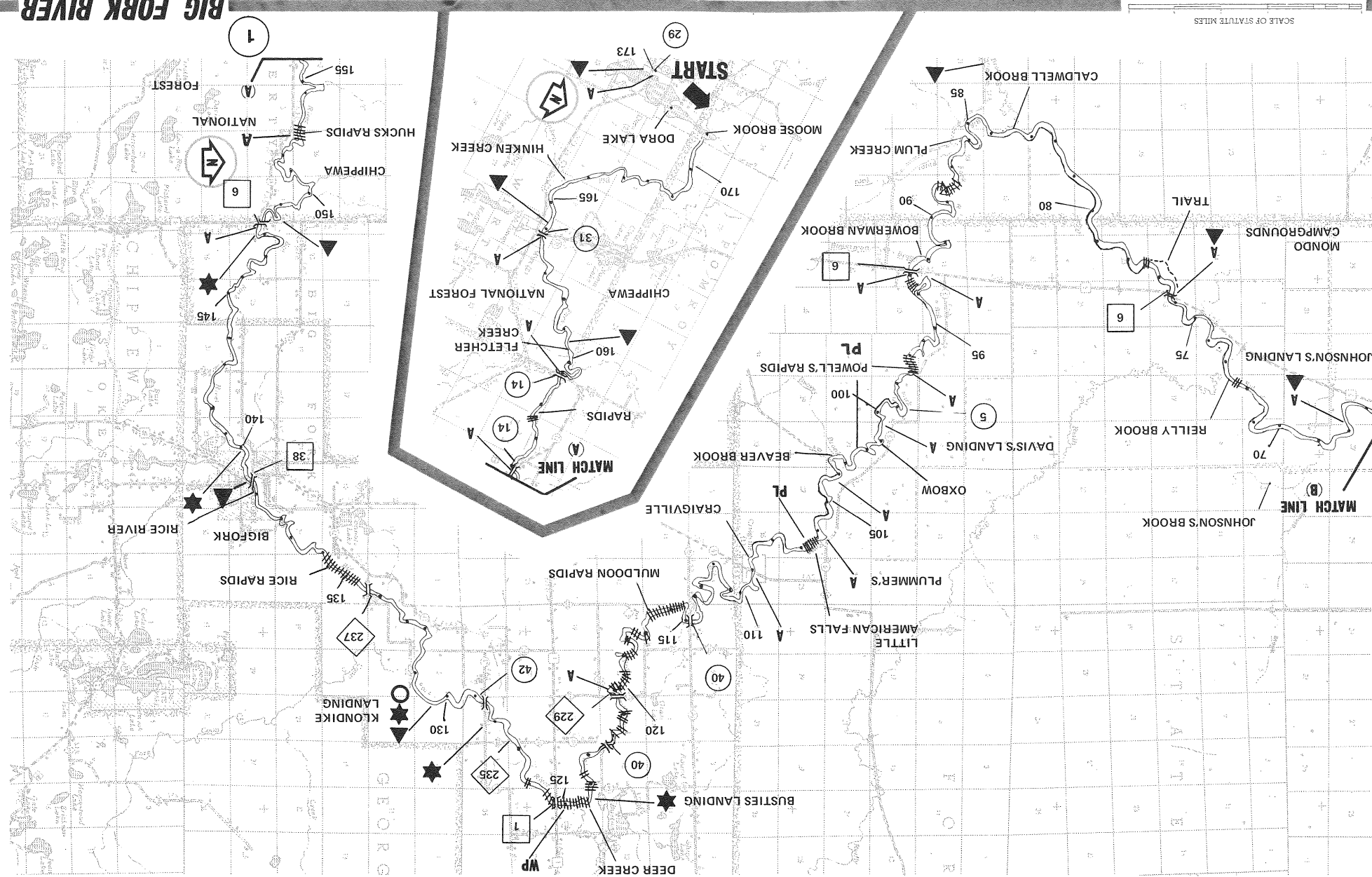
Mile	
173.0	Start of Route County Road No. 29 bridge — Dora Lake Lodge, campsite and canoe access.
171.0	Moose Brook.
165.5	Hinken Creek.
164.2	Edminster campsite, with tables and fresh spring water.
163.8	County Highway No. 31 bridge.

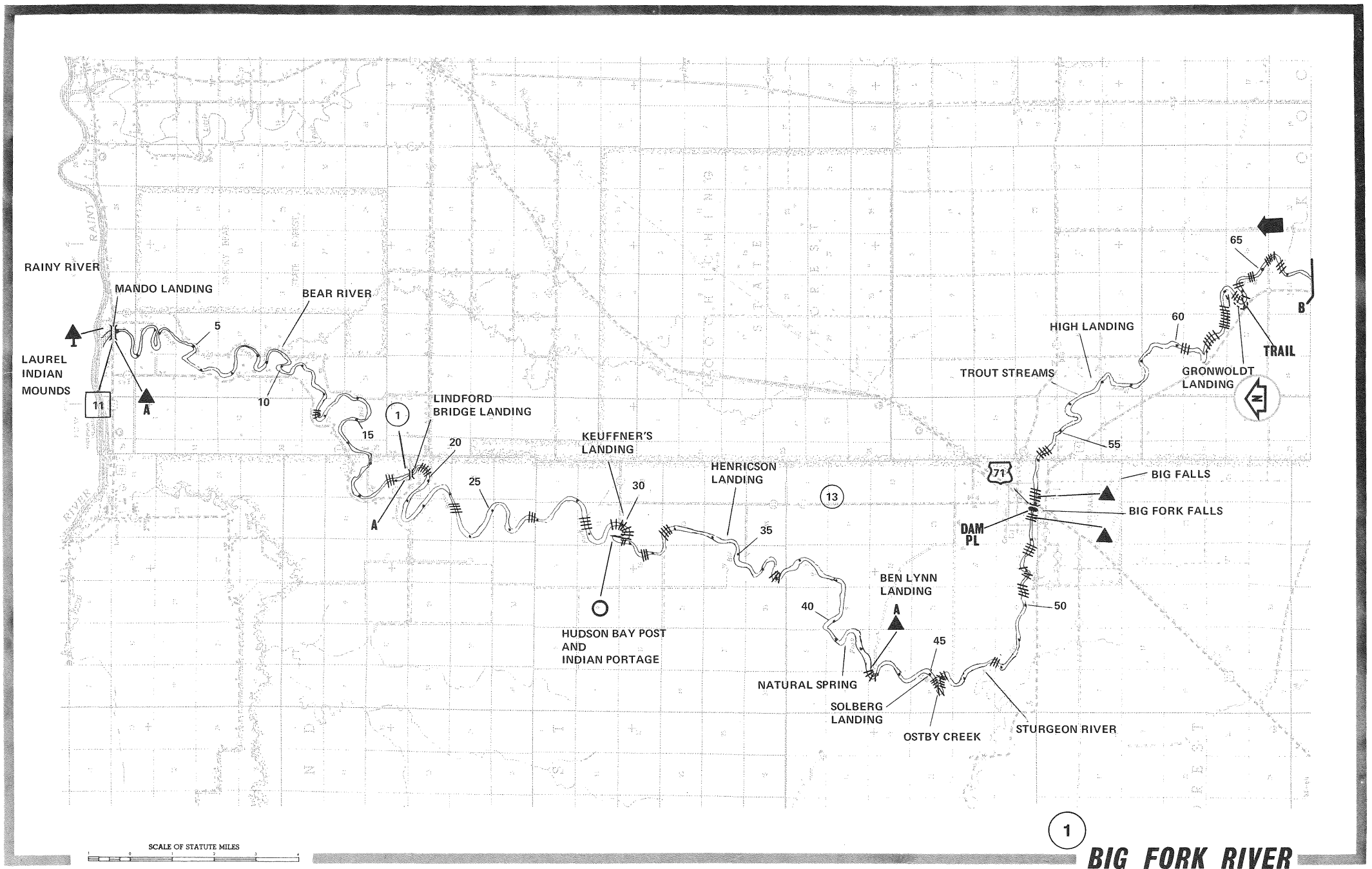
Mile	
160.6	Harrison Hill remote campground.
160.2	Fletcher Creek.
158.9	County Highway No. 14 bridge.
157.5	Robb's Rapids.
155.8	County Highway No. 14 bridge.
152.7	Huck's Rapids — Access from County Highway #14.
148.8	Tippe-Canoe Campsite. Privately owned — water, tables, tent sites, fire place. Access from road is fair.
148.3	State Highway bridge #6.
148.2	Hafeman's birch bark canoes — hand-made birch bark canoes.
139.9	Rajala Sawmill — Big Fork — One of Minnesota's largest mills.
139.4	Big Fork campground, tables, fire places. Access from road, poor.
139.3	Big Fork State Highway #38 bridge access not available.
134.8–135.9	Rice Rapids access from County Highway #42.
130.3	Klondike Landing — historic site — privately developed wooden steps, fresh water, picnic area with tables and garbage disposal area. No access.
128.6	County Highway #42 bridge. Frontier Farm — privately developed.
125.0	Roadside Park — excellent access from Highway #1, tables, toilets, trash cans, no water.
124.4	Bustie's Landing historic site of Chief Bustie.
120.3	Small Rapids area.
116.6	Muldoon Rapids.
114.9	County Road #40 — no access.
108.5	Craigville — Landing by ex-school good — access from County Road #5.
106.8	Little American Falls — portage on left side is mandatory.
106.2	Plummers access.
103.3	Beaver Brook — access from County Road #5.
101.0	The Oxbow — access from County Road #5.
100.1	Davis's Landing — access from County Road #5.
97.6	Powell's Rapids with portage on left side, access from County Road #5.
92.5	Bowerman Brook — access from State Highway #6.
86.1	Plum Creek — access from Forest Service Road.
83.5	Caldwell Brook — access from Forest Service Road.



Mile	
76.3	Mondo Campgrounds, access provided up steep banks, tables, fire places, wood, toilets and trash dump provided, hiking trail on logging road. Access from State Highway #6.
72.5	Reilly Brook — access from Forest Service Road.
67.8	Johnson's Landing and Campgrounds with access from State Highway #6. Tables, fireplace and toilet.
63.2	Gronwoldt Landing and hiking trail.
56.8	High Landing.
56.0	Trout streams.
53.0	Federal Highway #71 bridge & railroad bridge. Big Falls Municipal Park & Campgrounds — tent sites, trailer sites, running water, electricity, picnic tables and fireplaces — access excellent.
52.8	Portage is mandatory either by auto or foot provided. R.E.A. Hydroelectric Plant.
Mile	
47.5	Sturgeon River — Landing and campground with access from County Road #30. Tables, fireplaces and toilet.
45.2–46.2	Rapids.
45.3	Ostby Creek.
45.0	Solberg Landing.
42.6	Ben Lynn Landing and campgrounds with access from County Road #13. Tables, fireplaces and toilet.
41.5	Natural Spring.
34.4	Henricson Landing.
31.5–29.5	Rapids area.
30.2	Site of Hudson Bay Trading Post and Indian Portage.
30.0	Keuffner's Landing — hiking trail to remain at trading post — access from County Road #13.
19.4	Lindford Bridge Landing — County Highway #1.
9.5	Bear River — access from County Road #10.
0.9	Minnesota Highway #11 bridge.
0.0	Laurell Indian Mounds.

BIG FORK RIVER

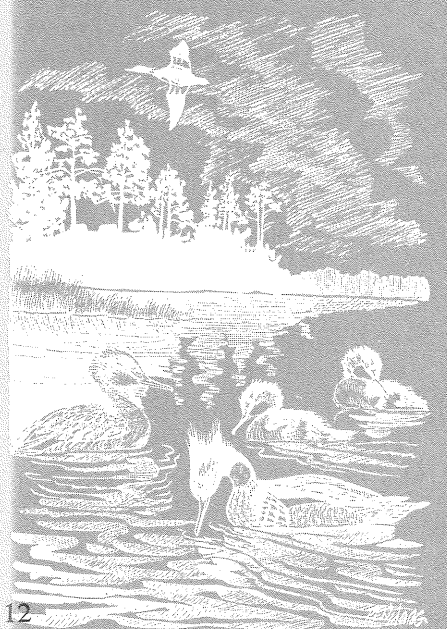




Canoe Country, U.S.A.

THE BOUNDARY WATERS CANOE AREA,

Superior National Forest



The Boundary Waters Canoe Area (B. W. C. A.) is million acres of portage-linked lakes and streams, islands, woods and crags which form the tapestry of a region where modern voyageurs can canoe, portage and camp in the spirit of the French voyageurs 200 years ago.

In the Boundary Waters you'll find yourself drawing upon your own resourcefulness and know-how in the land where the canoe is still the only practical means of transportation.

Tips for Canoeing in the B.W.C.A.

Canoeing is enjoyed from May through October. Spring weather can be chilly; in the fall, the days are short and apt also to be cool. However, early and late seasons provide the best fishing. Plus that, the lakes are less crowded.

Camping season: The regular season at campground is from May 30 through Labor Day weekend.

Reservations: None are required. Campsites are filled on a first-come, first-serve basis.

Firearms: Firearms are not permitted in adjoining Quetico Provincial Park in Canada. They are discouraged in the B. W. C. A. Shoot with a camera instead.

Crossing the International Boundary: The United States has customs offices in Ely, Crane Lake and in Grand Marais. Canada maintains stations on three boundary lakes. Check with both before crossing over by canoe.

Length of Stay: Your stay at any one campsite is limited to not more than 14 days.

Camping Limit: One party per campsite — not more than 15 persons per camping unit. This protects the thin soil and ground cover and limits the amount of clearing.

Pets: You may bring pets, but you are asked to keep them under control.

Before Entering the Boundary Waters Canoe Area...

Obtain a free travel permit in person from any Superior National Forest office or from most outfitters and resorters located adjacent to the Canoe Area.

Make sure you have a litterbag for packing out empty cans, bottles, and other nonburnable refuse. One litter bag is furnished with each travel permit.

Check your route. Outboard motors and snowmobiles are permitted only on routes designated for such use. Mechanized portaging is limited to six portages.

Your safety. Plan your trip in detail before starting. Adjust travel distances according to your individual condition and experience.

To Plan Your Trip...

There are excellent maps to help you chart your courses through Canoe Country. W. A. Fisher Company in Virginia, Minnesota, publishes durable, waterproof map quadrangles showing the Boundary Waters and adjoining country in the U. S. and Canada. They are available from local outfitters and Hoigaards in Minneapolis, Minnesota. The cost is nominal.

Contour maps of the Boundary Waters are available at a small cost from the U. S. G. S., Denver Federal Center, Denver, Colorado, or local outfitters. Portages, rapids and other features are shown.

Maps of the Canadian territory may be obtained from the Department of Lands and Forests, Toronto, Ontario, Canada. A recreation map folder that lists canoe routes and other useful information of the entire Superior National Forest is available free from the Forest Supervisor.

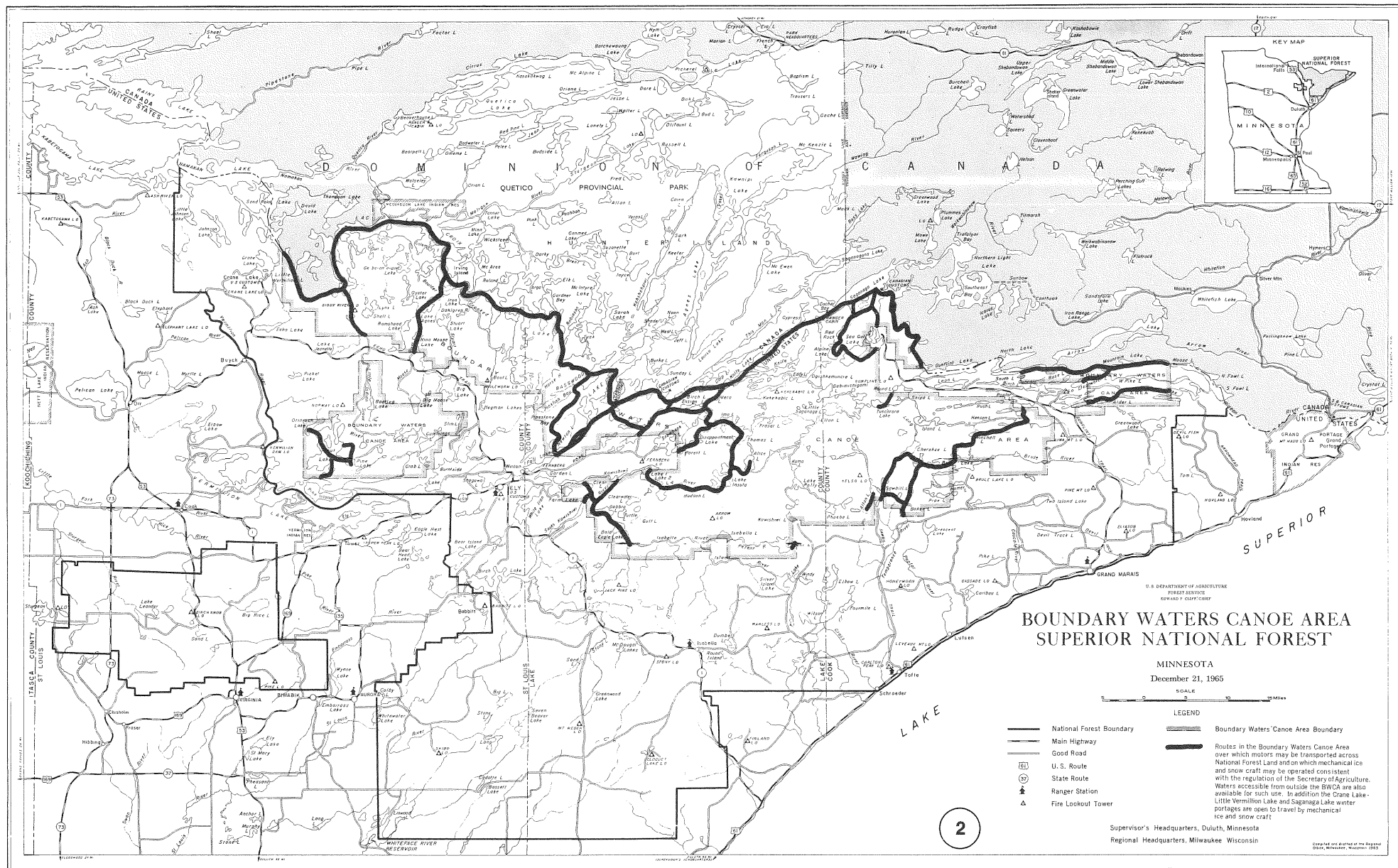
The Forest Service Voyageur Visitor Center, one mile east of Ely on Highway 169, is a good source of information.

State licenses are required to fish, hunt and trap in Minnesota, including the national forests. They can be purchased from most resorts, outfitters and sporting good stores. An Ontario fishing license can be purchased from the Department of Lands and Forests in Toronto, Fort Francis or Port Arthur or from Canadian Ranger Stations along the International Boundary.

Reputable outfitters can prepare a grub list and fill it for you and your group. They'll pack all you need for camping and canoeing will supply a guide if you wish. His services, of course, are extra. Daily rates include food, canoe, tent, packs, cook kits, all you'll need, including insect repellent. They will rent any piece of equipment. For addresses, contact: Commercial Club, Crane Lake; Chamber of Commerce, Ely; Minnesota Arrowhead Association, Duluth; Chamber of Commerce, Grand Marais.

FOR FURTHER INFORMATION WRITE:

FOREST SUPERVISOR, SUPERIOR NATIONAL FOREST, BOX 338, DULUTH, MINNESOTA 55801, or DISTRICT FOREST RANGERS AT — Virginia, Two Harbors, Ely, Isabella, Cook, Tofte, Aurora or Grand Marais.



CANOEING The CANNON

The Cannon River from Faribault to Highway 61, west of Red Wing, is one of our most interesting from the standpoint of experiencing a change of topography, and viewing wildlife. The distance from the metropolitan area to Cannon Falls, to Northfield, or to Faribault is such that those wishing a short outing can easily make one of the legs of the river on a weekend.

The trip starts at the Highway 13 bridge, just west of Lake Sakatah, and continues to the Mississippi River, about 72 miles east. In the area west of Faribault are several relatively large lakes — Cannon, Tekonka and Sakatah — which form part of the river. From Faribault to Northfield, the river is 50 to 100 feet wide

Above the Straight River-Cannon River, junction, the flow of water is restricted and the river is not canoeable during late summer. However, below the confluence, the river is generally satisfactory. At the town of Dundas are the remains of an old mill and dam.

From Northfield to Cannon Falls, the river flows gently through a valley with low banks, heavy woods and underbrush. At the lower end of this portion is Lake Byllesby which is adverse to canoeing due to heavy use by power boats and lack of access. At the eastern end of the lake is a power dam.

From the dam to where the river intersects Highway 52, the flow often is not sufficient for canoeing. From Cannon Falls to Highway 61, the Cannon River flows through deep gorge, a very picturesque part of the trip. In the beautiful hamlet of Welch, is a dam and a water-powered mill.

Mile	
73.0	Highway #13 bridge — access.
71.5	Sakatah Lake State Park — Faribault Trading Post Site.
70.8	Highway #99 bridge — access northwest and southwest quadrant.
68.9	Dam
66.7	Highway #60 bridge — access.
66.2	Highway #16 bridge — Morristown.
65.8	Highway #44 bridge.
63.2	Highway #60 bridge.
62.0	Bridge #13.
58.5	#12 bridge.
55.7	County Highway #202 bridge.
55.5	Faribault — Highway #11 bridge.
55.0	Highway #65 bridge.
54.1	Dam at woolen mill.
54.0	Highway #3 bridge.

Mile	
48.8	Turn Road Bridge.
48.6	Rapids — gentle.
43.0	Highway #3 bridge — access.
41.9	Dam — out and canoeable — Dundas bridge — #1 steep banks.
39.1	Highway #3 bridge — Northfield.
39.0	Very nice city park on right.
38.7	Dam — requires portage to left over 1,000 feet.
38.6	Highway #19 bridge. Jesse James held up bank. Northfield.
29.5	Railroad Bridge.
29.3	Highway #56 bridge — access to right.
27.5	Pay private park on left.
26.0	Access and parking.
25.2	Huge dam, high and difficult portage.
24.5	Highway #52 bridge.
23.0	Cannon Falls — bridge — small rapids.
14.5	Private pay camp on right.
12.5	Welch — Old Mill — Dam — access on northeast quadrant, portage on left.
6.5	Highway # 61.

CLOQUET RIVER ROUTE

The Cloquet River provides a striking, visual change; rapids range from moderate to treacherous depending on the stage of the river. Wildlife, including moose, is abundant and there are campsites available. The waters of the Cloquet are set in a back-drop of lush green vegetation and contrast with pools and marshes on both sides, red-orange sand banks and boulders in the rapids.

There are several considerations the canoeist should keep in mind.

To canoe the entire route, cars may have to be driven about 150 miles to be located for transfers. Other roads at certain times of the year may not be driveable when the water is good for canoeing.

Water levels must be at high spring levels in order to provide satisfactory canoeing throughout the route.

The upper Cloquet is a narrow, shallow stream with steep pitches where canoes must be lined through or canoed with extreme caution.

The Island Lake Reservoir is some seven miles across and because of wind, is somewhat dangerous for the average canoeist. The flow in the river below the reservoir is subject to extreme change due to the reservoir dam.

The river immediately below the Island Lake Reservoir and lake is heavily developed with summer cottages and heavily traveled by motorboats.

The lower reaches (to the St. Louis River) have white-water and should only be attempted by experts during high stages.

