





# Minnesota Conservation Department

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# BIENNIAL REPORT

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# STATE OF MINNESOTA DEPARTMENT OF CONSERVATION ST. PAUL, MINNESOTA 55101

January 1, 1969

To the Governor and the Legislature of the State of Minnesota

Re: Biennial Report, Minnesota Department of Conservation, July 1, 1966 through June 30, 1968.

We are pleased to present the Nineteenth Biennial Report of the Department of Conservation in compliance with M.S.A. Section 84.03. This report presents factual information concerning the high points of the functions, activities, accomplishments and needs of our Department. This report also provides an understanding of the complexities involved in managing Minnesota's lands and forests, game and fish, waters, soils and minerals and parks and recreation.

We are proud of our accomplishments in this past biennium and know that you share in this pride.

Respectfully subgitted

Jarle Leirfallom

Commissioner of Conservation

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# MINNESOTA DEPARTMENT OF CONSERVATION 3rd Floor Centennial Office Building Saint Paul, Minnesota 55101

# Office Directory

JARLE LEIRFALLOM, Commissioner of Conservation
CLARENCE B. BUCKMAN, Deputy Commissioner
ROBERT RYGG, Assistant Commissioner

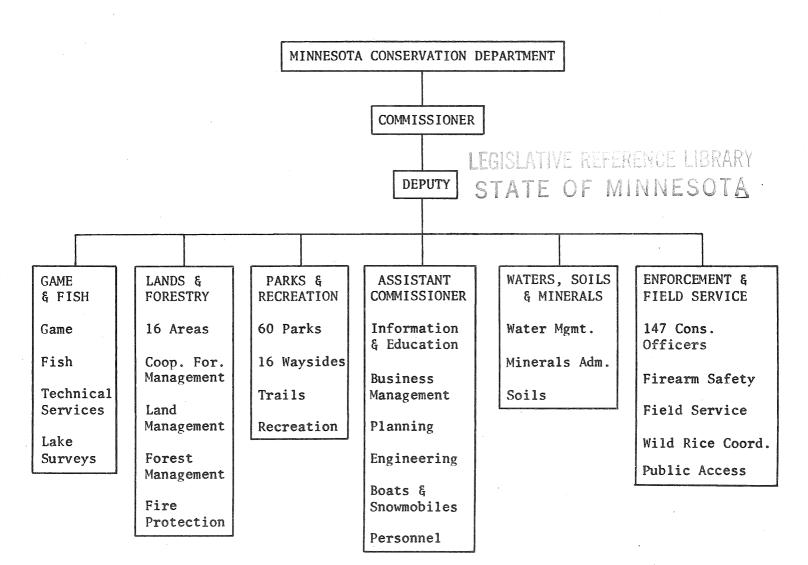
ENFORCEMENT & FIELD SERVICE - Paul R. Martz, Chief Conservation Officer

DIVISION OF GAME & FISH - Richard D. Wettersten, Director

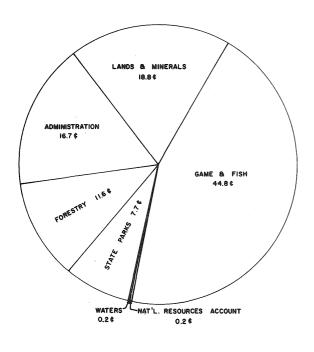
DIVISION OF LANDS & FORESTRY - (Temporarily Vacant)

DIVISION OF PARKS & RECREATION - U. W. Hella, Director

DIVISION OF WATERS, SOILS & MINERALS - Eugene R. Gere, Director



#### WHERE YOUR CONSERVATION DOLLAR COMES FROM

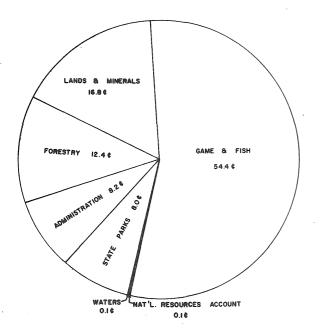


RECEIPTS JULY 1, 1965 - JUNE 30, 1966

#### INCOME BY DIVISION

Administration	\$ 2,163,216.34*
Waters	25,994.36
Forestry	1,502,968.79
Lands & Minerals	2,443,003.41
Game & Fish	5,817,772.54
State Parks	1,005,295.28
Nat'l. Resources Acc.	29,546.44