Contacts:

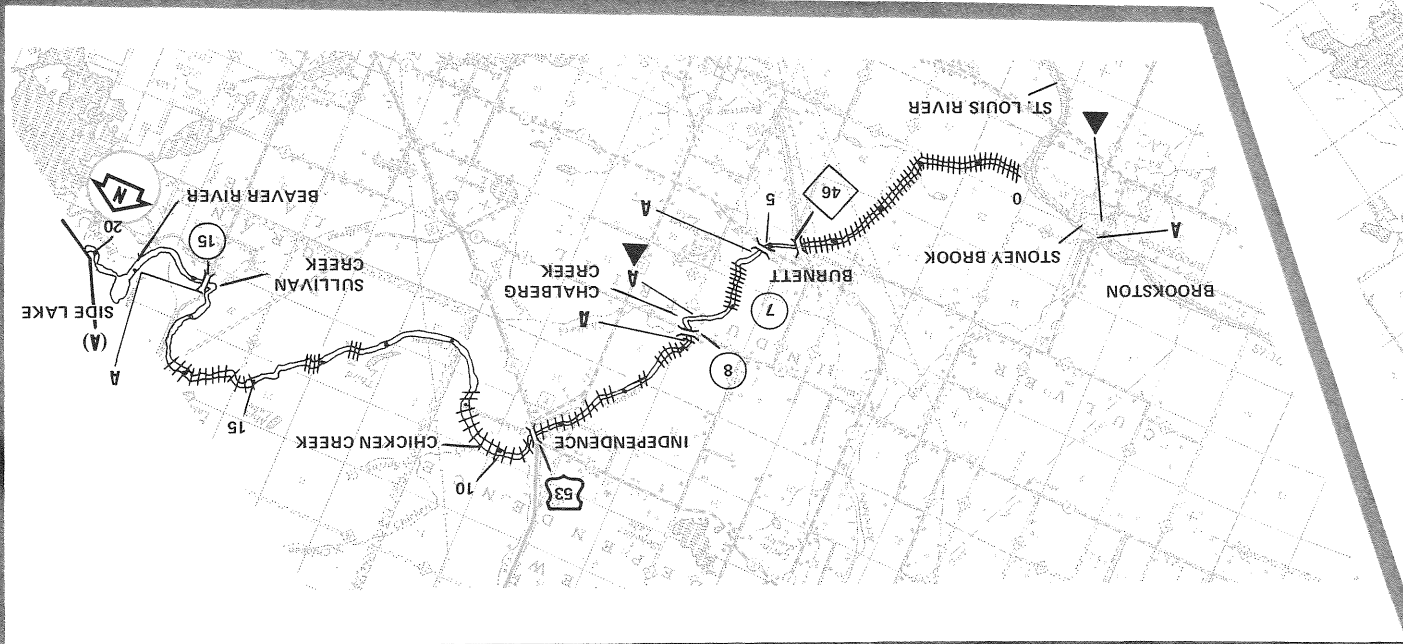
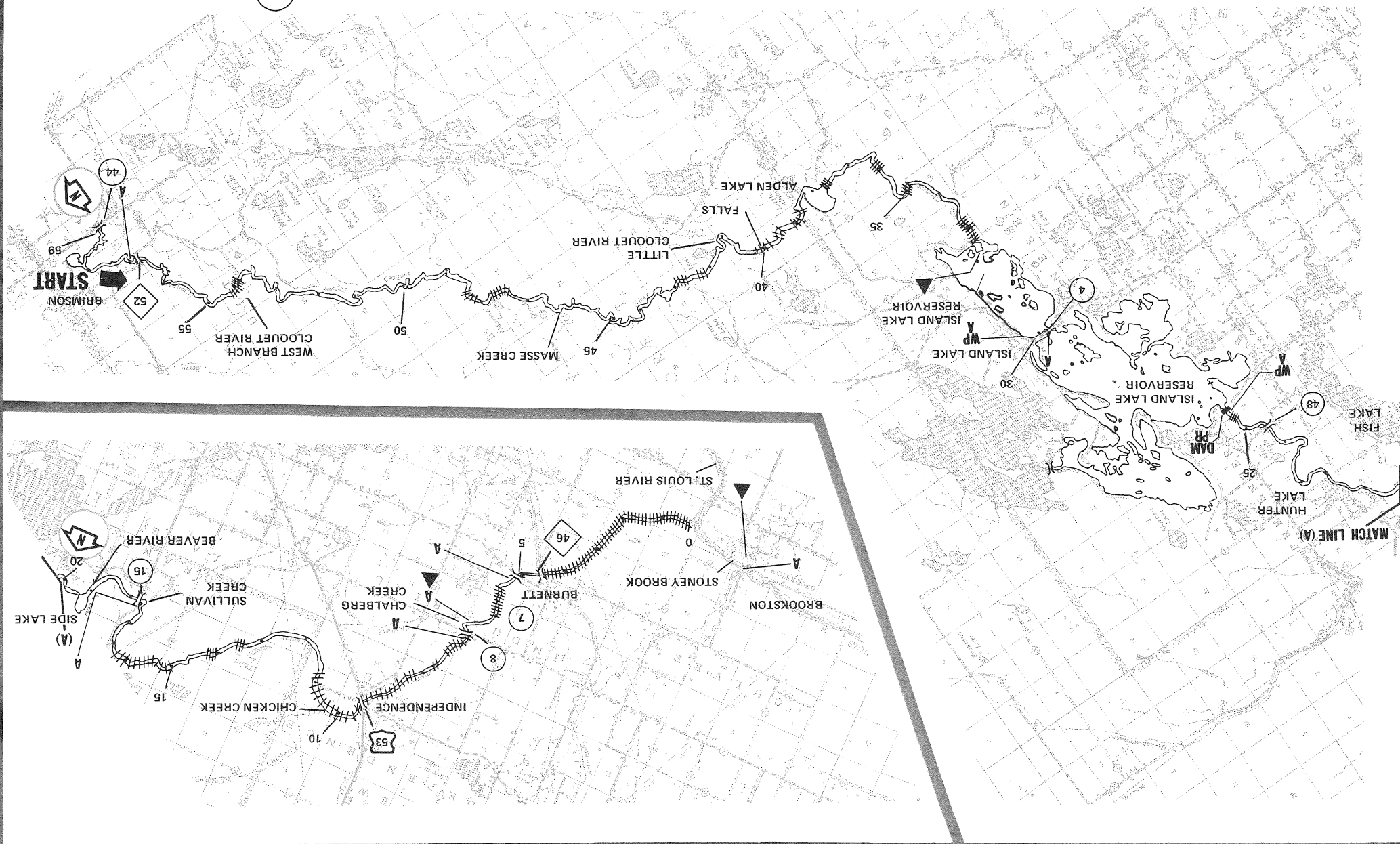
Conservation Officers, Floyd Jaros, Route 3, Box 7, Cloquet 55720, phone 218-879-7588 and Ken LaBoone, 3250 Trudeau Road, Duluth 55804, phone 218-722-0627; Division of Game and Fish, Robert Micklus, 10029 North Shore Drive, Duluth, phone 218-525-4080 and Dick Hassinger, 1417 East 4th Street, Duluth, phone 218-724-3792; District Forester, Cloquet Valley Ranger Station, James C. Ryan, Makinen 55763, phone 218-638-2394.

Mile	
59.0	Start of survey south of Brimson, Minnesota on County Road 44 — access on the northeast corner is poor.
54.4	Rapids.
54.2	West Branch Cloquet River.
48.5	Rapids.
41.1	Little Cloquet River.
40.0	Falls requiring portage.
38.2	Lake Alden, heavily developed by summer cottages.
37.8	Rapids at outlet of Alden Lake — canoeable in high water.
36.2	Rapids — canoeable in high water.
35.0	Rapids — canoeable in high water.
34.8	Rapids.
32.2	Entrance to Island Lake Reservoir, campsite on granite out-crop on right hand bank.
25.6	Minnesota Power and Light Dam, head of approximately 30 feet — access good on Island Lake side — poor on Cloquet River — portage on the south bank.
21.4	Hunters Lake — heavily developed with summer cabins.
19.4	Side Lake — also heavily developed by summer cabins.
17.9	County Road 15 bridge — landing on the northwest corner of bridge.
16.2	Start of Rapids.
15.0	End of Rapids.
11.3	Start of Rapids.
9.5	U.S. Highway 53 bridge at Independence, Minnesota — no access.
7.4	Rapids.
6.8	County Road 8 bridge — access on northeast corner.
6.5	Campsite and landing off County Road 872 southeast bank.
6.0	Rapids.
5.0	Landing on northeast corner of County Road 7.
4.5	County Highway 46 and railroad trestle at Burnnett — start of rapids 4 miles long.
0.0	End of rapids on Alluvial fan in St. Louis River.
0.0	Brookston, Minnesota on the St. Louis River — take out point on the southeast corner of County Road 31 in Brookston — campsite and city park on Stoney Brook directly off of County Road 31 three blocks from the landing. Access on southeast corner of Brookston bridge.

SCALE OF STATUTE MILES

CLOQUET RIVER

4



CROW WING RIVER COUNTRY

The Crow Wing River is one of the best family canoeing rivers in Minnesota. It is a good swimming river; in fact, the water is so clear, you can count the stones on the bottom. The tree cover is heavy and there is an obvious lack of man-made facilities. An excursion down the Crow Wing is a peaceful, relaxing experience in a wilderness atmosphere that can be enjoyed even with small children.

The current is not dangerous and the river is easy to canoe. There is an abundance of wildlife and good fishing. The landscape is gently rolling; the banks are sometimes steep and covered heavily with vegetation.

The Crow Wing River begins in the Crow Wing Lake Chain and flows south to join the Mississippi River. The water is seldom over three feet deep and nearly always has sufficient flow for canoeing.

The Crow Wing Trails Association Canoe Trail begins at the Blueberry Campsite, on Highway 71 north of Menahga, and from here 13 sites have been developed along the river at convenient intervals. Along the route are no dams or portages. At each site are sanitary facilities and ample camping space. Supplies can be purchased at Huntersville and Oylen. Itasca State Park, headwaters of the Mississippi, is located just 35 miles from the Blueberry Campsite.

Authorized outfitters — Ed Patson, Menahga; Irv Funk, Nimrod; Bob's Marine, Wadena. These men will transport you to the starting point of your choice on the river, and pick you up when and where you wish. Canoes, tents, sleeping bags, lanterns, etc. are available. You may use your own equipment and still use the transportation service. Another good contact, John Rife, Sebeka, Minnesota.

If plans call for a picnic prior to starting the canoe trip, there are excellent facilities at McGivern Park, Staples; roadside at Aldrich; roadside at Verndale; Sunny Brook Park, Wadena; Jaycees Park, Wadena; Black's Grove, Wadena; Sebeka Park, Sebeka; Menahga Park, Menahga. These areas also have overnight camping. (The facilities are in addition to those along the Crow Wing River.)

The first 75 miles of the Crow Wing route has been developed by the Crow Wing Trail Association, Box 210, Sebeka, Minnesota 56477.

Mile	
91.5	Nevis and Bridge 33.
89.7	Highway Bridge 13.
85.0	Highway Bridge.
82.0	Highway Bridge 13.
77.6	Highway Bridge 87.
72.7	Highway Bridge 109.
71.3	Shell River.
69.0	Tree Farm Landing — a 20 acre campsite.
66.9	Highway 18 Bridge.
66.0	Huntersville Campsite — 3-acre campsite — water, tables, toilet.
63.3	Huntersville Forest — campsite in State Forest.
61.3	Highway 15 Bridge.
57.7	Anderson's Crossing — a campsite and old Indian crossing also Pioneer Homestead.
54.5	Funk's Landing and Campsite.
53.0	Nimrod — Stigman's Mound — Highway 12 Bridge.
51.6	Frame's Landing — 14 acre campsite.
47.2	Little Round Hill — 65 acre campsite — was Indian lookout, Little White Dog — Indian Lookout.
45.7	Highway 9 Bridge.
41.9	Knob Hill Campsite — 105 acres.
39.0	Highway 7 Bridge.
39.0	Cottingham County Park — swimming and picnicking.
38.4	Farnham Creek.
33.4	Bullard Bluff — 80-acre campsite — Indian mounds and crossing.
30.0	Partridge River — Old Wadena, Fort site.
30.8	Leaf River.
28.5	McGivern Park — 40-acres — rifle range, water, shelter, picnic.
27.5	Highway #32 Bridge 67 & 30.
24.7	Hayden Brook.
16.4	Highway 10 Bridge and Motley.
14.8	Long Prairie River.
8.7	Dam — portage right — 22 foot head.
8.0	Highway 6 Bridge.
3.3	Dam — portage right — 22 foot head.

DES MOINES RIVER TRAIL

The Des Moines River watershed includes parts of seven southwestern Minnesota counties most of Murray and Jackson and parts of Martin, Cottonwood, Nobles, Pipestone and Lyon counties.

The West Fork of the Des Moines originates in Yankton Lake and flows southeast to the Cottonwood-Jackson County line where it turns abruptly northeastward for about ten miles and forms the Big Bend. The river then flows southeast, crosses the state line and goes into

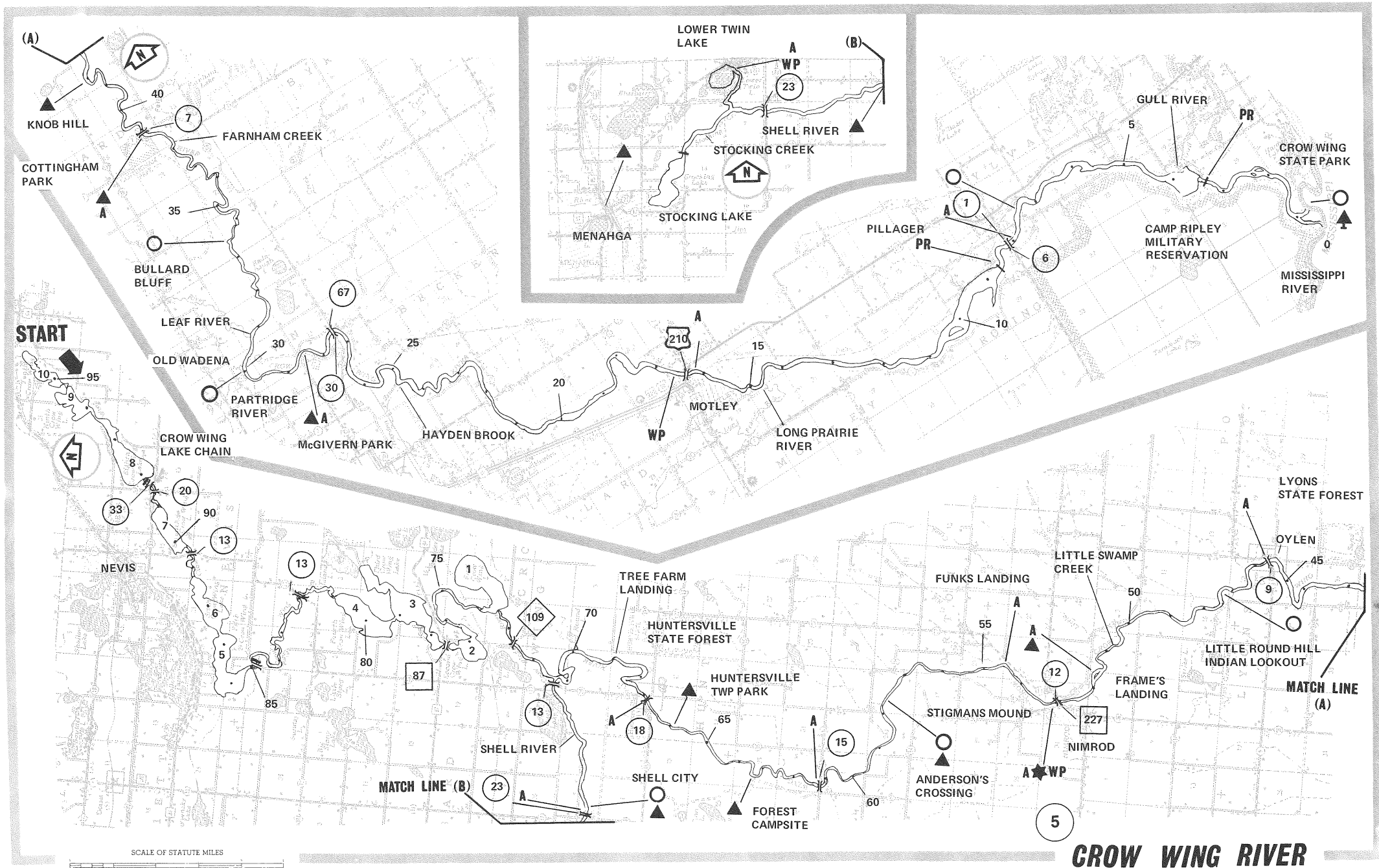
Iowa about eight miles south of Jackson. In its 94-mile length in Minnesota, the West Fork Des Moines River descends about 350 feet or 3.7 feet per mile.

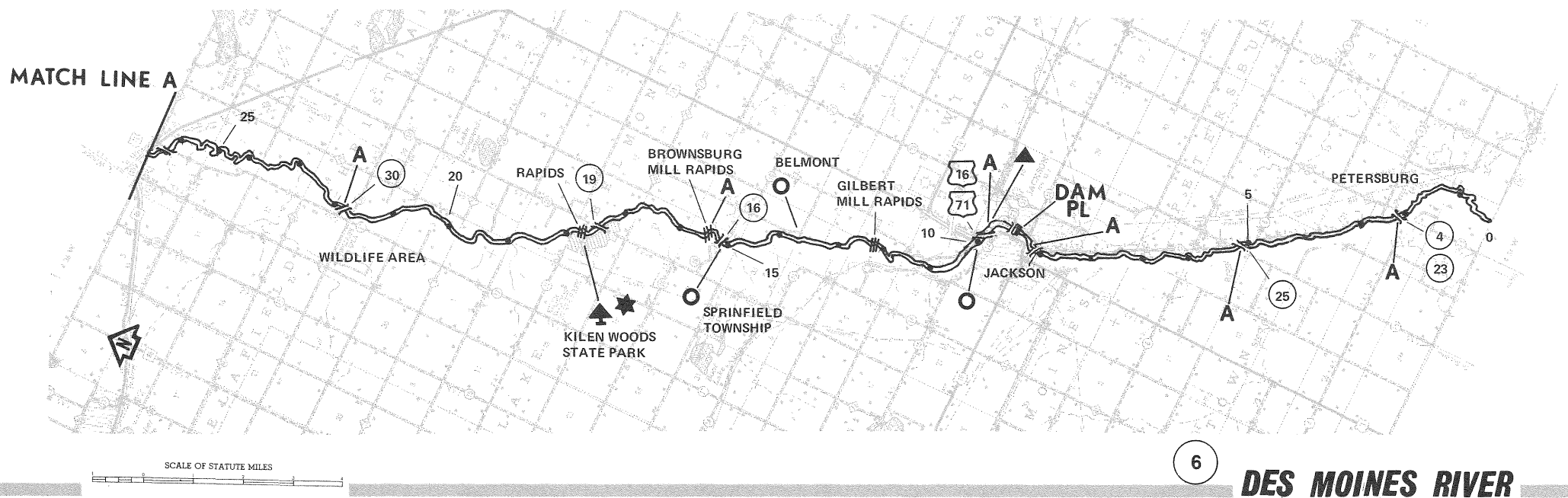
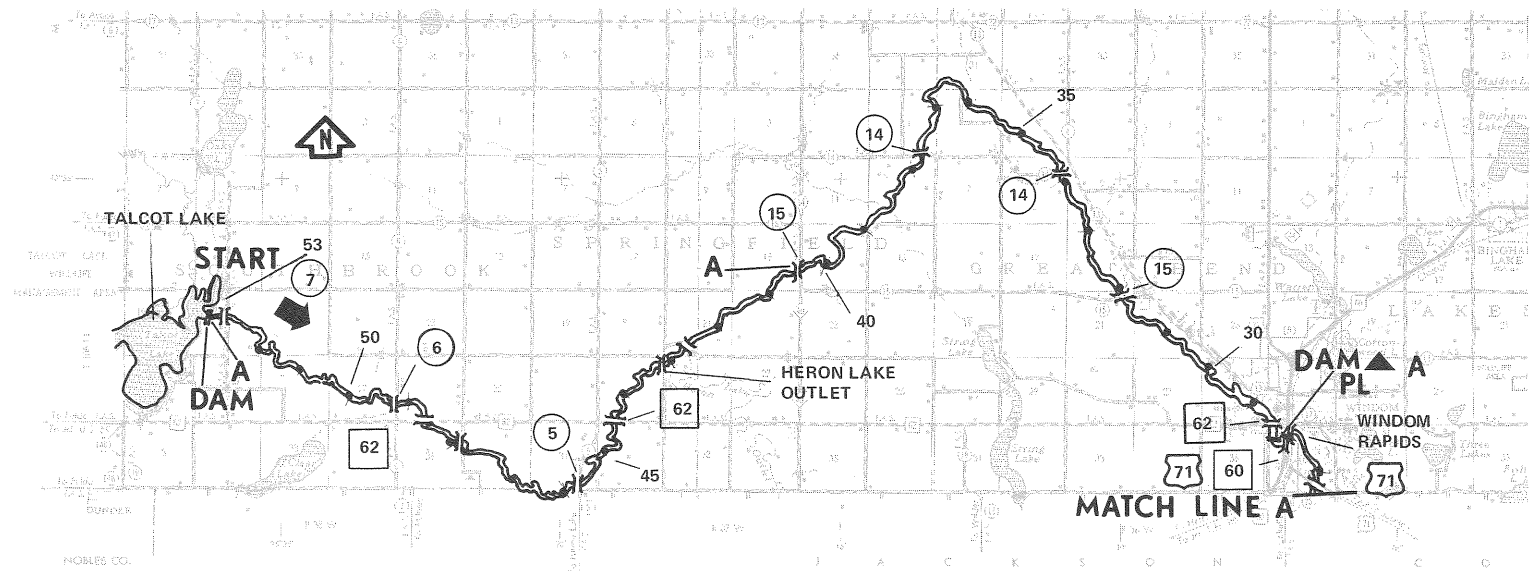
From Alcot Lake to Windom the river traverses quite flat farm country with few trees. At about the halfway point the river is bounded on the right by low hills and some trees.

Contacts:

Lake Shetek State Park, Robert Rosengren, Currie, phone Currie 2680; West Fork Des Moines River, Conservation Officers, Floyd Ragan, 3083 Pine Avenue, Slayton, 56172, phone 507-836-6860 and Jerry Kinney, 137 Thomas Hill, Jackson 56143, phone 507-847-4013; East Fork Des Moines River, Conservation Officer, Jim Bryant, 319 North Grant, Fairmont 56031, phone 507-235-6497.

Mile	
53.0	Talcot Lake Dam, access south side.
53.0-40.0	Flat Prairie, almost treeless.
42.8	Heron Lake Outlet.
40.5	Highway #15, good access, occasional boulder beds from here to Iowa line.
40.0	Intermittent trees on right to Windom, access poor due to wire fences to Windom.
29.0	Windom. Business district 2 blocks from river bank.
28.3	Dam, portage left, good access, camping and park facilities.
28.0	Rubble ridge at Railroad bridge. Canoeable at medium or above water flow.
21.9	Highway #30, access poor due to wire fences. Better tree cover here.
21.7	Game refuge, ¾ mile west.
19.0	Kilen Woods State Park. Best wooded area of the route. Many deer, some beaver. Nature trails in the park.
19.5	Rapids, boulder fields.
15.5	Brownburg Mill dam remnants. Boulders.
15.1	Highway #16, access poor, steep banks to fences. Site of Springfield town. Lost out to Jackson.
13.6	Site of Fort Belmont. Settlers defense from Indian attacks.
12.2	Gilbert Mill dam remnants. Boulders.
10.1	Trading Post site. Start of Jackson.
10.0	Jackson. Business district one block from bank.
9.8	City park, excellent access and facilities, Historic markers for Indian uprisings, cabin from Belmont.
9.1	Power dam, portage left.
10.0	Access, fair, entering area of intensive farming. Trees decrease again. Valley also flattens toward Iowa line. Wire fences across stream a real hazard.
5.0	Highway 25 bridge, access good on west side.
2.0	Last access in Minnesota. Access, fair. Town of Petersburg has one co-op store. Highway #4 bridge.
0.0	State line. Iowa.





DES MOINES RIVER

KETTLE RIVER

CANOEING

The Kettle River is a very scenic, interesting river with an ever-changing forest and topographic scene. Rapids and long pools provide both challenge and relaxing pleasure. The route is rich in history, especially of the lumbering era of the 1850's and 1860's.

The Kettle is a fine stream. It has all the qualities and charm of a good canoeing river and is within range for weekend outings by people from major population centers. The Kettle is one of the most picturesque rivers in Minnesota.

Fourteen bridges and two trestles cross the river. There are four developed access points and no developed campsites.

The middle and lower portions of the Kettle River extend from the dam below Sandstone to the St. Croix River, about 20 miles. (State Highway 48 is roughly the dividing point.) During high water, the middle section from the dam to Highway 48, may throw standing waves large enough to swamp an open canoe. The lower section from Highway 48 to the St. Croix is a fast rock-dodging run in high water and a very long portage in low water.

The Upper Kettle is a prized stretch of whitewater cascading through a narrow canyon scarred with huge potholes of "kettles". Here are the Hell's Gate Rapids. It is emphasized that the Hell's Gate area is extremely dangerous and three people have drowned here in the last three years.

This is a five-mile run from the Highway 23 bridge to Robinson Park in the town of Sandstone. It is imperative for anyone shooting this section to wear a life-jacket and be prepared to swamp! Under flood conditions, it is nearly impossible to retrieve a swamped canoe before it reaches the end of the canyon, two miles downstream from the first rapids.

The information given below is the minimum for running the Hell's Gate Rapids in low water and should never be run in high water.

The main (safest) channels for the four major rapids are in order of approach — (1) Blueberry Slide, follow an S-curve taking the first drop on the left and then crossing over to the right; (2) first rapids in the canyon, go roughly down the middle; (3) Dragon's Tooth, 100 yards from #2, aim for the left shore to avoid the "tooth", a large rock near the bottom of the rapids; (4) Hell's Gate Rapids, approximately one-half mile from #3. Generally this rapids is safest on the right.

There are some easier rapids and a stretch of calm water between Dragon's Tooth and Hell's Gate.

The following river conditions and points of interest have been provided by the Pine County Soil Conservation District, Hinckley, in a leaflet entitled, "Kettle River Canoeing."

Barnum to the town of Moose Lake on the Moose River (above the confluence of the Moose and Kettle rivers). This stretch is not canoeable in low water. There is an access at the Barnum Village Park in Barnum with water, sanitary facilities, picnic tables and supplies. Seven miles to town of Moose Lake on the Moose River.

Hanging Horn Lake, just below Moose Lake on the Moose River, access.

Moose Lake to the town of Willow River (below the Moose-Kettle river junction). This 13-mile stretch is good canoeing water most of the time. The access at the Moose Lake Park has water, sanitary facilities, showers, picnic tables, supplies and supervised swimming. (From Willow River, it is 11 miles to Banning State Park.)

Willow River to Highway 23 (Kettle River). Good canoeing most of the time. There are hidden rocks in the shallow water. Access at Highway 23.

Highway 23 and Banning State Park. Head-of-the-rapids, the beginning of two miles of extremely dangerous rapids.

Banning State Park-Hell's Gate Rapids. Extremely dangerous.

Four miles from Banning State Park at the town of Sandstone is Robinson Park, the last place to get supplies. (It is 10 miles from Sandstone to the Highway 48 access. From Highway 48 to a private access known as Soderbeck's, it is 17 miles.) Two accesses before Soderbeck's are Maple Island and Big Eddy in St. Croix State Park.

From Sandstone to Hinckley — Very good waters for intermediate canoers.

Hinckley to Maple Island — Very good waters especially for beginners.

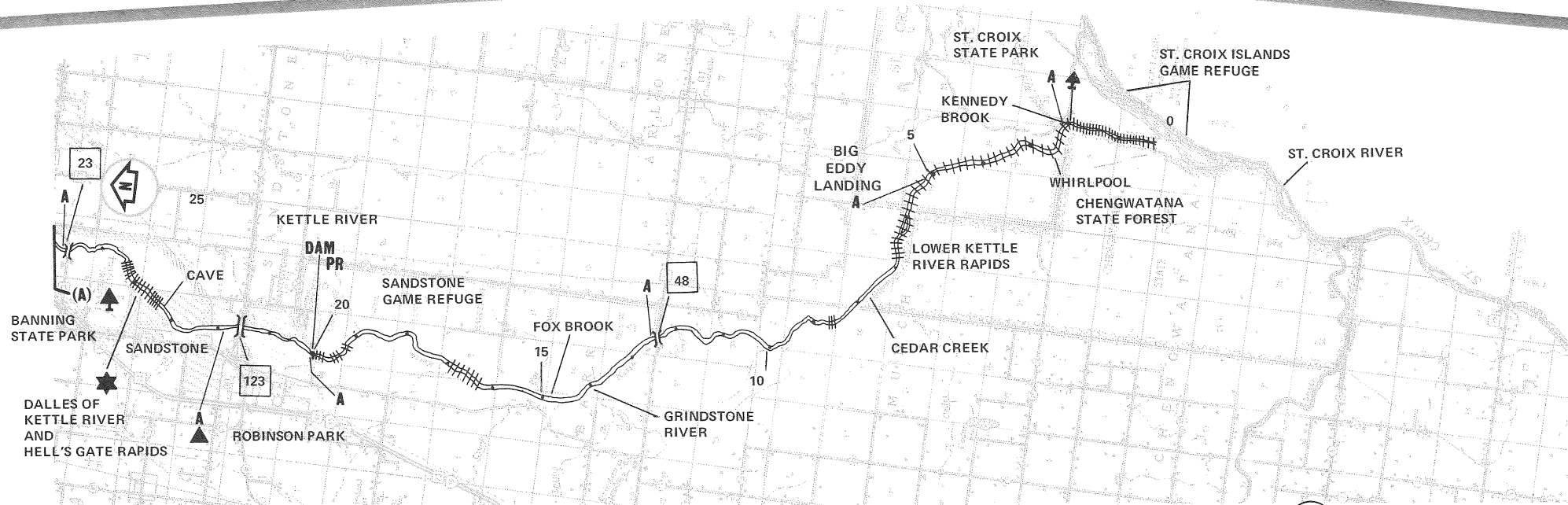
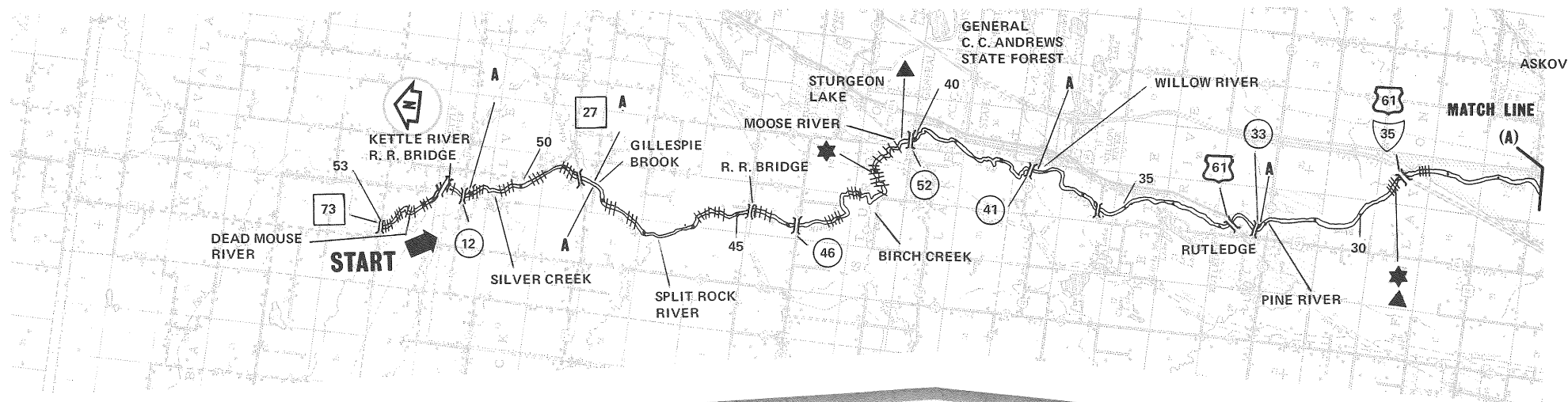
Maple Island to the St. Croix River — This stretch of river gives intermediate canoeists a thrill, but it is not canoeable in low water. Canoeists can either take out at Highway 70, or continue down the St. Croix.

Contacts:

Apco Station, Moose Lake; Standard Station, Barnum; Standard, Texaco, Mobil, or Phillips 66 stations at the Hinckley intersection of Highway 48 and Interstate 35; Jerome Scharitz, Soil Conservation Service, Mora; Ron Bergum, Soil Conservation Service, Hinckley; Wayne Golly, District Forester, Hinckley 55037, phone Hinck-

ley 217; Wayne White, Grasston, phone 612-396-2137; Banning State Park, Orville Kobberdahl, Rt. 2, Brook Park (seasonal).

Mile	
53.0	Start of Minnesota 73 — access is poor.
51.5	Rail trestle — high over the water.
51.1	Carlton County Road 12 bridge — access on southeast corner of bridge.
48.8	Minnesota 27 — no access.
48.4	Abandoned bridge — access good on east and west side — parking poor.
45.8	Rapids.
44.7	High rail trestle across the river.
43.8	Highway #46 — no access.
42.5–40.0	Scenic area of braided stream and dense hardwood forest — Potentially dangerous because of low trees and twisted nature of main current, Confluence with Moose River.
40.3	Small scenic campsite on right east bank in midst of large conifers.
40.2	Pine County Road 52 — no access.
40.0	Pine County Road 41 — access on southeast corner.
37.3	Railroad trestle and U.S. Highway 61 — gauge on trestle pier — no access.
32.8	Pine County Road 33 bridge — developed access and parking on southeast corner — supplies in Rutledge, one block west.
32.2	Scenic area — short heavy rapids with steep pitch — campsite on rock out-crop 10 feet above river on west bank.
29.4	New Interstate 35 — two bridges.
28.9	Spring with 1¼ inch pipe — temperature 43° Fahrenheit.
26.0	State Highway 23 bridge — developed access — parking and gravel launching ramp on northeast corner — crude gauge on bridge pier.
25.7	Enter very scenic Dalles of the Kettle River and Hells Gate Rapids — very heavy and dangerous — no developed portage — site of Banning State Park — ruins of old town of Banning and quarries.
24.5–23.3	Cave.
23.0	Rail trestle very high over river.
22.1	State Highway 123 — access via Robinson Park on west bank of river ¼ mile north of Highway 123.
21.6	Kettle River dam — picnic area, parking, access to river.
20.0	Three short heavy rapids.
20.0–19.2	Rapids ½ mile long.
17.1	State Highway 48 — access, parking, picnic tables and gravel launching ramp by Hinckley Sportsmen Club.
12.4	Start of Lower Kettle River rapids.
6.8	Access — St. Croix State Park.
6.1	Whirlpool on bend.
2.5	Access on Kennedy Brook.
2.0	Confluence with St. Croix River — end of rapids — end of trip.
0.0	



7

KETTLE RIVER

LITTLE FORK RIVER CANOE TRAIL

The primary charm of the Little Fork River is its wild character. Even in the farming areas through which the river flows, there is a sense of wilderness. In other parts, dense cover and large trees line the banks. There are moose in the muskeg swamps along the Little Fork and deer browse the farm meadows. In the smaller tributaries are muskrats and beaver. There are also ducks and other common Minnesota birds throughout. Fishing is excellent and most try for muskellunge and walleye.

The route covers 132 miles from the town of Cook to the Rainy River. The upper part, from Cook to the Silverdale bridge, is rolling country. Below Hananen's Falls, the river has intermittent rapids, some which must be run with extreme care and are possible only under normal water conditions. Outside the town of Little Fork, the river flows through rolling farm land.

Farther downstream are the Nett Rapids, moderately long and difficult and should be walked in low water. Below the rapids, the bends of the river are choked with log and stumps and the banks are high and covered with clay. In the LeVallee River area is a dense forest with towering cedars, some exceeding three feet in diameter. Below the LeVallee River confluence is an interesting phenomenon of vertical bank slumping. The clay material is very cohesive and shears in such a way that the trees seem to fall vertically into the water.

Rapids begin again outside the Nett Lake Indian Reservation. Seller's Rapids are possibly the roughest rapids of the trip. Deadman's Rapids are not as difficult as the name implies, especially in low water, but care is always essential. Upper and Lower Rapids present more of a standing wave action rather than rock dodging.

In the upper section (Cook to Highway 65 at the Silverdale Bridge), there are ten bridges, four with accesses.

From the Silverdale Bridge to mile 37.5, the Little Fork is a true wilderness stream.

Contacts:

Conservation Officer Don Fultz, Box 367, Cook 55723 phone 218-666-2747; District Forester, James J. Janousek, International Falls 56649, phone 218-283-3486; Area Forester, Robert Story, Littlefork 56653, phone 218-278-4241.

Mile	
132.2	Start of survey in Cook, Minnesota — access on southeast corner of Highway 53 bridge.
130.4	County Road 500 bridge — no access.
128.9	County Road 914 bridge — no access.

Mile	
123.1	County Road 481 bridge — access on northwest corner, good.
121.0	County Road 500 bridge — no access.
118.8	State Highway #73 bridge — access on southwest corner, good — wayside park, access on southwest corner.
116.9	Small rapids.
116.8	State Highway #1 — no access.
116.0	Hananen's Falls and Rapids; scenic area portage on south bank. Campsites on portage.
113.5	Access on County Road 908 spur.
110.0	No access on County Highway 76 crossing — intermittent rapids.
107.2	Sturgeon River.
105.9	County Road 114 bridge — no access — rapids underneath.
104.0	Fishers Rapids.
97.3	Small falls — may be run in high water.
97.2	County Road 75 bridge — no access.
94.4	State Highway 65 (Silverdale) bridge — excellent campsite and access under bridge from northeast corner. Canoe rentals at Silverdale tavern. Good muskie and walleye fishing from here to where State Highway 65 bridge crosses again.
90.8	Campsite on south bank at LeVallee River confluence — the Vallee River is said to have large brown trout in it.
87.0	Start of Nett Rapids.
87.5	Nett Lake Indian Reservation Line.
85.7	Jeep Trail access in Nett Lake Indian Reservation.
77.9	Jeep Trail access on Nett Lake Indian Reservation Line.
70.8	Seller's Rapids.
68.1	Flat Rock — nice campsite or lunch spot.
62.2	Start of Deadmans Rapids.
59.9	Access off small road.
57.1	Access off Twsp. Road.
55.1	State Highway 65 bridge — no access.
53.9	Nice campsite.
51.0	Nice campsite.
42.0	Access off County Road 8.
37.8	Campsite.
36.6	Access and campsite spur of County Road 8.
31.5	Access on Jeep Trail running off County Road 8.
28.0	Access and campsite at Flat Rock Rapids — popular spot to swim and picnic.
26.4	Upper Rapids.
23.1	Access and campsite at Ed Johns Sawmill.
21.9	Lower Rapids.
21.1	Access and campsite off County Road 23.
19.9	State Highway 217 bridge — rapids underneath.
15.0	U.S. Highway 71 bridge — access on northwest corner campsite on southeast corner.
0.0	Access on northeast bank — confluence with Rainy River — end of trip.

MINNESOTA RIVER

The trip down the Minnesota River starts at Ortonville and ends at Shakopee.

The Minnesota Valley is rich in Indian and voyageur lore, historic ox carts and stage coaches. Besides following history and early settlement of Minnesota, the Minnesota follows the trail of colossal geologic events of Glacial Lake Agassiz and gigantic ancient River Warren.

Below Minnesota Falls to North Redwood, the river flows through granite outcroppings and the banks are heavily forested with typical river hardwoods. This stretch is rich in geologic, human and natural history.

In the mid-1600's, white men made early explorations into the watershed. Radisson and Grosseillers, French fur traders, made an expedition into the west and reached the Minnesota River Valley in 1654. In 1700 Pierre Le Sueur ascended the river and established a fort near what is now South Bend.

In August of 1862, the Sioux Uprising began in the Minnesota Valley and resulted in the death of about 450 settlers and an unknown number of Indians.

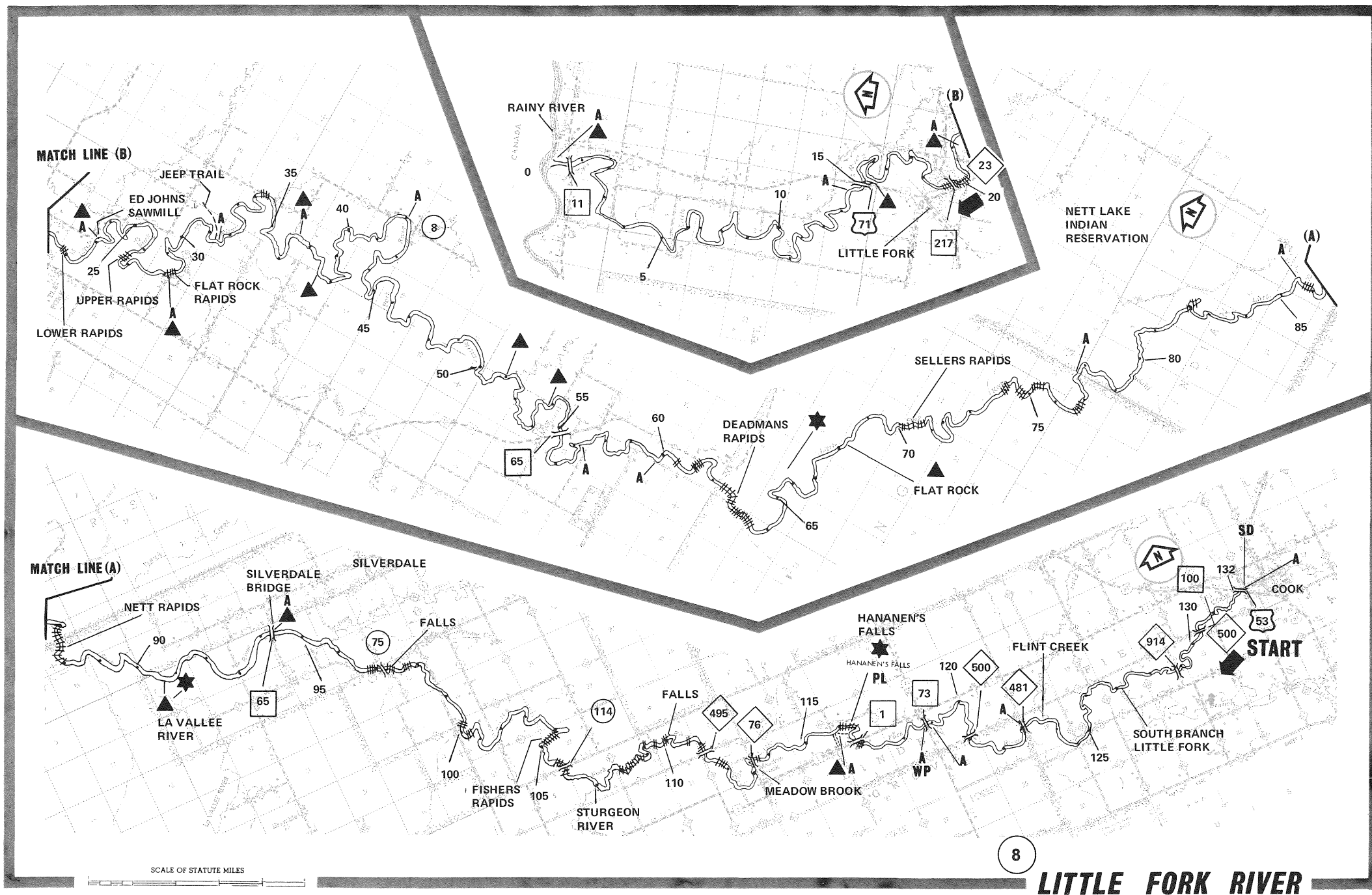
The headwaters of the Minnesota River rise in Browns Valley, on the Minnesota, South Dakota border. Leaving Big Stone Lake which is also on the Minnesota, South Dakota border, the river begins its 330 mile flow through the state of Minnesota to join the Mississippi River at the Mendota bridge in the metropolitan area.

The upper Minnesota flows to Mankato through a valley, one to three miles wide. The tributary streams enter this valley through deep, rugged, gorge-like valleys. Some 450,000 acres of land in the watershed is farmland and there are extensive drainage ditches.

The lower Minnesota extends about 115 miles from Mankato to its confluence with the Mississippi and has a slope of less than one foot per mile, through a wide and deep valley. (The average fall over its entire length is .8 feet per mile.)

The trip starts at Ortonville in Big Stone County and ends at Shakopee in Scott County, for a total of 262 miles. From Ortonville to Marsh Lake, trees and vines intermesh over the river and give the river a jungle-like appearance; dark woods of soft maple, cottonwood and elm fringe the banks. There are snags which require chopping through or carrying over and broken-down bridges create obstacles.

Marsh Lake is shallow and weedy and is a popular stopover point for migrating waterfowl. Lac qui Parle, two miles downstream from Marsh Lake, is similar except that it is deeper and longer. At the southeast end is



Lac qui Parle State Park with endless miles of back-channels and an abundance of wildlife. (The portage at the Lac qui Parle dam outlet is excellent on both sides of the river.)

From the dam to Granite Falls, the river flows in a channel, 100 to 150 feet wide; hardwoods fringe the river. The dam at Granite Falls should be portaged (60 yards on the south bank). Below the falls there is a short rapids and pool about two miles long to Minnesota Falls.

Contacts:

Division of Game and Fish, Roy Nelson, 205 Liberty Building, 1043 East Liberty Street, Mankato, phone 507-389-6713; *New Ulm Area*, Hazel Meine, Chamber of Commerce, New Ulm; *Redwood Falls Area*, Irene Lyslo, Chamber of Commerce, Redwood Falls; *Granite Falls Area*, Elmo Volstad, Granite Falls; *Big Stone Lake State Park*, Herbert Wachlin (seasonal), Ortonville.

Mile	
289.0	Start of Survey at Big Stone Lake in Ortonville, Minnesota — access and possible campsite point on the southeast corner of Highway 30 bridge.
288.5	Big Stone Dam — portage on right.
285.6	Scenic area, granite out-crops.
281.1	Odessa — access Bridge #15, poor.
271.0-266.6	Entrance to Marsh Lake, there is a total of 5 access points.
266.6	Marsh Lake Dam.
252.6-264.0	Lac qui Parle (Lake) — There are six access points on Lac qui Parle Reservoir, four of which are state owned, one federal and one private.
252.6	Lac qui Parle State Park.
251.7	Lac qui Parle Dam — Wayside Park on south bank directly below dam — access is good from the Wayside Park.
245.5	Good Access, campsite, water and tables.
239.4	Montevideo — access poor — Camp Release State Historical Wayside Park — Sioux surrendered 289 persons in 1862.
232.6	Wegdahl — access, poor.
224.6	Beginnings of granite out-crops and small rapids just above Granite Falls.
223.7	Dam and Granite Falls Hydroelectric Station — small rapids.
222.8	City Park Campsite and access excellent.
222.0	Scenic area, Granite out-crops.
220.6	Minnesota Falls — portage right — Dam and Historic townsite, Catfish Haven Resort.
218.5	Riverside, access excellent.
218.5-217.0	Historic Sites on Indian Reservation — Grave of Big Eagle — Riggs and Williamson's Mission.
212.7	Upper Sioux Agency State Park, Historic site, Canoe campsite.
210.3	Access to Minnesota River off Highway #21.
203.9	Joseph R. Brown State Historical Wayside Park, ¼ mile off river on north bank.
201.4	Access good on northeast corner of County Road #12 Bridge, Renville County.

Mile	
201.2	Beginning of granite out-crops and small rapids.
199.0	Patterson Rapids, rough in high water.
197.6	Scenic area, Granite ridges, cedars and small lake.
197.1	Access off County Road 6, southeast corner of bridge, Redwood County.
195.2	Schwandt State Monument — North side, Scenic area and Historic Gold Mine.
194.6	Historic Site — campsite of Red Middlevoice.
193.5	Scenic area, Cedar Rock south bank of the river.
188.9	Historic site — Camp Pope.
186.8	North Redwood, home of Sears Roebuck Co. — Riverside Townsite — Historic site.
182.6	Historic site — Little Crow Village.
180.0	Whipple Chapel.
179.8	Morton — Birch Coulee State Memorial Park, 1 mile north of Morton, in Renville County — quarries in Morton contain some of the world's oldest granite gneiss and is a scenic area.
177.6	Historic Site — Lower Sioux Agency and Redwood Ferry.
172.5	Access at #5-11.
167.3	Access at #3-8.
160.7	Fort Ridgely Memorial State Park, ¼-mile off Minnesota River in Renville County.
154.4	Access, Brown County #10.
148.4	Historic site — Harkin Store, Pioneer condition.
147.5	Milford State Monument, 1½-mile south of river, off State Highway #29 in Brown County.
135.7	Historic New Ulm — Old Houses and Schell Beer Gardens — Access in city park and pool, Flaudrau State Park 1½ miles southwest.
134.7	Wayside Park off Federal Highway #14.
126.8	Access off County Road #45 bridge, Blue Earth Co.
113.8	Judson, Access, poor, #23 & #42 Bridge.
108.0	Historic Seppman Mill, 1 mile southwest of the Minnesota River off State Highway #68.
105.0	Minneopa State Park, ½ mile off Minnesota River abutting U.S. Highway #169 on the south.
102.2	Sibley Park, access and camping.
100.5	Hanging site of Indian Insurgents 1863.
85.6	Access and campsite in St. Peter on southwest corner of State Highway #99 bridge in city park.
83.0	Historic St. Peter.
79.9	Traverse des Sioux State Park.
72.7	Ottawa, Ghost Town.
66.0	Le Sueur, access north of #93, Historic Mayo House.
55.7	Henderson, Historic Town — Joe Brown House, Access on southeast corner of State Highway #19.
48.0	Blakeley Access, poor.
39.8	Access and campsite good on northeast of #25 bridge in Belle Plaine.
35.8	Sand dunes.
32.0	Carver Rapids — trading post site — Mounds, proposed State Park.
29.7	Historic Carver.
25.7	Chaska, access S.E. #41 Bridge.
	Shakopee, access #169 Bridge.

MISSISSIPPI RIVER — Father of Waters

This Mississippi River route carries canoeists through parts of ten counties in north-central Minnesota. From its source in Itasca State Park, the river follows roughly a circular course, flowing 376 miles to the mouth of the Crow Wing River. At this point, it is only 75 airline miles distance from its source.

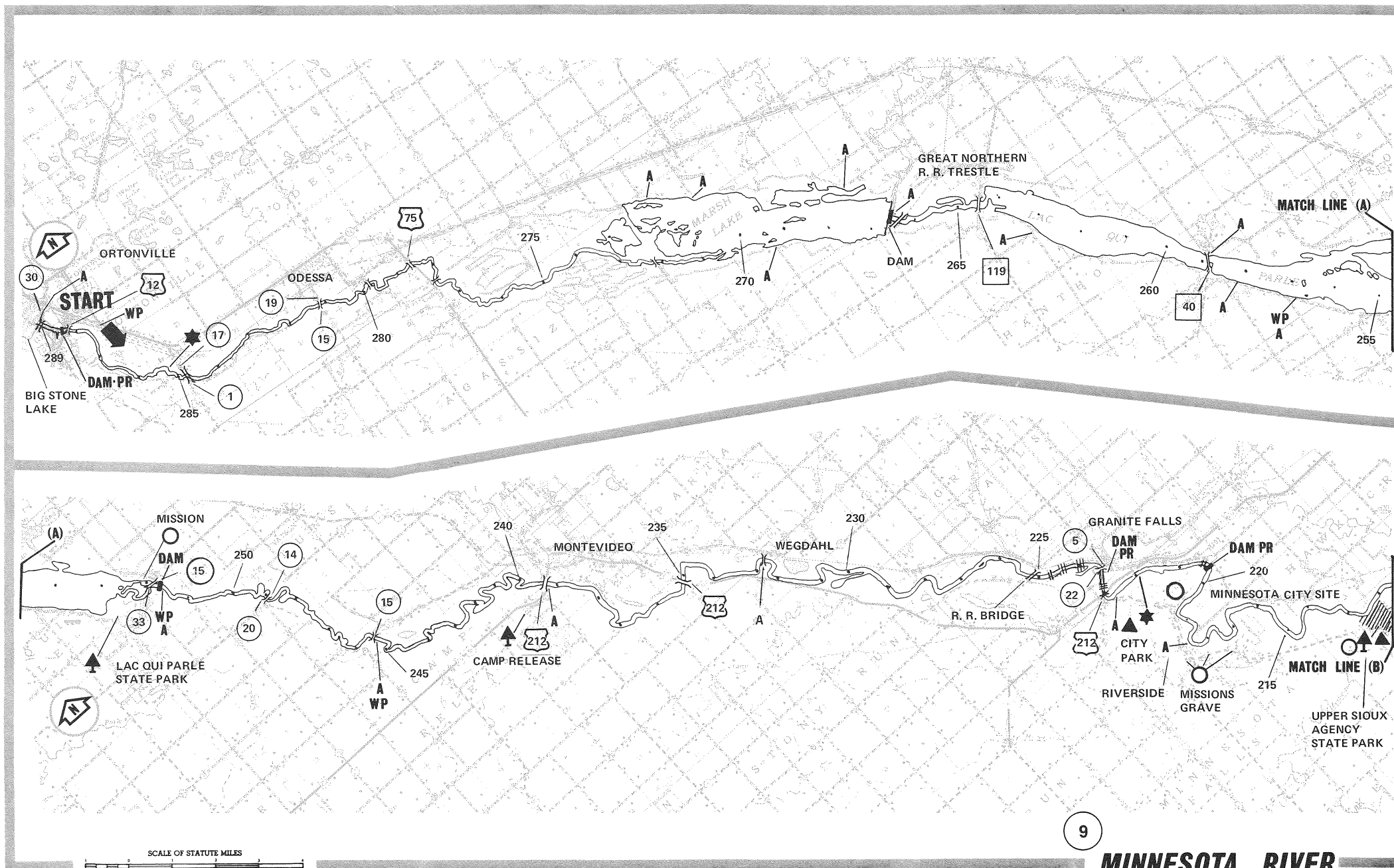
The topography ranges from level to very rough and hilly. An outstanding topography feature of the southern part of the watershed is the broad, marshy plain covering much of Aitkin County. This area was once occupied by a shallow glacial lake, know as Lake Aitkin which was drained by the Mississippi River after the glaciers retreated.

The Chippewa National Forest, parts of 12 state forests and the Leech Lake Indian Reservation, are within the Mississippi River Basin. The Chippewa National Forest with its miles of clear, northern water, excellent stands of pine and abundance of wildlife, is one of the finest recreational areas in the country. It is rich in Indian and early fur trade history. Itasca State Park embraces about 32,000 acres of scenic wilderness at the source of the Mississippi River. Crow Wing and Charles A. Lindberg State Parks have good recreational facilities.

The Rice Lake Federal Wildlife Management Area is near McGregor.

From Bemidji to Grand Rapids, there are four dams on the Mississippi and the river passes through two very large lakes. Throughout this region fishing is excellent.

From Grand Rapids to Brainerd, the river flows into a huge swamp basin and past the Cuyuna Iron Range. From Brainerd to Anoka, the Mississippi flows through rolling glacial till plains interrupted by hills, farmland and lake-filled hollows. This portion of the trip is less wild, due to the numerous towns, including Brainerd, Little Falls, Sauk Rapids, St. Cloud, Monticello, Elk River, Dayton and Anoka.

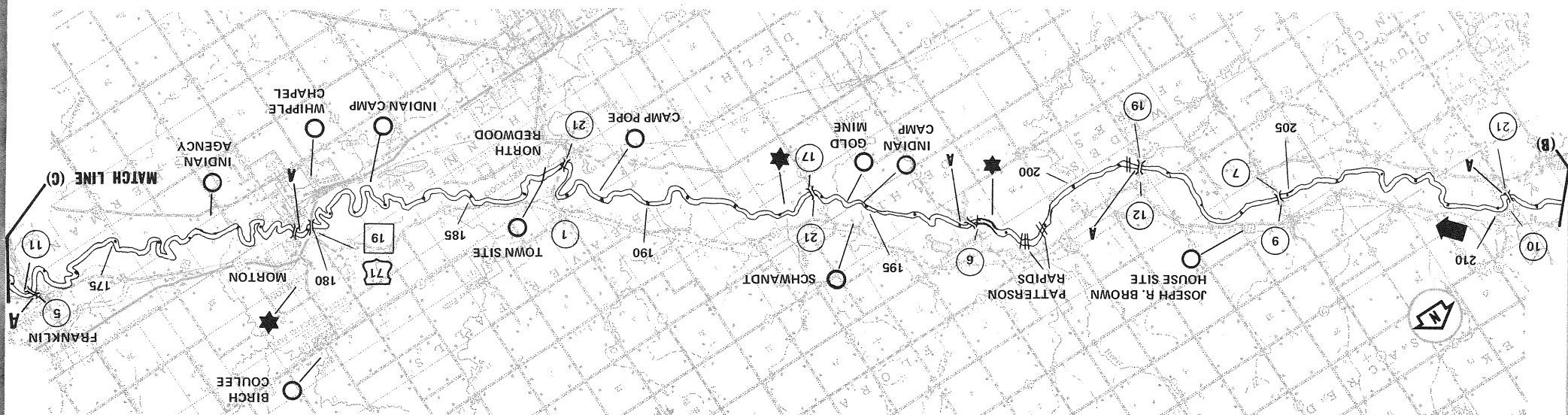
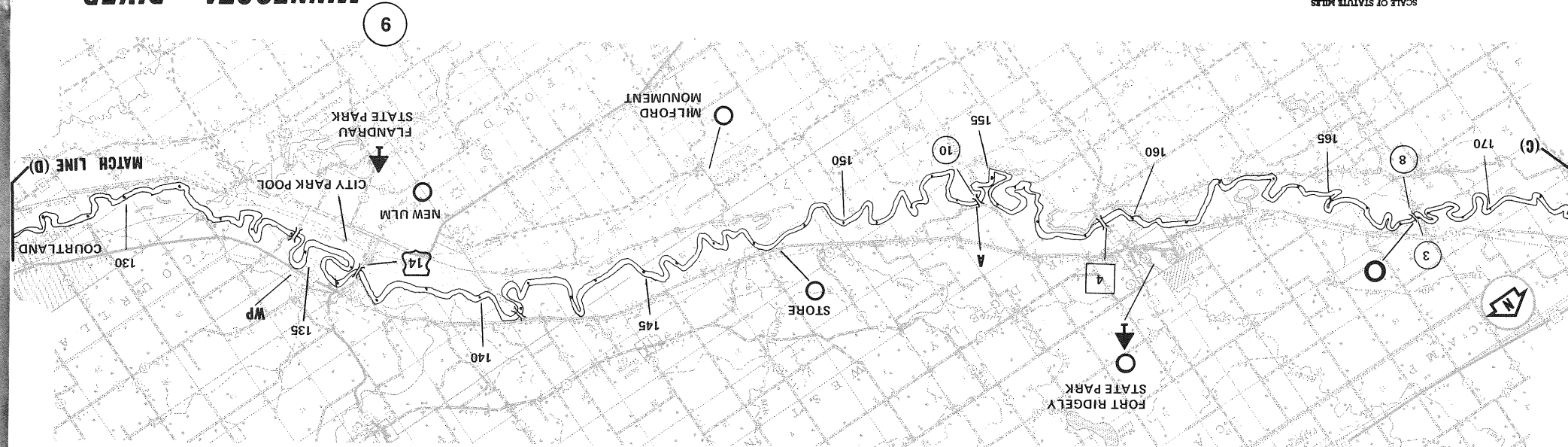


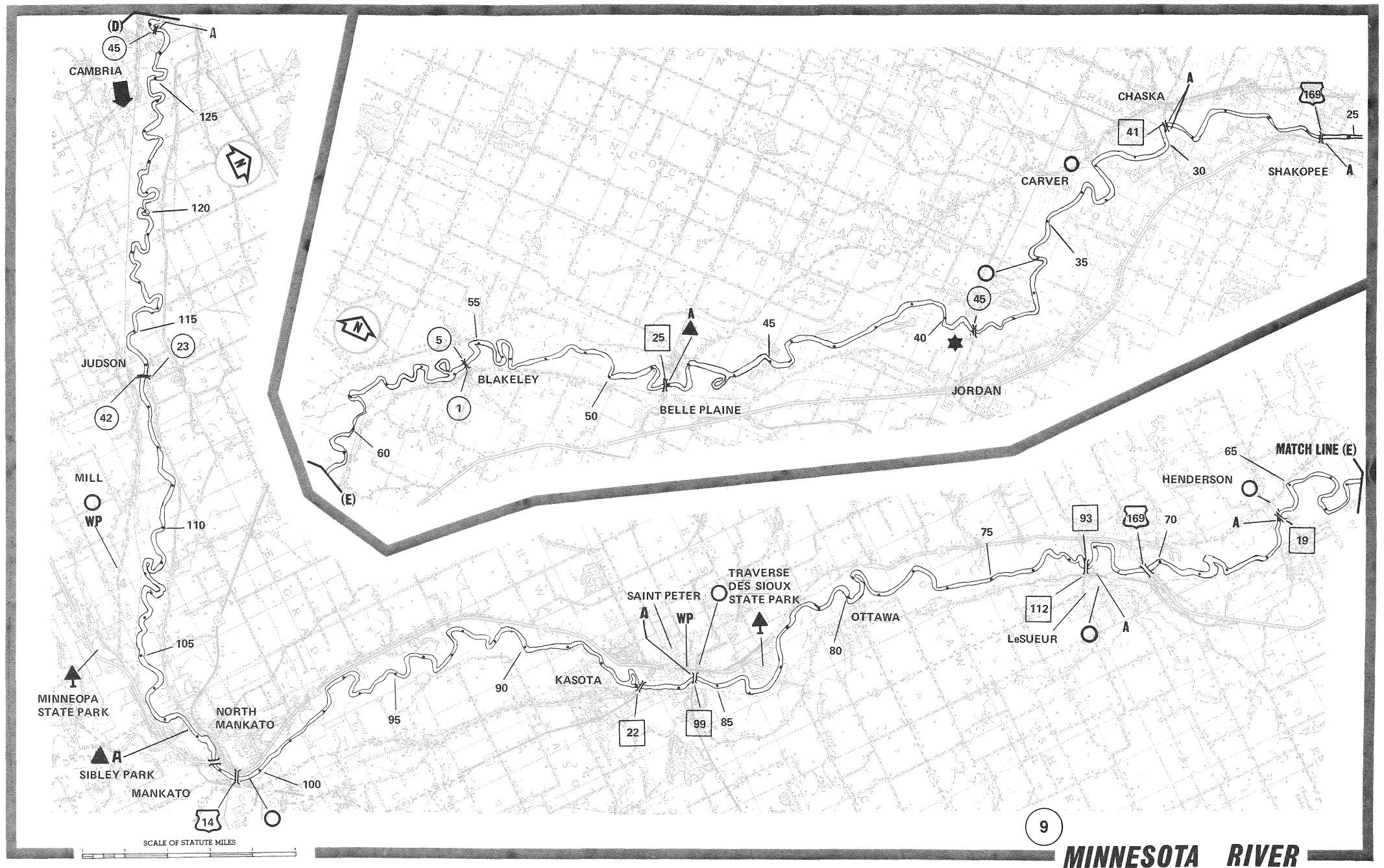
9

MINNESOTA RIVER

MINNESOTA RIVER

SCALE OF STATUTE MILES





Mississippi

Headwaters Canoe Route

The Mississippi River played a very significant part in the development of Minnesota and was an important avenue of commerce to Indians, fur traders and the early explorers who either entered or left the region by way of this river.

The first foreigner to record his arrival on the shores of the Mighty Mississippi was Hernando De Soto on a journey of exploration in 1541. From the date of De Soto's discovery, the Mississippi was a continuing challenge to venturesome explorers and traders and to the nations they represented. Little by little, the course of the river was discovered, mapped and explored. The stream had become an important artery of frontier commerce long before the rivermen knew its source.

In fact, it was not until 291 years after De Soto first viewed the river that Henry Schoolcraft accurately determined the presently accepted source at Lake Itasca. On July 13, 1832 the Schoolcraft party, guided by an Indian, Ozawindib, arrived on the east shore of Lake Itasca, and made the first official record of discovery of the source of the Great River.

Since the time of Schoolcraft, the headwaters area of the Mississippi has become a national landmark dramatized by beautiful Itasca State Park which includes Lake Itasca and attracts almost a million visitors annually.

The first 80 historic miles of the Mississippi has now been established by the Division of Lands and Forestry, Minnesota Department of Conservation, as a canoe route.

From Lake Itasca to Lake Bemidji, the winding river is practically untouched by industry or concentrated settlement.

At its source, the Mississippi traverses a typical semi-wilderness country. It alternates through pine country and through relatively untouched swamps where small and large game abounds.

Three overnight landings have been completed — Bear Den Landing, five miles south and three miles southeast of Solway, is readily accessible; Pine Point Landing may be reached by car over the forest road which leaves the blacktop road two miles north of Becida; the Iron Bridge Landing, west of the iron bridge on the Bemidji-Becida road, is accessible only by canoe or boat.

Additional information may be obtained at Lands and

Forestry stations at Bemidji, Bagley, Guthrie or Itasca Park.

The Mighty Mississippi —

The next part of the Mississippi River canoe route starts in Bemidji in southern Beltrami County, a city named for Chief Bemidji, a Chippewa Chief whose band of 50 Indians made their home at the southern end of Lake Bemidji.

On the channel to Cass Lake, 8 miles from Bemidji, is a 22-foot hydroelectric power dam and seven miles from the dam, at the entrance to the Chippewa National Forest, is the old Red Lake Oxcart Trail. Hudson Bay Company wagons carried furs over this route from Steamboat River past Cass Lake to the Red River Valley.

Between Cass and Winnibigoshish lakes, the river flows sluggishly through flat marshy land with extensive rice beds bordering both sides. Winnibigoshish Lake covers an area of 114,800 acres and is 15 miles across. Crossing should not be attempted when the water is not calm.

On the northeast side of Winnibigoshish are the Turtle and Snake Indian Mounds along the shore of Cut Foot Sioux Lake. In 1748, a major Sioux-Chippewa battle was fought on the spot where the mound now stands ending in the complete ouster of the Chippewa. The Sioux, jubilant and eager to commemorate the victory, built the turtle with the head pointing north to signify that the enemy had been driven in that direction.

The morning after the battle, while the Chippewa were still dividing the spoils, some of their squaws found an unconscious Sioux warrior whose foot was almost severed. The Chippewa thereafter referred to this lake as the "Lake of the Cut Foot Sioux". The original Cut Foot Sioux Ranger Station was built in 1904 on the site of an old camping ground at the head of the portage. It was vacated about 1918, but is still in good condition.

Two miles below the Leech Lake fork, the Mississippi receives the discharge of Ball Club Lake — 6 miles long, and 1 to 2 miles across, the direct route to Little Lake Winnibigoshish.

After leaving Ball Club Lake, the river is exceedingly tortuous. The bends are so connected with collateral channels, that the stream virtually doubles and encloses a series of large islands. From here the river flows to an area known as the "meadows" and the White Oak Point, on Big White Oak Lake, the historic site of an old Indian village and a fur trading post, built in 1795.

Thirteen miles south of White Oak Point, where the Vermilion River enters the Mississippi River, is School-

craft State Park, named after Henry Schoolcraft who discovered the source of the Mississippi River.

Nine miles east of Schoolcraft State Park above the Pokegama Falls, is the discharge of Lake Pokegama. This is the largest body of water in the vicinity, and has an extreme length of 13 miles.

A Northwest Company trading post and a nearby Indian village were located one mile south of the outlet of Sandy Lake. Remains of old settlements can be seen further south. At the discharge of Sandy Lake into the Mississippi is a small, sharp point, the site of a post of the American Fur Company. Below Big Sandy Lake, the river meanders through a broad, flat plan that was once occupied by glacial Lake Aitkin.

The Pine River enters the confluence of the Mississippi, 28 miles west of Aitkin. The Pine River was a means of communication for the voyageurs with Leech Lake and was a more direct course to Leech Lake than the Mississippi. In 1805 there was a Chippewa encampment of 15 lodges where the two rivers join.

Just south the Crow Wing River confluence, is the site of the abandoned town of Crow Wing, one of the state's oldest ghost towns. The town was abandoned in about 1870 when surveyors for the Northern Pacific Railroad Company selected a site on the east bank of the Mississippi for a railroad crossing. This area was also an important crossing of the Red River Oxcart Trail over the Mississippi and the site of a fur trading post dating to 1700's.

South of the Crow Wing area is Fort Ripley and an area called Painted Rocks by the French voyageurs, which served as the winter headquarters of Zebulon Pike during the winter of 1805-06 while Pike was searching for the source of the Mississippi. This area is also important as the site of Charles A. Lindberg State Park.

The town Watab was an old Indian trading post before it was organized in 1858. The little river was formerly important as the most tangible part of the shadowy Sioux-Chippewa boundary of 1825. The word Watab is a Chippewa term applying to the long slender roots of the tamarack and jack pine.

The Mississippi River crosses at Sartell at a community that once marked the Indian boundary established by the Prairie du Chien Treaty of 1825.

Downstream from Sauk Rapids was the site chosen by the Sac Indians as a refuge after they had been driven from Wisconsin for their raids on the white settlers. When Sauk Rapids became the northern terminal of the Northern Pacific and Great Northern Railways, it also became the junction of rail and ox-cart traffic. A cyclone in 1886 leveled the entire city.

*Text and map from the "Conservation Volunteer, "Our Headwaters Canoe Trail", by Rivers R. Elliott, January-February, 1968

The section of the river from Sartell through St. Cloud is very urban; houses, factories and businesses line the banks.

The geographical position near what was then the head of upper Mississippi River traffic, brought St. Cloud into prominence in the 1850's and 60's as an outfitting post for fur traders. A vast tonnage of furs from the territory west and north was loaded on steamboats after discharging cargo supplies for the wilderness forts and for the distant Canadian posts of the Hudson Bay Company. The goods were carried inland by a steady flow of trains of 100 or more oxen and pony carts. The last regular steamboat trip was made up the river in 1874 as by that time the railroads had absorbed the traffic.

The Elk River enters the Mississippi at the town of Elk River; the name came from herds of elk found here by Zebulon Pike. Just south of Elk River is the birthplace of Oliver H. Kelley Homestead who was instrumental in starting organized agriculture in the United States. The pioneer farm house, barn and corn crib date back to 1870. At one time the Red River Oxcart Trail traversed this site.

Visible to the north and east of the Mississippi is the triangular area known as the Anoka Sand Plain, covering about 858 square miles.

Near Dayton Station, the Crow River flows into the Mississippi. Dayton Station is an abandoned railroad-junction town and former Indian trading post. Ginseng, a medicinal herb found in the woods, became a source of income and helped bring many early settlers through bad years.

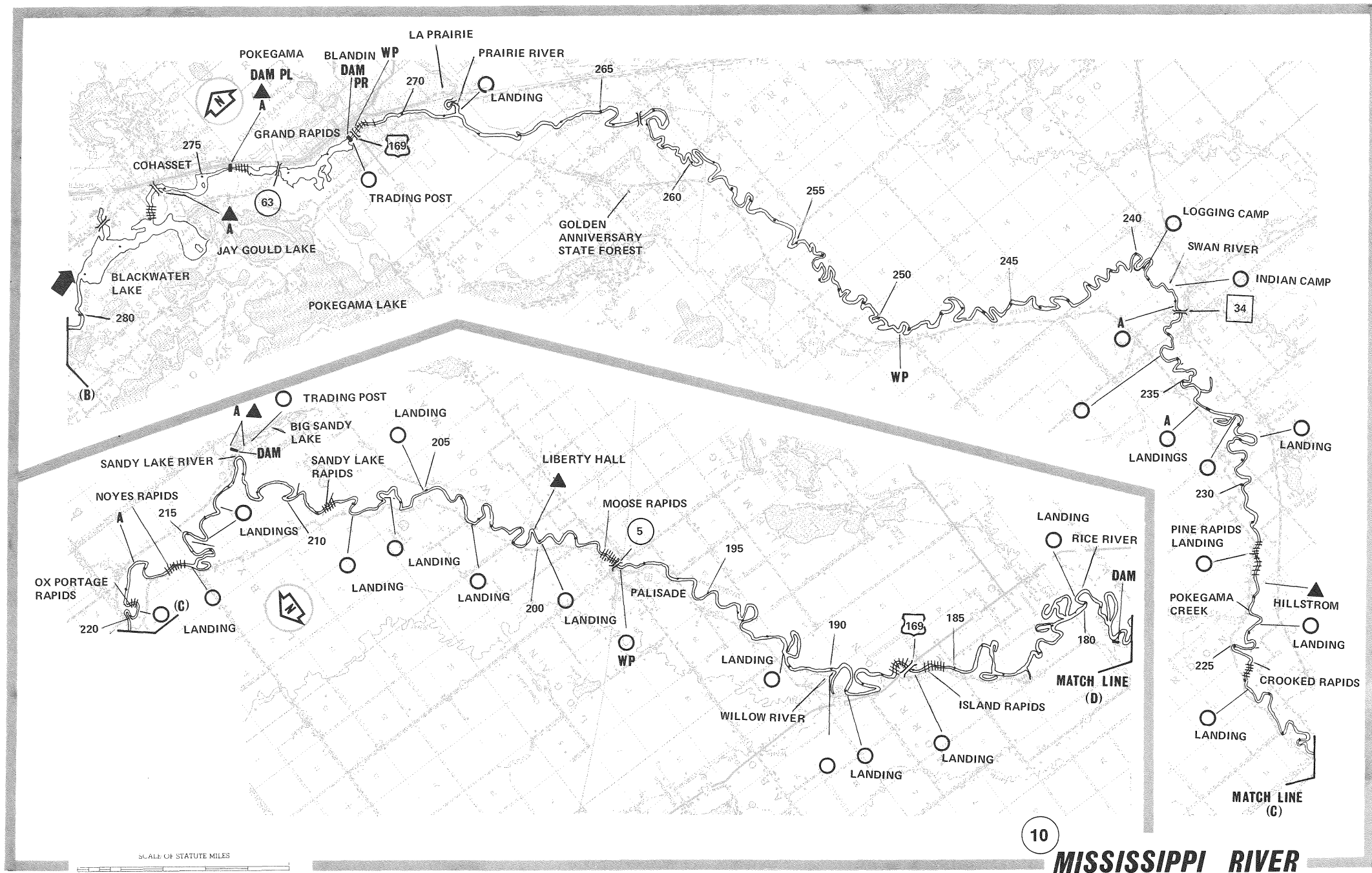
The Rum River enters in the Anoka area and is one of Minnesota's most famous streams, noted especially for the historic excursions of Father Hennepin, Jonathan Carver, and Sieur du Luth.

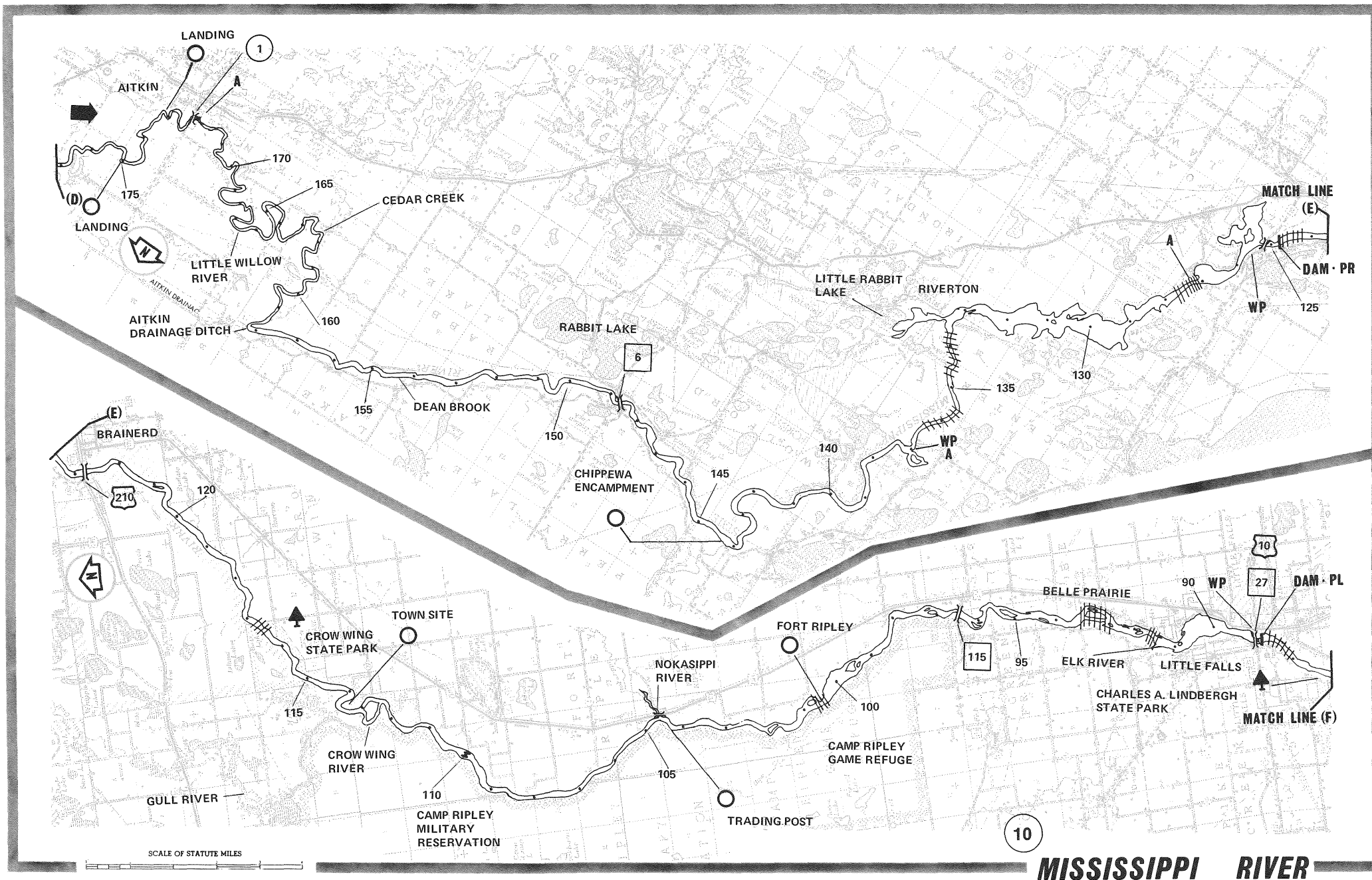
Contacts:

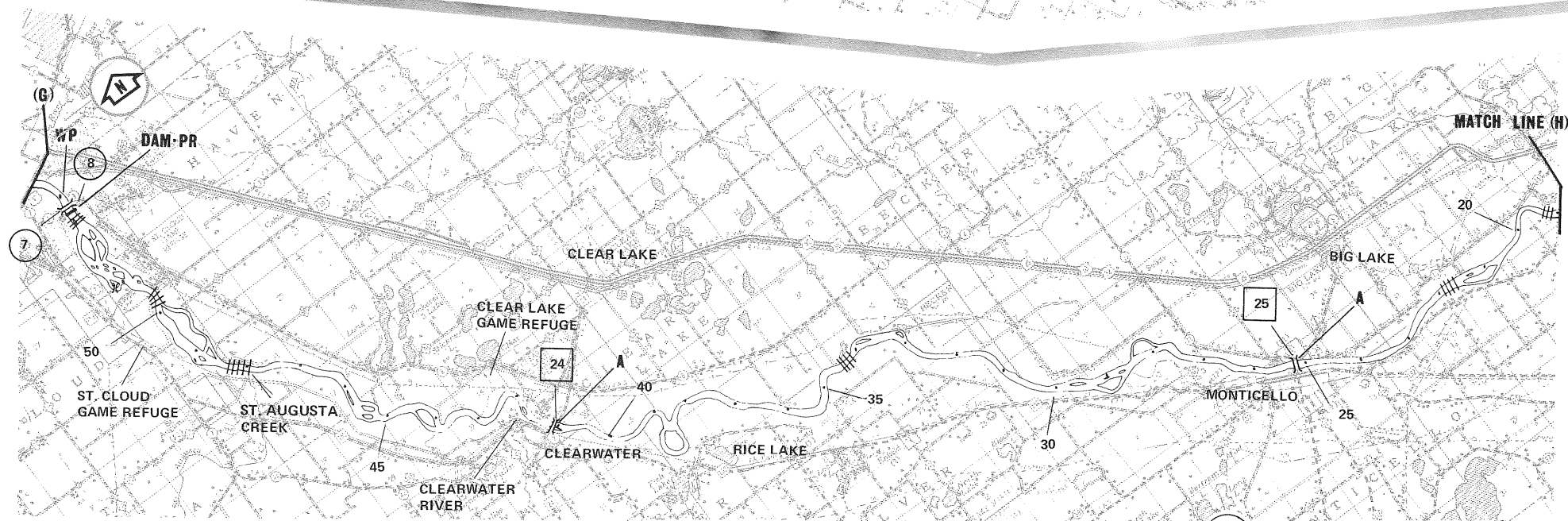
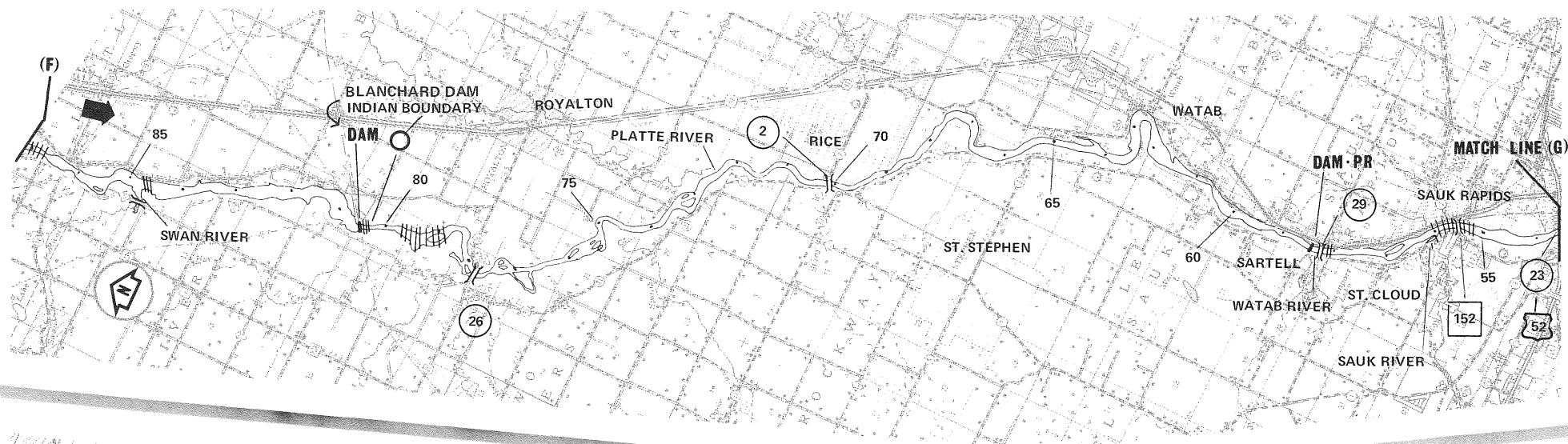
Mississippi from Knutson Dam to Lake Winnibigoshish, District Ranger, Cass Lake District, Chippewa National Forest, Cass Lake, phone 218-335-2279; *Cass Lake*, Sailstar Marine, Cass Lake, phone 218-335-2316; *Lake Winnibigoshish* and *Mississippi below the Winnibigoshish Dam*, Dam Tender, Winnie Dam, U. S. Corps of Engineers, Deer River, phone 218-246-8107; *Grand Rapids area*, Lee Gaalas, Grand Rapids; *Aitkin County*, Jack O'Konek, Hill City; *Division of Game and Fish*, Merle Johnson, 315 Charles Street, NW, Brainerd, phone 218-829-9121; *Area Forester*, R. R. Elliot, Box 825, Bemidji 56601, phone 218-755-2965; *Fort Snelling State Park*, Charles Kramer, St. Paul, phone 612-722-2911.

Mile	
370.0	Survey starts at the Mississippi River from Lake Bemidji where U.S. Highways 2 and 71 cross the river.
367.2	Access fair — alternate access — Lake Bemidji State Park — County Highway #19 Bridge.
362.1	Ottertail Power Company Dam portage right 150 yards — fair — access fair — picnic grounds.
355.2	County Road #8 access — fair. Boundary of Chippewa National Forest Old Red Lake Oxcart trail.
350.0	Lake Windigo picnic area improved — Star Island campsite improved — Turtle River.
345.3	County Road #39 — access fair.
342.0	Forest service road #172 — access fair.
335.5	West Winnie campsite and access.
328.0	Birches picnic area and access — improved.
327.0	Tamarac point access.
325.0	Excellent side-trip to four improved campsites: West Seelye Bay, East Seelye Bay, Masomo Point, William Narrows and two historic sites: (2 miles north) original ranger station 1904, Turtle Mounds (5 miles north).
321.0	Plug Hat Point campsite and access — improved.
320.9	Lake Winnibigoshish dam, portage right.
306.0	Access from Leech Lake River.
304.0	Access from Ball Club Lake.
295.4	Deer River.
295.0	White Oak Point and Old Indian Village site and Trading Post 1995.
288.0	Schoolcraft State Park.
287.0	Vermillion River.
277.0	Rapids.
276.0	Izaak Walton campsite and access.
274.5	Pokegama dam, portage left.
271.3	Blandin Paper Company dam, portage right. Historic Site — Grants Northwest Company Trading Post.
271.0	Wayside Park.
268.8	Prairie River. Historic Site — Guners Landing.
249.4	Wayside Park.
239.5	Historic site — Swan River Logging Camp.
238.4	Swan River. Historic Site — Indian encampment.
238.0	Access point. Steamer Fawn sank here in 1894.
236.5	Historic site — Cox Landing.
234.2	Historic site — Ferrose Landing.
233.2	Historic site — Cut-off Landing.
232.3	Historic site — Ball Bluff Landing.
228.3	Rapids.
228.0	Historic site — Pine Rapids Landing.
227.4	Hillstrom campsite.
226.3	Pokegama Creek. Historic Site — Dixon's Ranch Landing.
224.5	Crooked Rapids.
223.8	Historic site — Verdon Post Office Landing. Steamboat Irene sank here in 1908.
219.8	Historic site — Ox-Portage Landing.
219.6	Ox-Portage rapids.
218.4	Libby access.
217.6	Noyes rapids.

Mile	
216.7	Historic site — Lees Ferry.
214.6	Historic site — Doney's Landing.
213.6	Historic site — Scriber's Landing.
212.4	Sandy Lake dam. Historic site — Northwest Company Fur Trading Post. Campsites on both sides of dam — access good.
208.8	Sandy Lake Rapids.
207.8	Historic site — Scotts Meadow Landing.
206.9	Historic site — Sanders Landing.
205.0	Historic site — Portage City Landing — Old Ferry Crossing.
203.3	Historic site — Denman's Landing.
200.3	Historic site — Liberty Hall Landing and campsite.
200.0	Historic site — Finn Hall Landing.
198.2	Moose Rapids.
197.5	Historic site — Lee Landing and Wayside Park.
193.0	Historic site — Bear Portage or Trepp Portage Landing.
191.5	Historic site — Clarks Landing.
190.0	Historic site — Willow River Landing.
189.0	Historic site — Waldeck Ranch and Landing.
186.7	Rapids.
186.0	Historic site — Suttons Landing.
185.8	Island Rapids.
179.9	Historic site — Rice River Landing — Rice River.
178.1	Control dam — Aitkin drainage ditch.
175.0	Historic site — Cliffs Landing.
173.0	Historic site — Ripple River Landing, Swan, Lee and City of Aitkin sank here.
172.0	Access point.
144.2	Historic site — Chippewa encampment.
137.0	Wayside Park and access point.
127.2	Access point.
125.5	Wayside Park.
124.8	Dam, portage right.
113.0	Historic site — abandoned town of Crow Wing in Crow Wing State Park.
104.3	Historic site — Bate Trading House 1831, Indian Village.
100.5	Historic site — Fort Ripley.
93.0	Belle Prairie.
89.0	Wayside Park.
88.9	Dam, portage left.
87.3	Charles A. Lindbergh State Park.
80.5	Blanchard dam. Historic site — Chippewa boundary of 1825.
58.3	Dam, portage right.
53.0	Wayside Park.
52.7	Dam, portage right.
41.1	Access.
25.1	Access.
12.7	Wayside Park and campgrounds.
9.8	Oliver H. Kelley Homestead of the National Grange.
7.5	Historic site — Indian Trading Post, Wayside Park and access.
0.0	Historic site — Fur Trading Post where Rum enters confluence of Mississippi River.



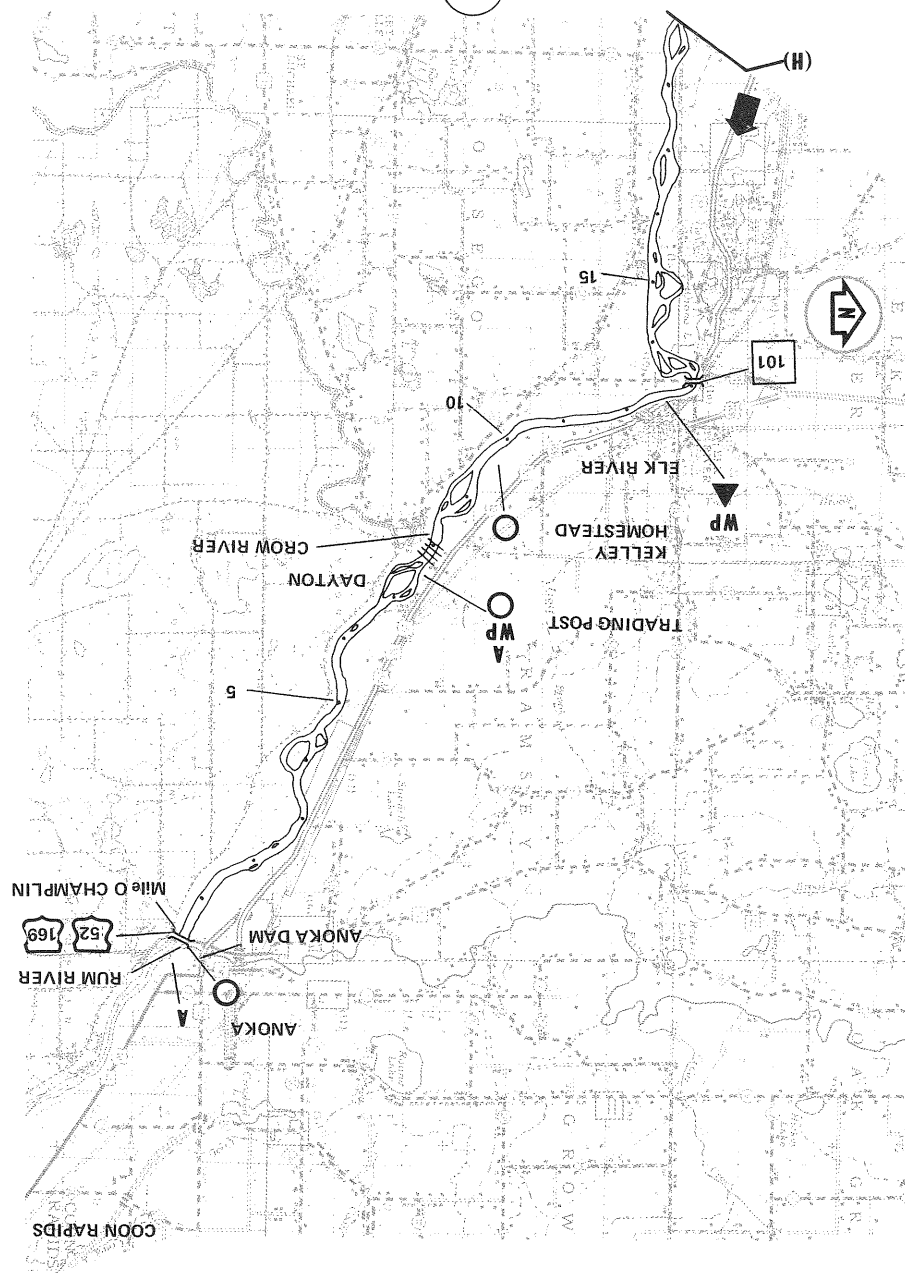




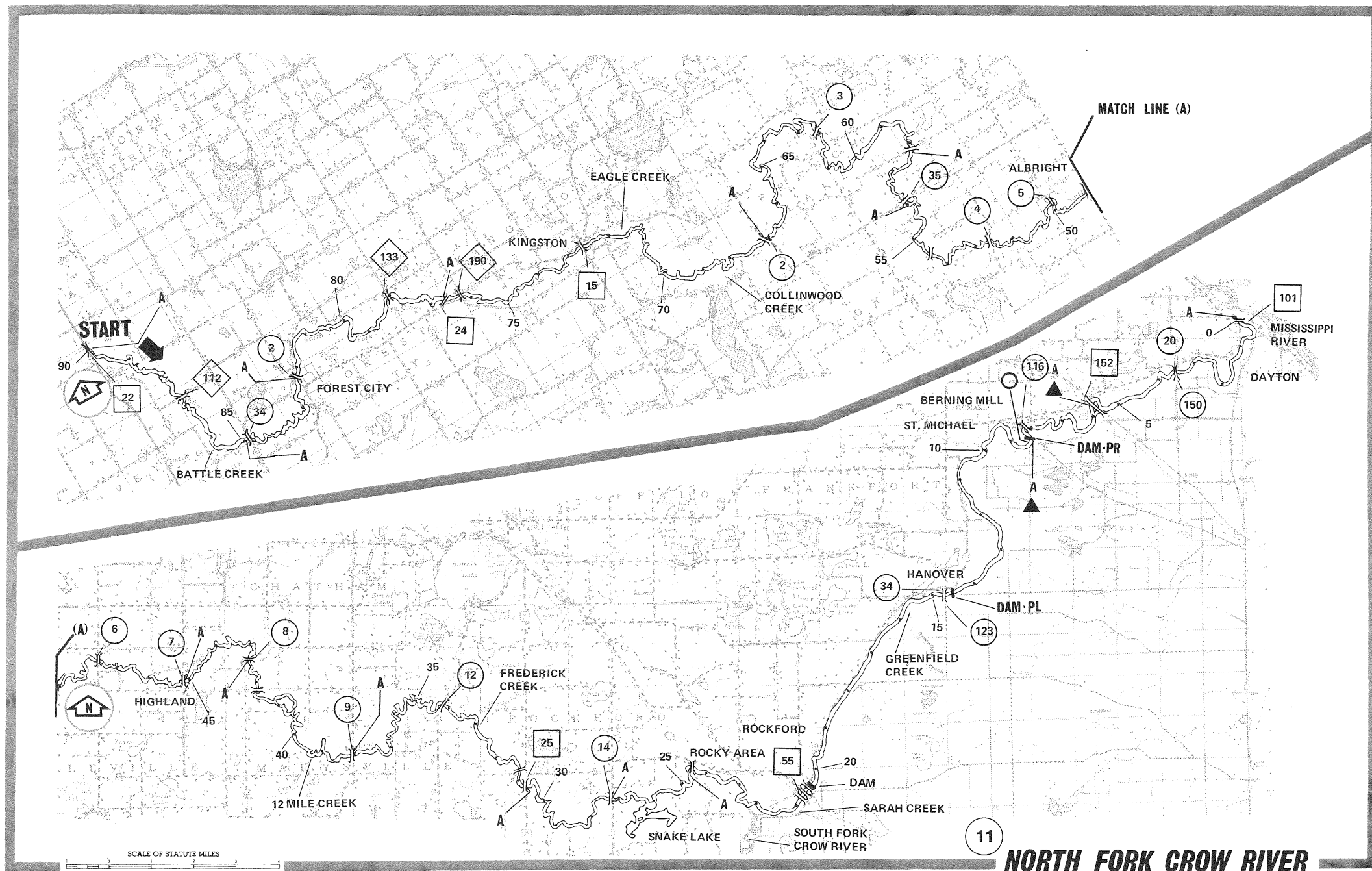
SCALE OF STATUTE MILES

10

MISSISSIPPI RIVER



MISSISSIPPI RIVER



NORTH FORK CROW RIVER

CROW RIVER ROUTE

The North Fork of the Crow River flows through farmland interspersed with trees and swamps. Throughout its length the river is generally shallow during the summer.

The river flows southeasterly for about 175 miles and joins the South Fork of the Crow River about 1½ miles south of Rockford. From Rockford, the Crow River forms the boundaries of Wright and Hennepin counties and empties into the Mississippi River at Dayton.

The trip starts at State Highway 22 where it is clear and in normal conditions, shallow with large rock boulders. The river here is narrow and fast-moving, with farms dotting the landscape. Where County Highway 35 crosses, the river is quiet and beautiful, the water still extremely clear. However, about a mile downstream, dumps have polluted the river and from here to the Mississippi, the water is brownish and discolored.

At Rockford, where the North Fork and South Forks join the Crow River, the water is slightly deeper, trees line the banks and the river is quite scenic. (Access at State Highway 55 is steep and poorly developed.)

Just south of Hanover, is a portage extending some 500 to 800 feet downstream, around the dam and a rocky area directly below the dam. The access at Hanover by the mill is difficult because of the steep banks. The river here is rather rough and is typical of its behavior to the Mississippi River. Outside Hanover is a campsite with easy access. About ten miles from Hanover, just outside St. Michael, a high bluff parallels the river and the river widens and becomes fairly shallow.

A 75-yard portage must be made at Bering Mill. The portage is good and there is a picnic area.

Middle Fork of the Crow River

(Write "Contact" For Map)

There is a fine leisurely family canoe route developed by the Little Crow Canoe Outfitters on the Middle Fork of the Crow River, 90 miles northwest of the Twin Cities.

The trip is about 12 miles up and 12 miles back, but there are 65 miles of shoreline and numerous bays, islands, trails and small creeks for exploring. Canoeists can leave from the outfitter base and canoe up river.

There are three campsites: (Sioux Camp, Cherokee and Backfoot camps) with picnic tables, toilets, fireplaces and wells. To plan your trip, contact the Little Crow Canoe Outfitters, Box 267, New London 56273, phone 612-354-2644.

Contacts

Conservation Officers, Norman Dahlman, 718 Stearns Avenue, Paynesville 56362, phone 612-243-4653, Earl Putzke, RFD 3, Annandale 55302, phone 612-274-8344, Glenn Fredell, 710 South First Avenue, Buffalo 55313, phone 612-682-1535; District Foresters, Derwood Newland, 113 Division Street, Sauk Rapids 56379, phone 612-251-0191 and Brian Garvey, Zimmerman 55398, phone 612-856-2126.

Mile

90	Trip starts at State Highway #22 near Litchfield. Poor access on northeast corner. No parking provided except on shoulder of highway.
87.2	County Road #112 bridge.
85.7	Battle Creek enters river from west.
84.7	County Highway #34 bridge — access.
82.7	Forest City — County Road #2 bridge — small rapids.
78.0	County Road #133 — poor access — three small rapids.
76.7	County Road #24 bridge — small creek enters — access.
76.4	County Highway #19 bridge.
72.7	State Highway #15 bridge — no access.
71.5	Eagle Creek enters river.
68.4	Collinwood Creek enters river.
67.1	County Highway #2 bridge — access.
62.1	County Highway #3 — no access.
56.1	County Highway #35 — access.
52.6	County Road #4 bridge.
50.4	Albright — County Highway #5 bridge — no access.
47.5	County Highway #6 bridge — no access.
45.2	County Highway #7 — easy access.
42.6	County Highway #8 bridge — access.
39.2	Twelve-mile Creek enters river.
38.0	County Highway #9 bridge — access.
34.2	County Highway #12 — poor access.
33.0	Frederick Creek enters river.
30.7	State Highway #25 bridge — access.
27.2	County Highway #14 — access.
25.0	Rocky area.
22.0	North Fork joins South Fork to form Crow River.
21.1	Sarah Creek.
20.8	Soo Line Railroad bridge crosses Crow River.
20.6	State Highway #55 bridge — poor access.
20.5	Rockford bridge — poor access — also dam.
15.5	Greenfield Creek.
14.8	County Highway #34 bridge, town of Hanover.
14.5	Dam
9.5	Town of St. Michael abuts river.
8.1	County Highway #116 bridge — no access.
8.3	Dam and Berning Mill — access.
5.7	State Highway #152 bridge — excellent access.
3.7	County Highway #20 bridge — no access.
0.2	Dayton — State Highway #101 bridge — no access.
0.0	Crow enters Mississippi River. End of trip.

RED LAKE RIVER ROUTE

The Red Lake River is a very long river, varying from marshy wilderness with long views and abundant wildlife to dull and featureless. It varies from the beauty of the river frontage at the town of Thief River Falls to the trash-laden banks at Crookston — from repeated lovely, navigable rapids and cliffs, to the long placid sameness of the lower 30 miles.

Certain reaches have very special appeal in a part of Minnesota where such attractions are uncommon. In general, the aesthetic appeal is primarily above the dam in the upper stretch and along the rapids and high cliffs from Thief River Falls to Huot.

The Red Lake River extends from the outlet of Red Lake to the Red River of the North at East Grand Forks. It is generally navigable throughout its length, with portages around two large dams, one river and one washed-out dam. Some rapids require walking at low water stages.

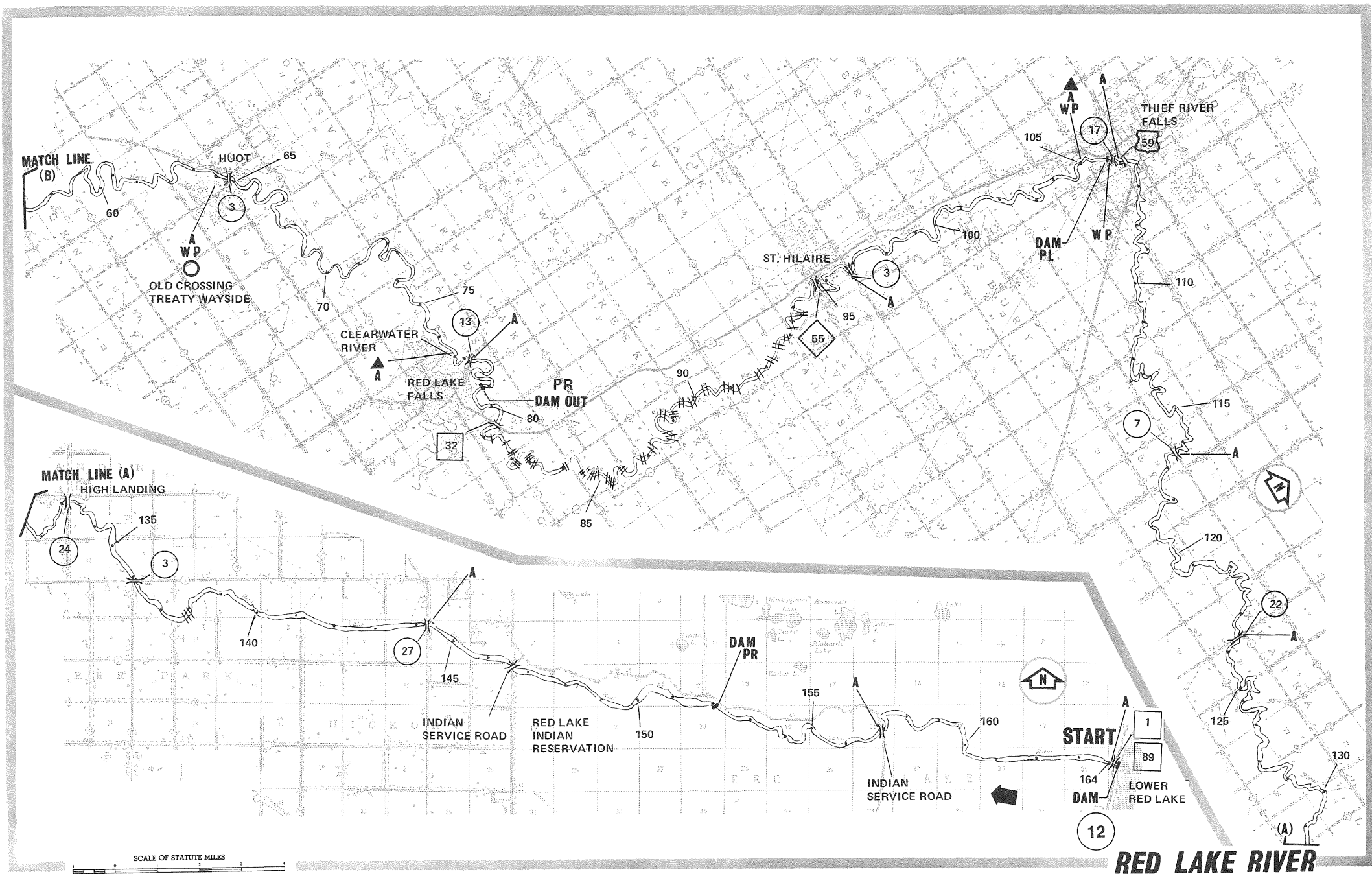
The reach above the dam at mile 174 is very interesting and unique. The river passes through marshy, open land in a corridor of large trees and the area is rich in wildlife. The water is very clear and lacks the deep amber color so common in northern bog rivers. This picturesque area is unchanged by man and is very fascinating (There are no camping areas along this stretch.)

Below the dam the river is considerably different — there are no swamps and few trees. Near High Landing, the meanders are more prevalent and several farms are passed. At the town of Thief River Falls, well-manicured backyards extend to the shoreline which is stabilized by a control dam. The portage around the dam is short but high, steep and difficult. There are good public access sites and boat launching facilities at Thief River Falls.

From Thief River Falls to St. Hilaire, rapids are occasional, but the river from St. Hilaire and downstream is predominated by rapids, short pools and large boulders. There has been considerable bank erosion and slump from the spring floods of 1966 below St. Hilaire. The river then passes through an area of clay deposits where there are almost no boulders and navigation is usually easy.

An abandoned dam at Red Lake Falls is both an eyesore and hazard to navigation; obstructions below the water level can cause serious craft damage. High, nearly vertical cliffs are seen along this stretch.

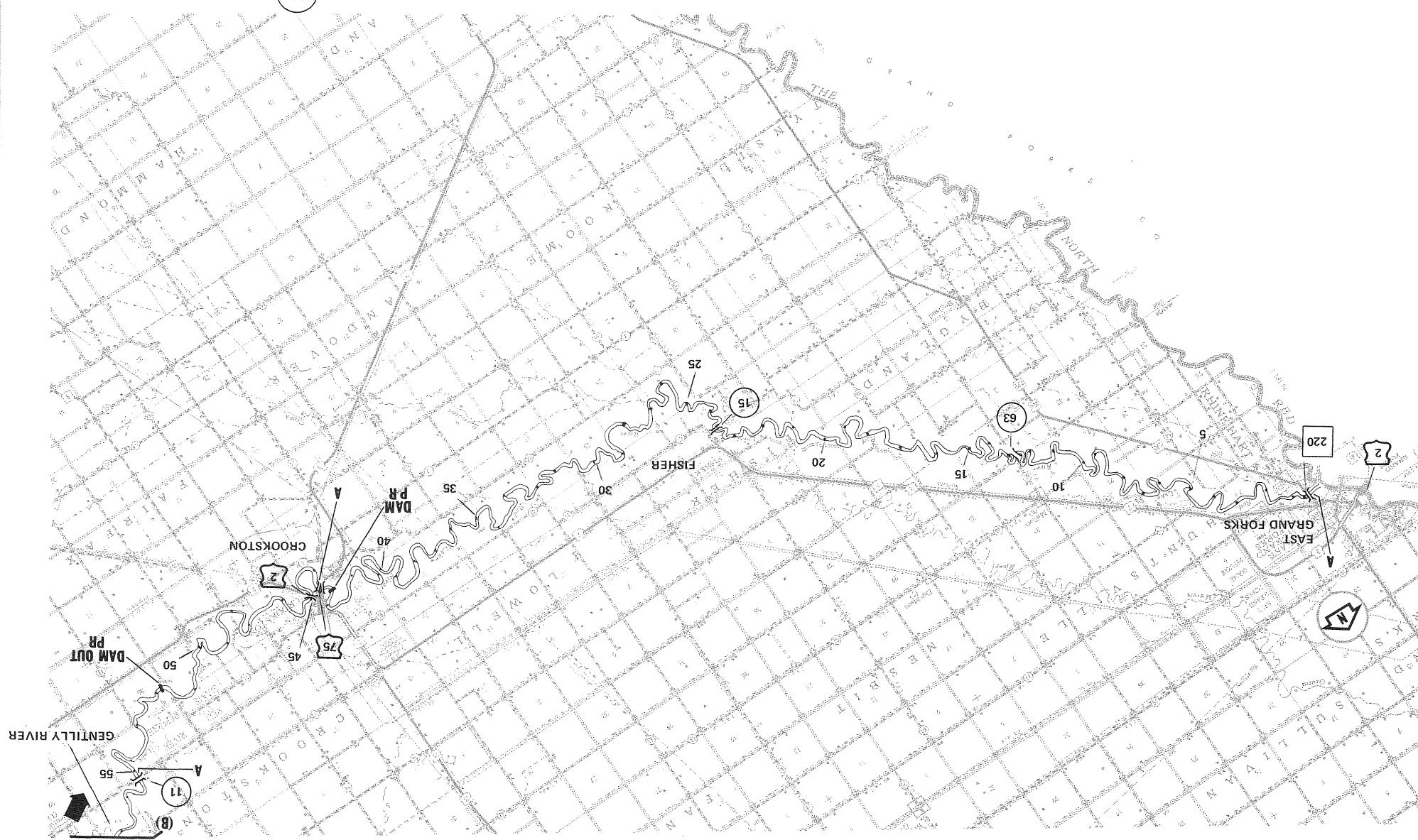
The banks at Crookston are littered with trash and



RED LAKE RIVER

SCALE OF STATUTE MILES

12



debris and the water is shallow. The banks are often high and of clay and detract from camping enjoyment. At Crookston a dam requires portaging; the slopes are steep and covered with loosely-piled, well-rounded boulders. This is not a long portage, but is steep and somewhat difficult. In the lower reaches, trees torn from eroded banks and large slump areas upstream, have been carried down during spring floods and lie along the banks.

At East Grand Forks is another small dam with a short, easy portage. Exit can be made here or at the park on the left bank at the upstream edge of the suburban area.

Contacts:

Conservation Officers, Donald Fearn, 123 W. 4th Street, Thief River Falls, 56701, phone, 218-681-2922; Owen Josephson, Box 215, Red Lake Falls, 56750, phone, 218-253-2605; Conrad Olson, 410 Woodland, Crookston, 56716, phone, 218-281-4226.

Mile

164.0	Small control dam between Lower Red Lake and Red Lake River, Access.
157.0	Indian service road bridge.
152.0	Dam.
144.4	County Highway No. 27 bridge.
136.0	County Highway No. 3 bridge.
133.1	High Landing (town) access.
123.5	County Highway No. 22 bridge access.
116.4	County Highway No. 7 bridge.
106.1	Thief River Falls — Picnic grounds and swimming area, Federal Highway No. 59 bridge, launch site excellent, paved ramp, floating docks, food supplies convenient to boaters.
105.1	Park — water available, good access.
96.8	St. Hilaire County Highway No. 3, good access.
95.0	County Road No. 55, poor access.
94.0	Start of intermittent rapids (12 miles) — increasing difficulty downstream.
80.6	State Highway No. 32 bridge, access poor.
79.1	Dam out (portage right).
77.4	County Highway No. 13 bridge, Good access, Red Lake Falls.
76.8	Clearwater enters the Red Lake River, Campsite and access.
65.0	Huot.
64.5	Old Crossing Treaty State Historical Wayside Park.
55.2	County Highway No. 11 bridge.
51.8	Dam out, recommend portage around dam area, right, many unseen obstructions.
43.6	Crookston, Dam — must portage left — steep and loose rocks.
23.5	County Highway No. 15 bridge — No access.
12.5	County Highway No. 63 access very poor.
.5	State Highway No. 220 bridge.

THE ROOT RIVER

Pride of the Hill Country

Southeastern Minnesota's Pride of the Hill Country is the Root River. In the early spring, the Root River has a large flow and can be dangerous. But during the rest of the year, it is usually a very enjoyable family canoe route.

Towering, heavily forested bluffs reach down to the river's edge, narrowing the river to a tree-banked canyon. Limestone walls drop nearly straight to the river's edge. Cliff swallow nests stand out against the white walls of the overhanging cliffs. Many bluffs are capped with white pine and white birch cling to the sides.

Although the river is seldom over three feet deep, there are deeper pools which provide fine fishing. There are no serious waterfalls, but there are a number of rapids with large rocks rising from the rushing water. The scenery is different around each bend. In fact, the Root River is said to be a continuous corner.

The route starts on the north branch at the Highway 5 bridge. From here, the river flows east some 82 miles as a direct tributary to the Mississippi River. The south branch of the Root River joins at Lanesboro.

The upper part has a continuous change of scenery with enough fast water and rapids to make it challenging. There are many potential campsites, with either a sandy or rocky base, high enough to invite breezes and keep insects at a minimum. Woods line the shores and now and then there is a rock outcropping. At Chatfield, the channels cut deep into the bedrock and vertical cliffs exposed limestone, dolomite, sandstone and shale. On the highlands near Lanesboro, Rushford and Hokah, the cliffs tower as high as 450-500 feet. The river to Rushford is meandering with a series of pools and rapids flanked by wooded banks and hills.

From Rushford to the Mississippi River, the Root River tends to flow directly as there are levees and channel improvements along the route. These flowage changes have caused fast water, but have also reduced the frequency of rapids and obstructions. Paddling down this heavily wooded portion with its high hills and valleys is an enjoyable experience.

Distance between towns:

Chatfield to Lanesboro — 22 miles
Lanesboro to Rushford — 20 miles
Rushford to Houston — 12 miles
Houston to Hokah — 16 miles

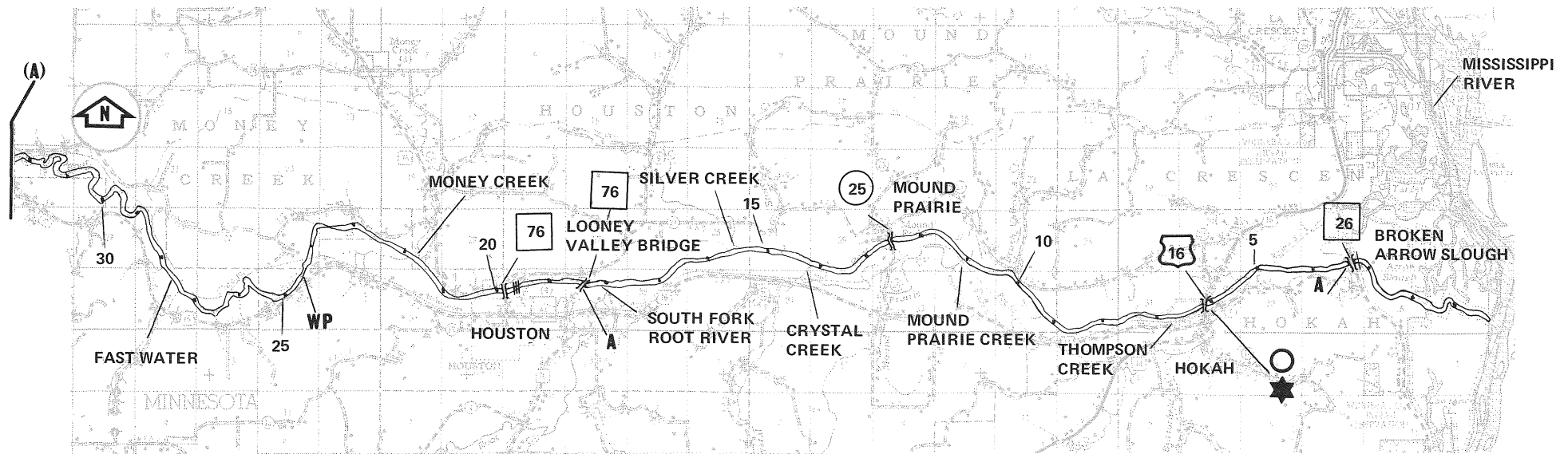
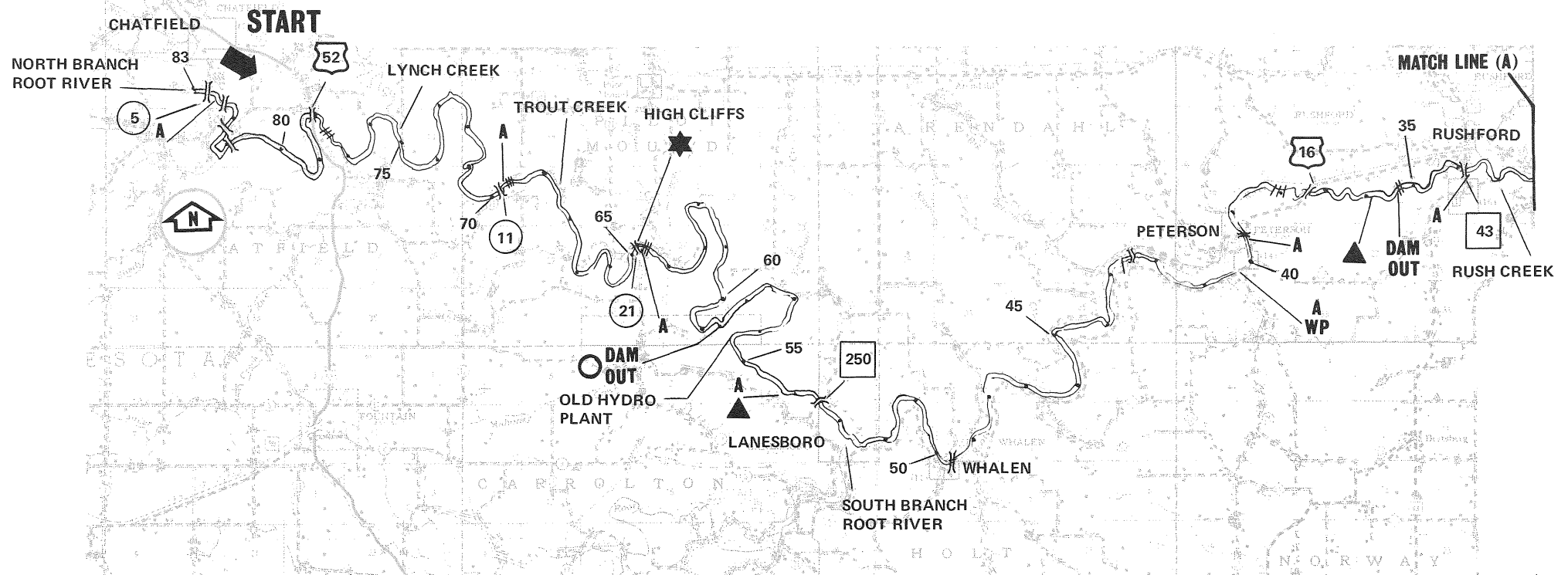
Contacts:

Root River Canoe Trail Association, Chatfield (information on facilities and for re-uniting canoeists with their cars as well as river condition information). For those starting at the headwaters of the Root River, contact Willie Eppen, RR 2, Box 50, Chatfield, phone 507-867-4824. For those starting at the middle of the route, contact Earl's Tree Service, Rushford, phone 507-864-9468.

Other contacts — Leo Giethbrook, Chatfield, phone 507-667-3894; Ray Bentdahl, Preston; Russ Hanson, Division of Game and Fish, Lanesboro, phone 507-467-3926; John Nelson, District Forester, Caledonia 55921, phone 507-724-3413.

Mile

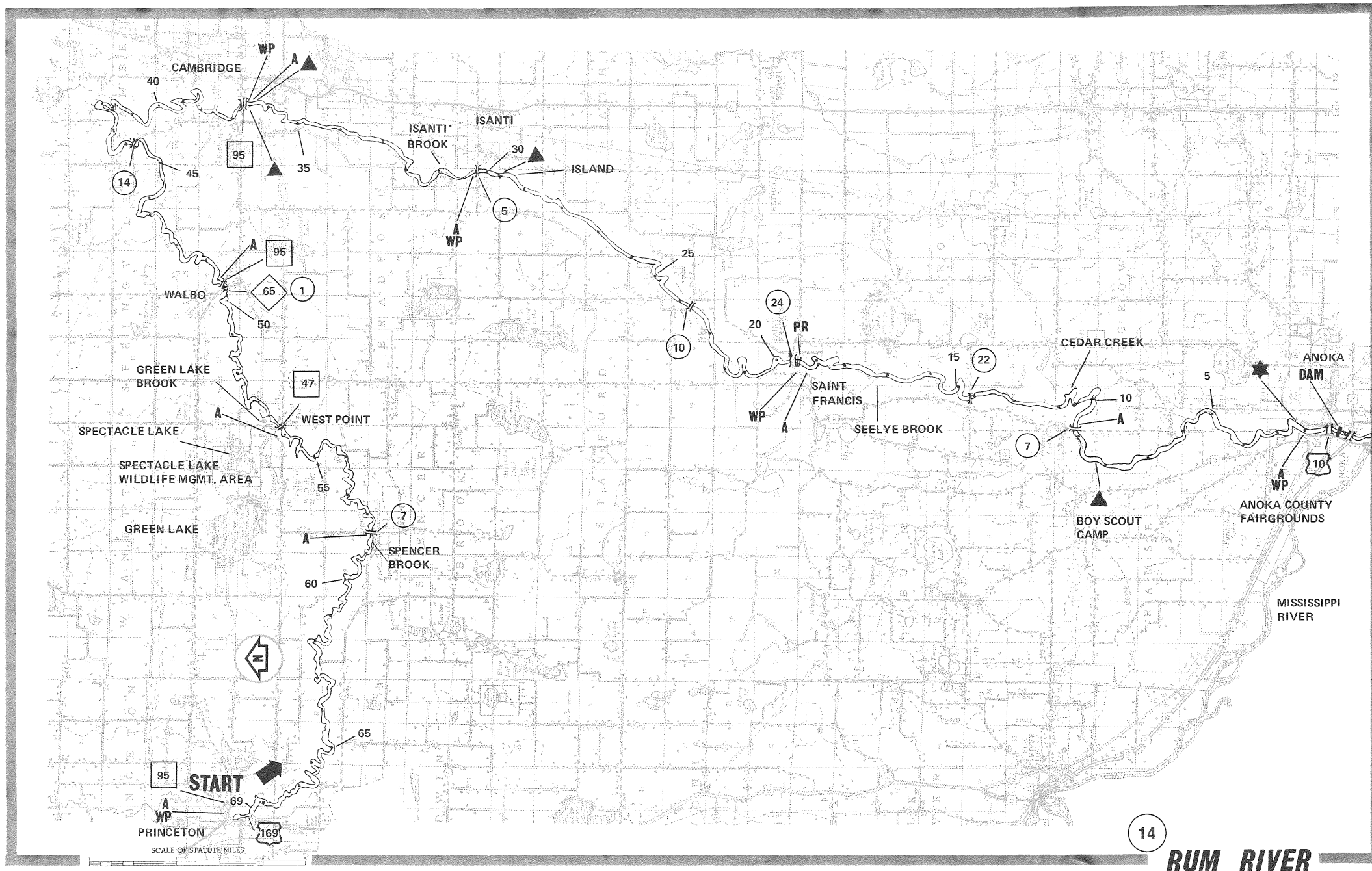
82.4	Bridge on old Highway #5 — access on northwest.
81.7	Bridge on township road, old bridge with sluiceway evidence.
81.0	Bridge on township road.
78.0	Bridge on Highway #52, rapids and island below bridge.
69.8	Bridge on Highway #11, high banks and rapids below bridge.
64.9	High cliffs, bridge on Highway #21, access on southeast quadrant.
55.5	General area where Army Engineers is considering a flood control dam. Also site of old hydro-electric plant.
54.0	Campsite.
53.5	Bridge on Highway #250, Lanesboro.
52.7	South Branch Root River.
49.8	Whalen Bridge.
40.3	Wayside park with flowing spring.
39.5	Peterson.
37.4	Bridge on Highway #16.
35.9	Campsite.
35.4	Old dam — creates rapids.
33.9	Rushford Bridge — camping site through Sportsmen Club.
27.6	Fast water.
24.5	Wayside park.
21.9	Money Creek.
19.9	Houston Bridge.
18.5	Looney Valley Bridge.
18.0	South Fork, Root River.
12.6	Mound Prairie Bridge — no access.
6.1	Hokah Bridge — no access.
3.4	Bridge on Highway #26.
3.2	Railroad Bridge.
0.0	Slough — no access.



SCALE OF STATUTE MILES

13

ROOT RIVER



RUM RIVER CANOEING

The Rum River presents a variety of experiences and scenery. In the upper portion, especially above Cambridge, the canoeist retreats into an area where nature is in command and wildlife is abundant. Portages are not necessary except at St. Francis where the remains of a dam and early bridge have created rapids which are canoeable only in high water.

The Rum River flows southerly for 140 miles as a tributary of the Mississippi River. This trip covers the Rum from Highway 95 in Princeton to the landing in the Anoka County Fairgrounds, 67 miles.

At Cambridge is a city park with picnic facilities, rest rooms and drinking water. From Cambridge to Anoka, the land is heavily wooded, primarily elm, oak, maple and ash trees. The channel is about 50–60 feet wide until a pool enters behind the Anoka dam then the river widens to 200–300 feet. There are numerous islands, homes, camps and cottages along this stretch. However, the river retains its north woods atmosphere. At the Anoka County Fairgrounds and county park on the west bank, water, boat ramp and picnic facilities are available.

Contacts:

Dr. H. D. Stoker, Cambridge; John Kirkwold, Area Forester, Cambridge 55088, phone 612-689-2832; Mille Lacs Kathio State Park, Bromley Griffen, Route 1, Onamia, phone 612-532-3523.

Mile

69.0	Start in wayside park just north of Highway 95 bridge in Princeton.
58.6	County Road 7 Bridge, access N.W. corner, Spencer Brook.
53.7	State Highway 47 Bridge, access S.W. corner, West Point.
53.5	Green Lake Brook.
49.8	Bridge, Highway 65, small store ½ mile north, Walbo.
49.7	Bridge, Highway 95.
44.1	Bridge, Highway 14.
36.6	Cambridge — park, water, bridge over highway 95.
30.9	Isanti Brook.
30.3	Bridge, Highway 5, Isanti.
29.7	Island campsite.
23.8	Bridge, Highway 10.
19.7	Bridge, Highway 24. Rapids over old dam — portage right. Park and stores in St. Francis on top of right bank.
17.2	Seelye Brook.
14.1	Bridge over Highway 22.
11.6	Cedar Creek.
9.1	Bridge over Highway 7 — access on S.E. corner.

Mile

8.2	Boy Scout Camp on right.
2.0	Anoka St. Hospital. Landing at Anoka County Fairgrounds.
1.1	Anoka Dam.

SNAKE RIVER CANOEING

The Snake River is one of Minnesota's most scenic and exciting rivers, especially from McGrath to Mora and from Pine City to the St. Croix River. The area two miles east of the Woodland Store, below McGrath, is extremely difficult. In fact, it is said to be the most difficult rapids in Minnesota. The rocky, unpredictable character of this area limits use to explorers only. However, from Mora to Pine City, the river is an easy, safe, two-day trip.

The Lower Snake River, a stretch of about ten miles from Pine City on U. S. Highway 61 to the St. Croix River, is a fast run in high water, but very scratchy in low water. Like the Upper Kettle, at high water the Lower Snake is too wavy to give open canoes a chance.

The best "put-in" point is from a dirt road going off to the right almost five miles north of Highway 27. Starting the trip at Highway 18 adds about an hour of paddling. The "put-in road" leads to an old set of bridge pilings (no bridge). These make a rough water gauge; four feet of wood showing above water means runnable; three feet or less showing means very high.

At mile 63.5, the river drops about 78 feet. Between CSHS 3 bridge near Warman and the county road 82 bridge near Woodland, there is a drop of 150 feet in 31 miles. There is a series of rapids and pools along this section, the largest pools being Buck and Beam Dam. Rock remnants of the Old Beam Logging Company Dam have created a large pool above the dam. There are also rapids and pools from CSHS 3 bridge to the CSHS 6 bridge at Mora.

Except for a two-mile pool, the last part of the trip to the St. Croix River is primarily rapids and pools. The lower 2.5 miles flows through the Chengwatana State Forest.

The early name of the Snake River was the Portage River. It was re-named by the Chippewa Indians who lived near the mouth. They named it "snake" after their bitter enemies, the Sioux who lived up the river. The Groundhouse River, one of the tributaries, of the Snake

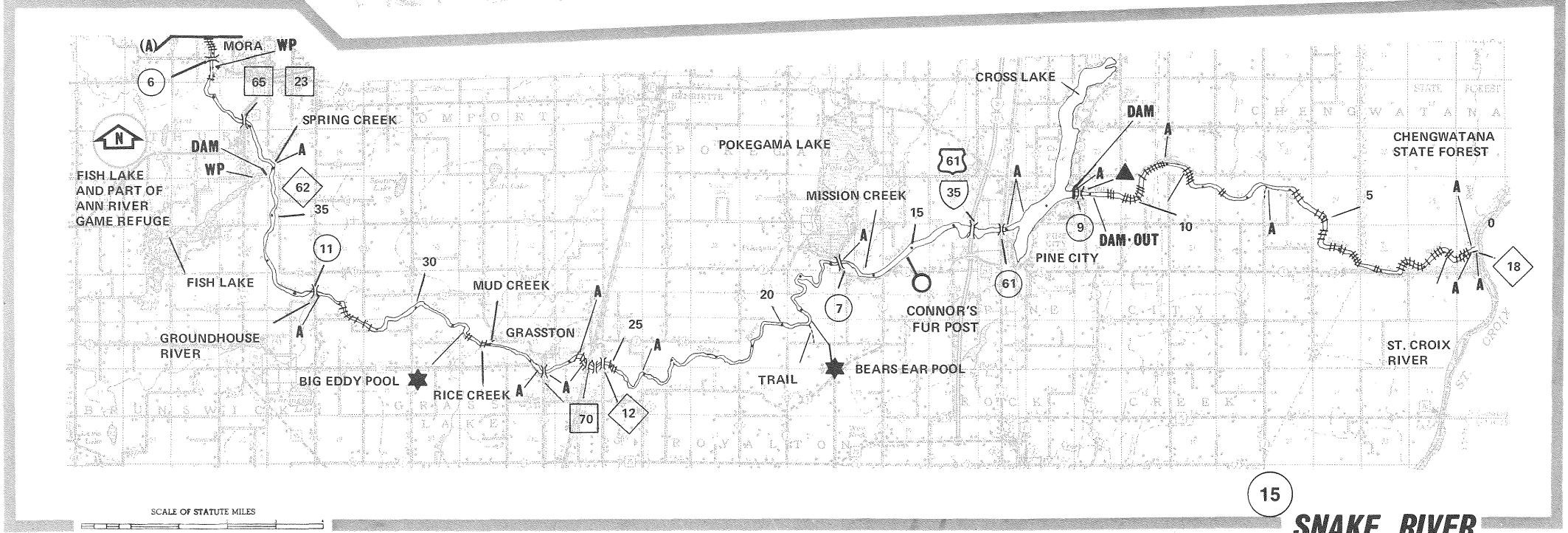
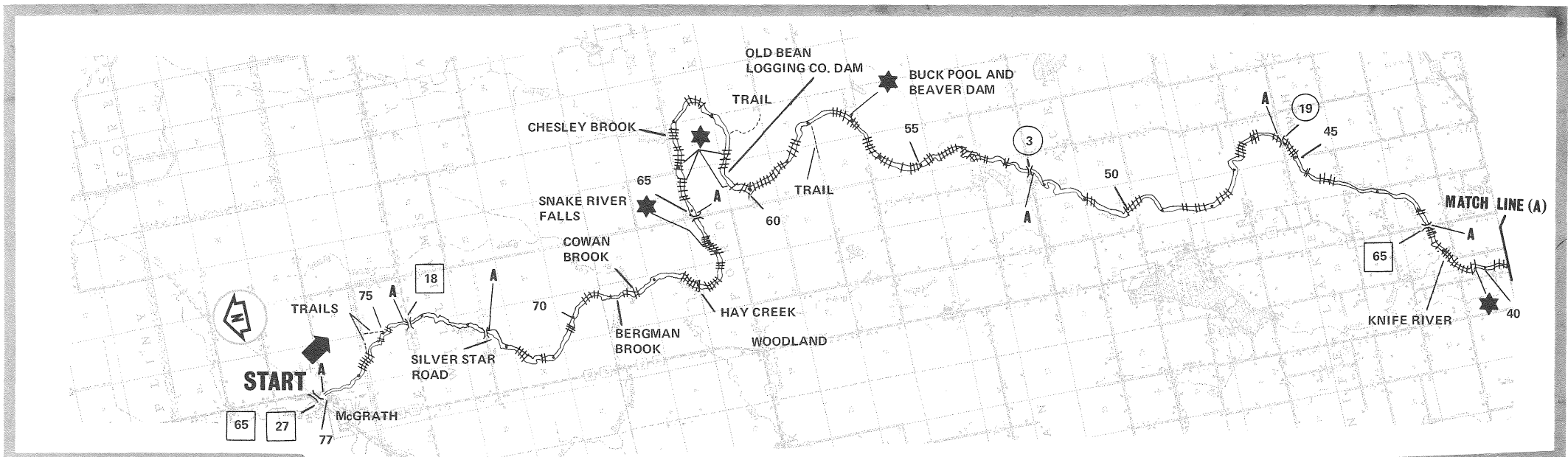
River, was named from the earth lodges of the Mandan Indians, relatives of the Sioux who once inhabited this area.

Contacts:

Soil Conservation Service, Mora; District Foresters, Elvin Horton, McGrath 56350, phone 612-592-3248 and James Donahue, Mora 55051, phone 612-679-3683; Wayne White, Grasston, phone 612-396-2137.

Mile

77.0	Start of survey at Highway #65 — access good from east side of Snake River.
75.0–75.5	Foot trails.
74.4	State Highway 18 bridge — access fair on either side of river.
72.5	Silver Star Road — access fair on either side of river.
68.9	Bergman Brook and Cowan Brook.
68.5	Snake River Falls — upper and lower, scenic area.
65.1	Township road bridge — access good on south side of river.
61.0	Old Bean Logging Company dam.
58.0	Existing trail.
57.0	Scenic area — Buck Pool and Beaver Dam.
52.5	County Road 3 bridge — access good on west side of river.
45.5	County Road 19 bridge — access good on east side of river.
41.7	United States Highway 65 bridge — access fair on south side of river.
41.0	Knife River scenic area, bedrock area rapids, natural springs.
38.9	County Road 6 bridge — access good on east side of river — Wayside park.
37.1	Highway # 65 bridge — access fair on south side of river.
36.0	County Road 62 — access good on east side of river — wayside park and dam on Fish Lake.
32.6	County Road 11 bridge — access good on south side of river.
28.7	Scenic area — Big Eddy Pool.
26.6	State Highway 70 bridge — access fair from either side of river.
25.5	State Highway 70 — access good from north side of river.
19.2	Scenic area — Bears Ear Pool.
16.8	County Road 7 bridge — access good on either side of river.
15.5	Historic site — Conners Fur Post.
13.1	United States Highway 61 — access good from north side of river.
11.4	Dam — can be run in spring — access and campsite good on north side of river.
11.2	Dam — out.
9.0	County Road — access good from north side of river.
6.5	Township Road — access good from south side of river.
0.5	County Road 18 — access good on either side of river.



15

SNAKE RIVER

THE ST. CROIX

The St. Croix is unquestionably one of the finest rivers in the United States. Because of its size, clear, clean water, accessibility to the heavily populated Twin Cities metropolitan area, the excellent character of the banks, and the many sandy islands, it should receive primary consideration for preservation by the States and by the Federal Government.

From St. Croix State Forest to its junction with the Mississippi, the St. Croix River forms the boundary between Minnesota and Wisconsin for 120 miles. The St. Croix begins at Solon Springs, Wisconsin and flows 164 miles to join the Mississippi at Hastings, Minnesota.

The reach of rapids from Head-of-the-Rapids Island, downstream past the Kettle River, is one of the finer safe areas of fast water within Minnesota. The St. Croix is large, but generally not dangerous.

At the Kettle River Rapids, the St. Croix divides into two parts and is joined by the Kettle River at the lower end of the rapids. Below the rapids, the width varies from 300 to 1,200 feet, with an average gradient of 1.2 feet per mile and a maximum depth of 2 to 10 feet.

The valley is well-defined with river banks up to 8 to 15 feet high. From the rapids downstream to the hydroelectric impoundment at Taylors Falls, the river characteristics are similar. Below the outlet of the Sunrise River, the river flows through an area once impounded by Nevers Dam.

A portage must be made at Taylors Falls because of the dam. There is a good access next to the edge of the breakwaters on the west side of the river. Equipment can be carried through the streets of town and put in at the boatlanding on the Minnesota side. There is also launching space for canoes at Interstate Park. Just below the Highway 8 bridge at Taylors Falls is the beginning of a narrow rock gorge known as the St. Croix Dells. Interstate Park now preserves much of its steep rock walls and the geologic phenomena.

Below the St. Croix Dells, the river flows through a wider valley and splits into several channels and backwaters. At the lower end, the river becomes Lake St. Croix, a large river-like reservoir created by a natural bar at its junction with the Mississippi River.

During periods of Indian strife between the Chippewa, Sioux (Dakota) and Fox, the St. Croix and its tributary rivers became fur trading and exploration routes between the Mississippi River, Lake Superior and rivers to the east and west. Indian conflicts did not deter the fur traders as they continued to establish posts and trade centers in the St. Croix basin. It was not until the French traders, who lived amongst the Chippewa, established a post in 1694 near the mouth of the St. Croix, that there was a brief time of peace.

In the mid-1700's, the French fur traders competed with English traders and French control was eliminated. Strife continued in the fur trade between the French and English and the St. Croix basin was involved in conflicts between the huge Northwest Company of Montreal, the XY Company and individual traders.

Settlement began along the St. Croix in 1838, following expeditions into the basin by Henry Schoolcraft and Lt. James Allen. The first commercially productive sawmill was Marine Mills, now Marine-on-St. Croix. For the next 80 years, this was the era of the lumberjack. Massive stands of timber were cut and hauled to the St. Croix and its tributaries and floated down the St. Croix.

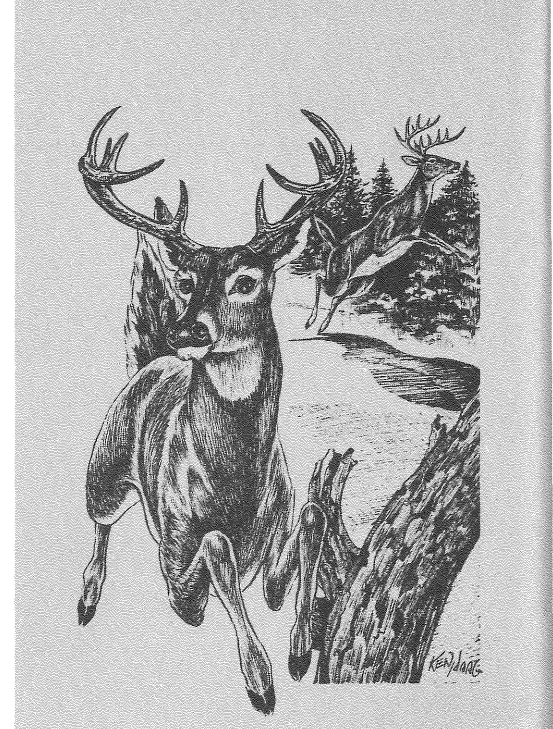
Most of the town development is below Taylors Falls. There are historic sites and great scenic beauty along this entire stretch such as Boomsite Park where millions of logs were sorted, scaled or measured and rafted down the river to mills. When in operation, over 15,500,000,000 feet of logs were sent through this boom site. The last log was sent through in 1914.

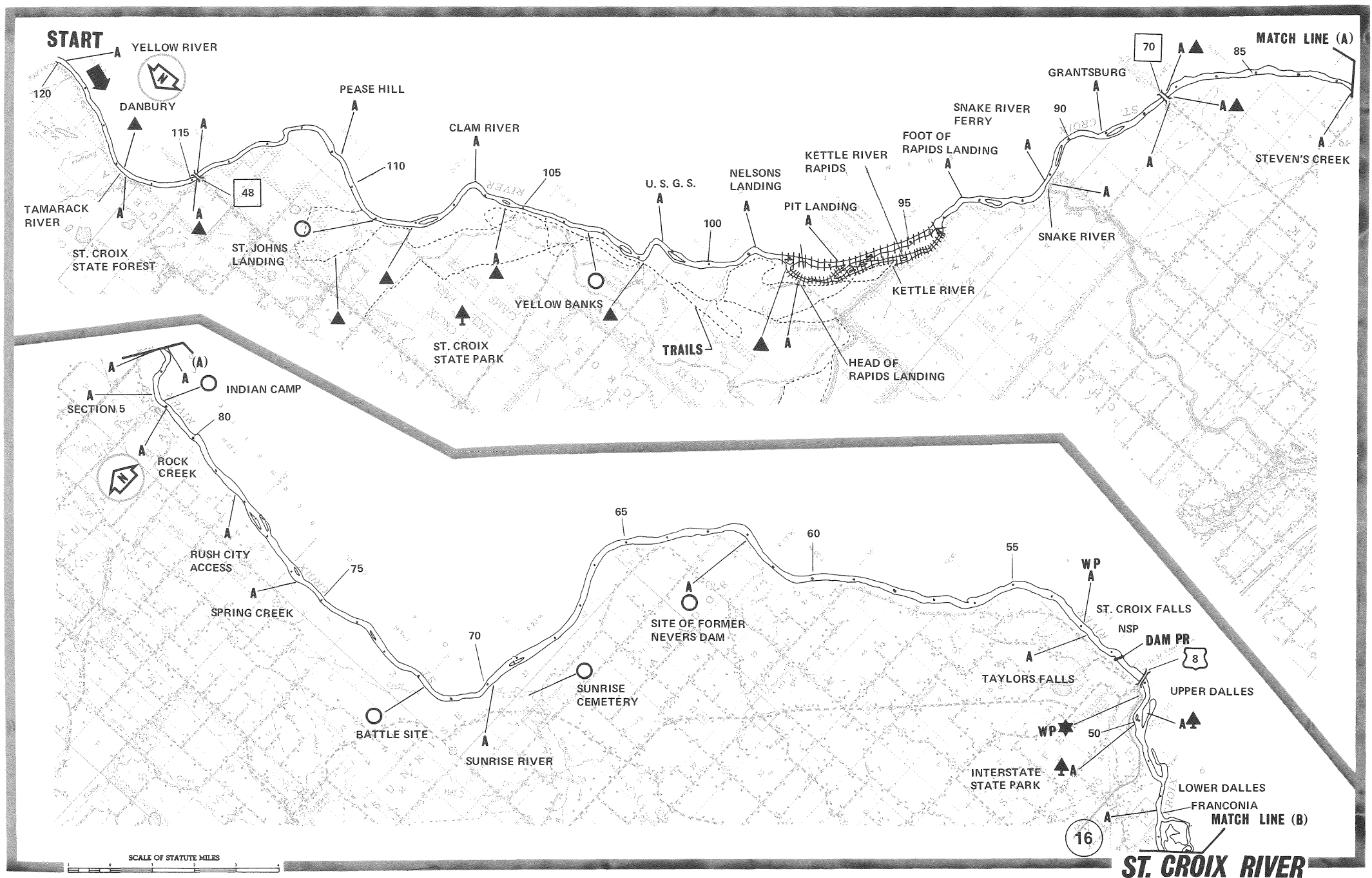
At Lake St. Croix, the waters of the St. Croix River and its tributaries merge with the flow of the Mighty Mississippi, and move to the Gulf of Mexico.

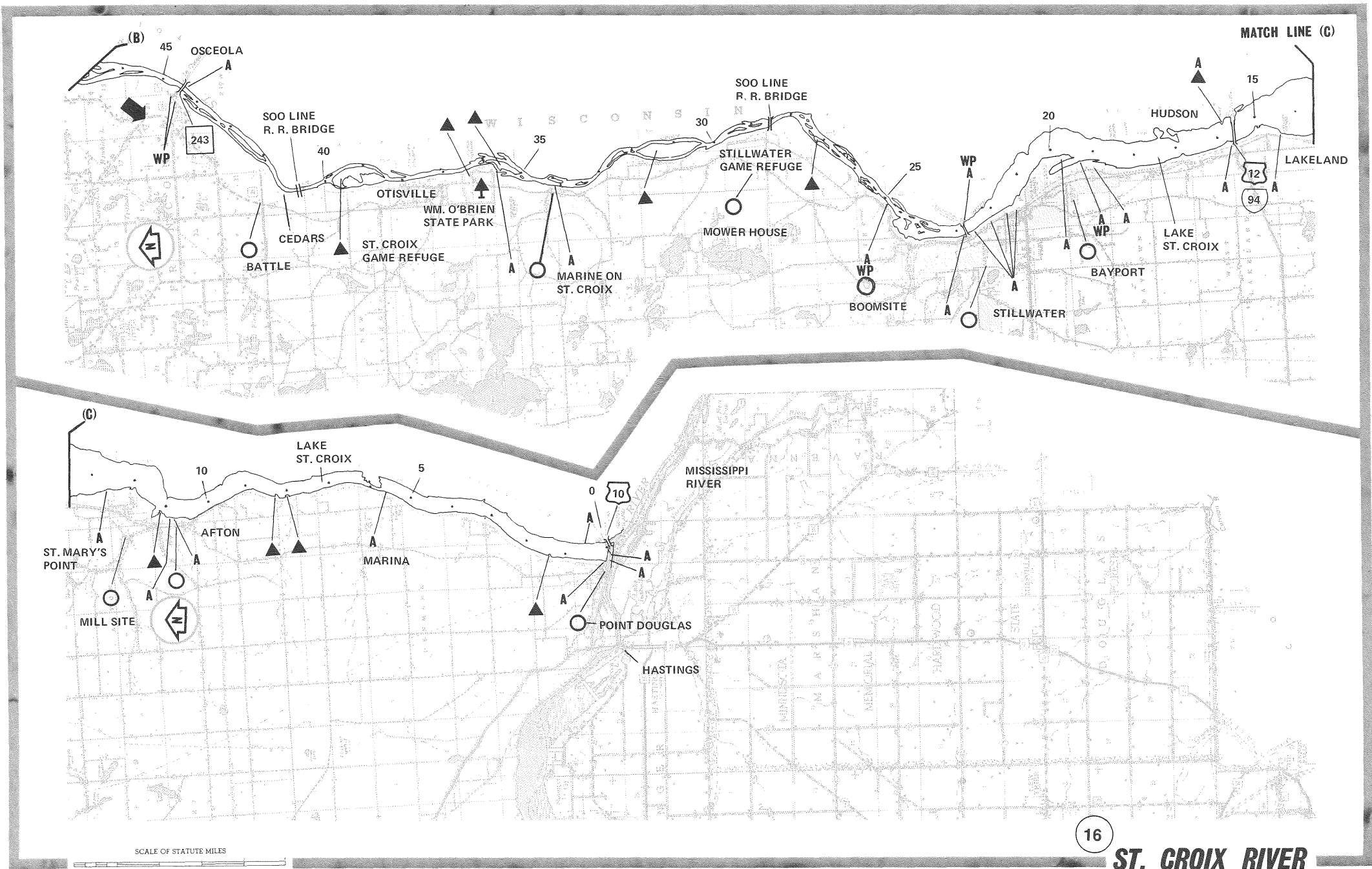
Contacts:

Taylors Falls Canoe Company, Division of Mueller Boat Company, Inc., Taylors Falls, phone 612-465-4755, or 465-2576; District Foresters, Dennis Gardner, Markville, phone 612-245-2022; Wayne Golly, Hinckley 55037, phone Hinckley 271, and Donald Klande, Forest Lake 50025, phone 612-464-2126; Area Forester, John Kirkwald, Cambridge 55008, phone 612-689-2832; St. Croix State Park, Norman Reitan, Hinckley, phone Hinckley 8221.

Mile	
120.0	Danbury, Wisconsin. Yellow River access good.
116.8	Campsite (Wisconsin side).
116.6	Tamarak River access good.
114.9	State Highway #48, access good on southeast corner (Wisconsin). Access and campsite on northwest corner (Minnesota), good.
110.8	Pease Hill access, good (Wisconsin side).
109.0	Historic St. Johns Landing—private group camp within St. Croix State Park.
106.4	Clam River access (Wisconsin side), good.
105.4	Public access and campground within St. Croix State Park, excellent.
103.4	Historic Yellow Banks (Minnesota side).
102.3	Private group camp within St. Croix State Park.
101.3	U.S.G.S. access (Wisconsin side), good.
98.8	Nelsons Landing (Wisconsin side), good.
98.5	Private group camp within St. Croix State Park.
98.2-94.2	Start of Kettle River rapids.
97.8	Head-of-the-Rapids landing, good.
96.9	Pit landing (Minnesota side), good.
93.4	Foot-of-the-Rapids landing (Wisconsin side), good.







Mile	
91.2	Snake River ferry landing (Minnesota and Wisconsin side), good.
89.1	Grantsburg area landing, good.
87.4	State Highway #70 bridge access and campsite on Wisconsin side, poor. Access and campsite on Minnesota side, good.
82.5	Stevens Creek access (Minnesota side), good.
81.4	Section 5 access (Minnesota side), good.
81.1	Historic Indian camp.
81.0	Rock Creek access (Minnesota side), good.
78.3	Rush City access (Minnesota side), good.
75.8	Spring Creek Access (Minnesota side), good.
71.8	Historic Chippewa Village and site of battle in 1855.
70.0	Sunrise River access (Minnesota side), good. Site of historic Sunrise cemetery.
62.0	Historic site of Nevers Dam and access (Minnesota side).
53.0	St. Croix Falls (Wisconsin side) Wayside Park and access.
52.8	Taylor's Falls (Minnesota side), good access.
51.7	N.S.P. Dam — 60' high — portage on west bank.
51.1	U.S. Highway #8 bridge.
51.0	Taylor's Falls Wayside Park in Interstate Park. Muller Boat landing has refreshments, canoe rental and excursion boat rides.
50.8	Upper Dells of the St. Croix.
50.0	Interstate Park and campsite.
48.3	Lower Dells of the St. Croix.
47.6	Franconia (Minnesota side) access, good.
44.5	Osceola, Wisconsin access, excellent. Two wayside parks on Minnesota side of river.
41.5	Historic site of Indian battle.
40.9	Line of Cedars, Indian Boundary in 1835.
40.4	Soo Line Railroad Bridge.
39.8	Campsite on island, excellent.
35.7	William O'Brien State Park access and campsites, excellent.
35.7-40.0	St. Croix River Game Refuge.
34.0	Historic Marine on St. Croix — private access off State Highway #95, excellent, ¼-mile north of town hall.
31.5	Campsite on center island.
29.0	Historic John E. and Martin Mower House built in 1847.
28.8	Soo Line Railroad Bridge.
27.2	Campsites on center islands.
24.9	Historic Boomsite Wayside Park and excellent access.
24.8-32.8	Stillwater Game Refuge.
23.0	Historic Stillwater, Minnesota with four access points both public and private, all excellent.
19.7	Access (Minnesota side), good.
19.5	Historic Bayport with wayside park and two good public access points.
15.6	Public access (Minnesota side), good. Private access and campsite on Wisconsin side.
14.5	Public access, good.
12.7	Public access, fair.
11.0	Campsite on sand bar. Historic Afton, Minnesota. Two excellent access points one public, the other private.
8.2	Campsite on sandbars.
5.7	Private marina, public access, fair.
1.4	Campsite on sand bar.
0.5	Access (Wisconsin side).
0.0	Historic Point Douglas, three excellent public and private access points but with inadequate parking facilities.

ST. LOUIS RIVER, Wild and Majestic

The St. Louis is a picturesque river flanked with jack pine, black spruce and Norway pine in its upper reaches.

In the upper reaches, gravel and sandbars create riffles and a never-ending challenge and changing scene. Larger rapids and boulder fields should be left to challenge experienced canoeists, especially when the water is high. Generally, wildlife is characterized by big game — deer and moose. White-tailed deer and ruffed grouse hunting is very popular; fishing is another strong attraction. Many deep pools harbor catfish and some up to 15 pounds have been taken.

From Seven Beaver Lake, the river flows southwest to parallel several iron range towns. South of Virginia, the river turns south and flows to Floodwood. From here, the river flows to Cloquet, Duluth and into Lake Superior. The total length is 160 miles from the source to Lake Superior.

From the starting point west of the Highway 53 bridge, the St. Louis flows through stands of black spruce, Norway and jack pine. It is narrow and generally deep, averaging 6 or 7 feet. The first dam marks a significant change in the river's setting. Below the dam, rapids predominate for about 100 yards and the river narrows.

At about mile 143, the banks are 20 feet high and the river is very narrow and deep with rapids throughout. The most difficult are at mile 13.5.

Where the Swan River enters, the St. Louis broadens and becomes deeper, still entrenched with high banks. The fall is about 1.3 feet per mile and there are no rapids. At mile 114, there is a boulder field; this is the roughest rapids of the trip at certain water stages.

At mile 103, the river once again flows through heavy forests, then narrows and, in high water, is a rugged sluiceway. Directly below, are the longest rapids of the trip. These rapids are about one mile long with shallow boulder fields. The two small rapids at miles 102 and 102.9 are short, with a steep drop.

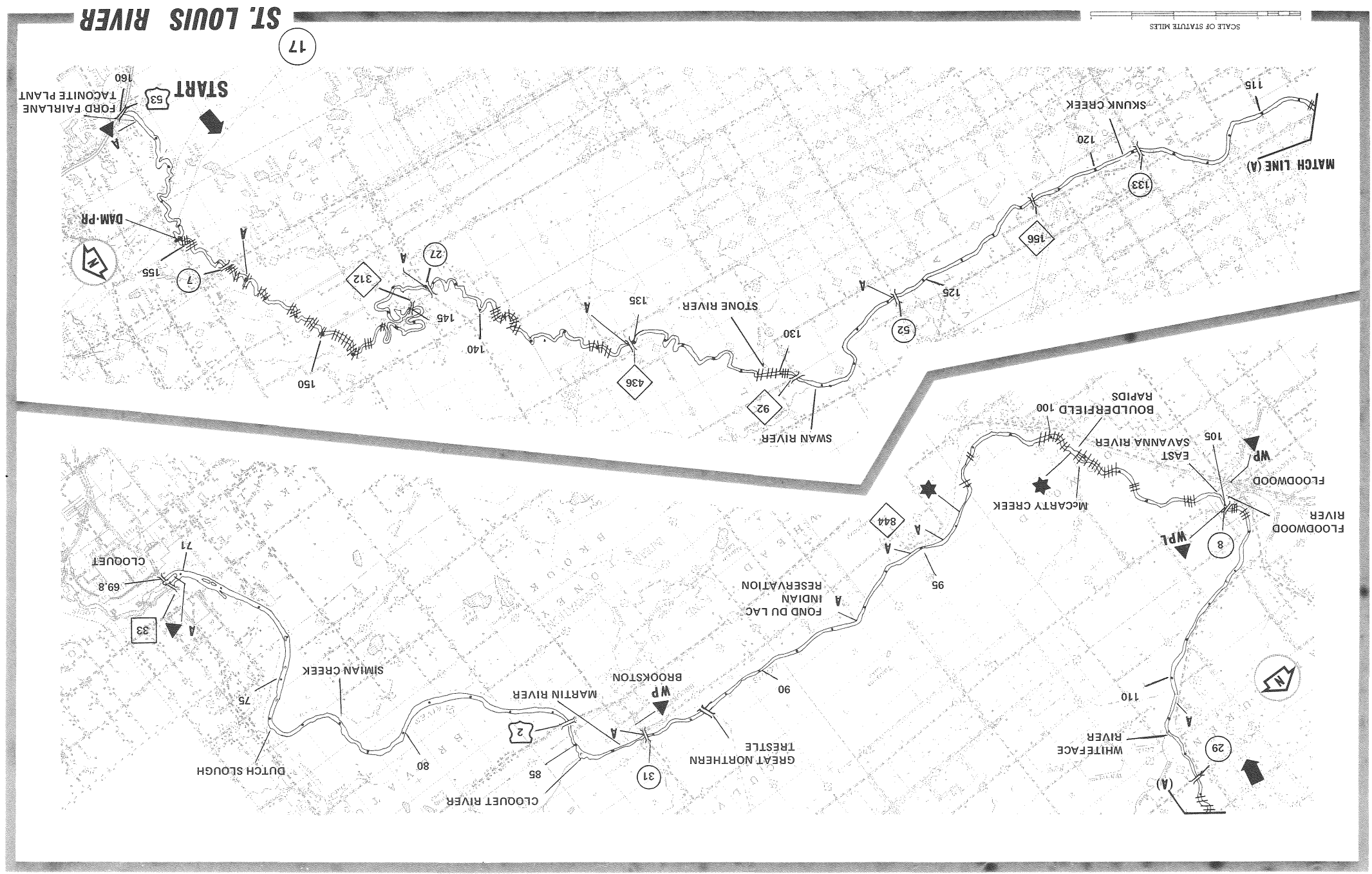
Above Brookston, the river widens again to about 300 feet. The wide, placid waters extending full view downstream give the impression that the rest of the trip is slow. Such is not the case. From here to the confluence with the Cloquet River, to two miles above the town of Cloquet, there are sets of large, fairly fast and sometimes long boulder rapids. (Some boulders in this area are 10 and 20 feet in diameter.) Canoeing below Cloquet

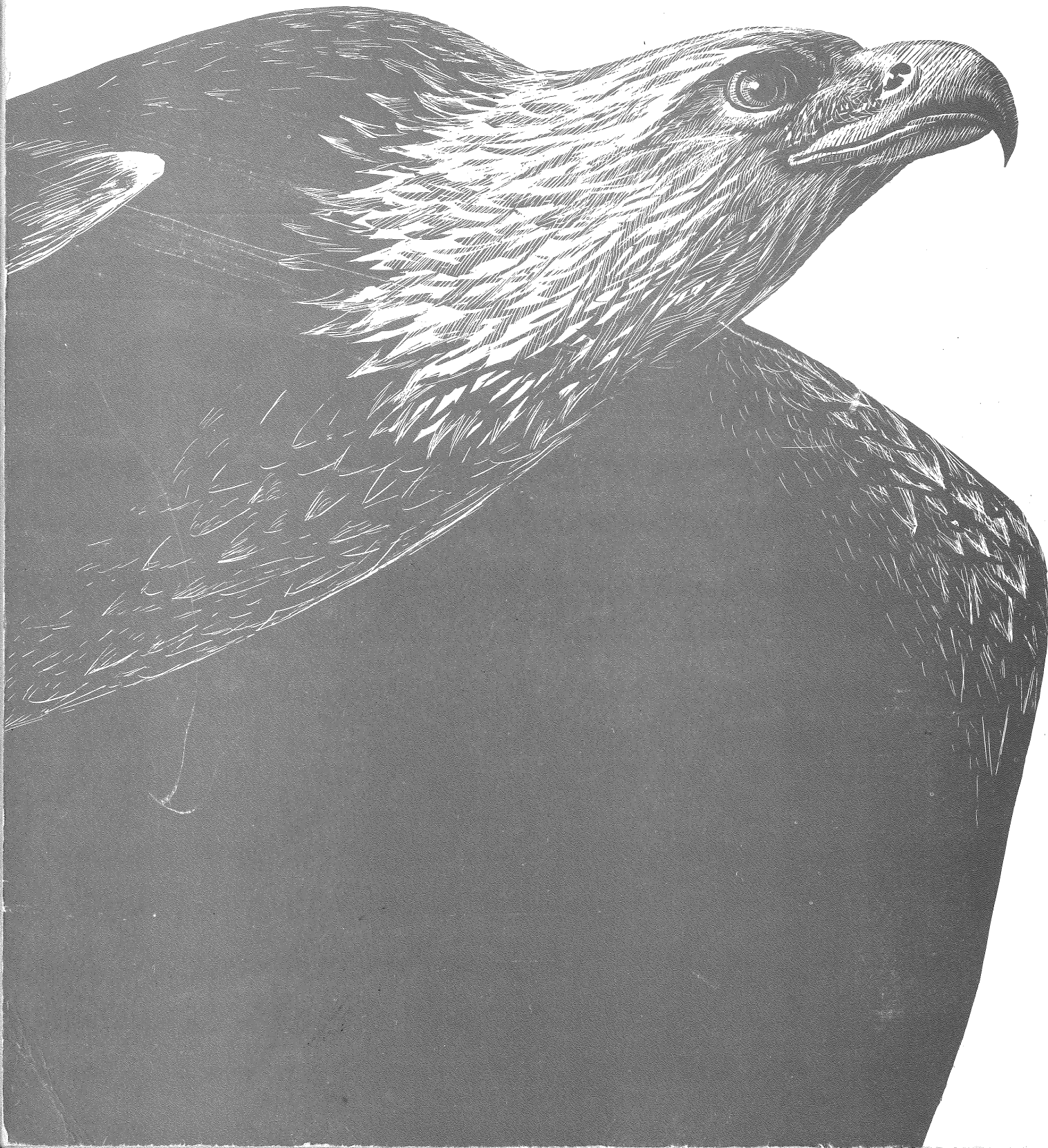
is not practiced because of numerous dams and dangerous water.

Contacts:

Conservation Officers: James Gawboy, Box 426, Biwabik 55708, phone 218-865-4275; Gerald McHugh, 418 South 5th Street, Virginia 55792, Floyd Jaros, Route 3, Box 7, Cloquet 55720, phone 218-879-7588; Division of Game and Fish, Robert Micklus, 10029 North Shore Drive, Duluth, phone, 218-525-4080; District Foresters, Robert Gaeth, Cotton 55724, phone Cotton 20 and Otto Leerssen, Clouquet 55720, phone 218-879-6638; Jay Cooke State Park, John Lindell, Carlton, phone 218-384-4610.

Mile	
159.6	Start at undeveloped campsite and access by Ford Fairlane Taconite Plant, off County Road 16 directly west of U.S. Highway 53.
155.5	County Road 16 parallel the river. Ford Taconite Plant.
147.0-155.5	Start or riffles, a large boulder about 100 yards below the dam.
153.8	County Road 7 bridge.
142.2	Access on County Road 27, northeast corner.
135.0	County Road 436 crossing, access on southeast corner.
129.7	County Road 92 crossing, no access.
125.8	County Road 52 crossing, access on northeast corner.
121.7	County Road 156 bridge, no access.
118.9	County Road 133 bridge, no access.
113.0-113.5	½-mile long rapids.
112.7	County Road 29 crossing, no access.
111.5	Confluence of White Face River, St. Louis River widens to over 200 feet.
110.5	Access on the right hand bank off County Road 29.
105.0	Floodwood. City park on northeast corner off County Road 8; historic site commemorating portage on east Savanna River; supplies are available in Floodwood.
104.0	Start of rapids.
101.0	Pool and narrowing between two sets of Boulder Fields rapids, scenic area.
96.5	The end of the more severe rapids and the river once again broadens out; there is a large rock as big as a house on the righthand bank.
95.5	Paupores Resort.
94.8	Landing off County Road 844 on south bank.
92.8	Entrance to Fond Du Lac Indian Reservation.
88.4	The Great Northern Railroad trestle crosses the river.
86.8	The Brookston County Road 31 bridge, access on the southeast corner developed, city park three blocks south on County Road 31, campsite.
69.8	Cloquet — access with ramp, campsites and water on island.





CONSERVATION PLEDGE

*I give my
pledge as a American
to save and faithfully to
defend from waste the
natural resources of
my country — its soil
and minerals, its
forests, waters,
and wildlife.*