Total \$12,987,797.16
\*Includes N.Y.C.-Fed. Aid \$1,884,896.84
Land & Water Cons.-Fed. Aid \$10,866.80



RECEIPTS JULY 1, 1966 - JUNE 30, 1967

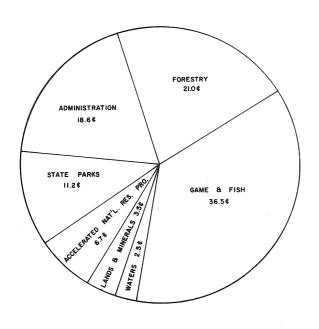
#### INCOME BY DIVISION

Administration	\$ 1,004,299.66**
Waters	15,899.50
Forestry	1,516,711.58
Lands & Minerals	2,060,678.88
Game & Fish	6,684,691.20
State Parks	983,302.89
Nat'l. Resources Acc	. 14,700.54

Total \$12,280,284.25
\*\*Includes N.Y.C.-Fed. Aid \$661,257.54
Land & Water Cons.-Fed. Aid \$103,055.96

# WHERE YOUR CONSERVATION DOLLAR IS SPENT

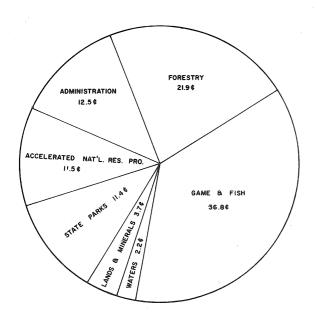
# EXPENDITURES JULY 1, 1965 - JUNE 30, 1966



# EXPENDITURES BY DIVISION

	_	
Administration	\$	2,829,458.83
Waters		380,860.26
Forestry		3,187,396.48
Lands & Minerals	-	537,144.33
Game & Fish		5,540,760.09
State Parks		1,701,803.76
Accelerated Nat'l. Res.	Pro.	1,010,176.98
Total	\$	15.187.600.73

# EXPENDITURES JULY 1, 1966 - JUNE 30, 1967



# EXPENDITURES BY DIVISION

Administration	\$ 1,900,554.52
Waters	326,780.24
Forestry	3,321,973.85
Lands & Minerals	558,419.29
Game & Fish	5,586,567.45
State Parks	1,732,037.31
Accelerated Nat'l. Res. Pro.	1,750,820.51
Total	\$ 15,177,153.17

#### DEPARTMENTAL HIGHLIGHTS

DEPARTMENT REORGANIZATION - Major organization changes have just been accomplished along modern functional lines as shown in the chart on page 1. Changes and improvements within the various divisions are now in progress. One example is the Department's new License Bureau which handles all registrations and licenses issued under the authority of the Department. Modern business machines have been installed to provide fast, efficient service to the public.

STATE-WIDE TRAILS PROGRAM - A state-wide system of multiple-use trails has been planned and over a thousand miles will be posted and under construction this year. These trails will provide for hiking, horse-back riding and snowmobiling; and will be located within easy reach of both metropolitan and rural residents.

MINING LAND RECLAMATION - Since May, 1967, Department personnel have been working with an industry group on mining and land reclamation and accompanying planning which will prevent future blight. Included is a plan to create an "Iron Range Trail" which will guide tourists through Minnesota's unique iron range, focus attention on the contribution of the area to the Nation and show how mining lands can be reclaimed for recreational uses.

COHO SALMON - These fish have been stocked experimentally in three inland lakes and will be introduced into Lake Superior at French River in May. Success of the program will depend on the coho's ability to make use of the herring in inland lakes as a forage species. Reduction of the herring population by the coho will also benefit the lake trout population. If the cohos grow successfully to maturity in Lake Superior, they will return to French River in the fall of 1970 to spawn. Spawn taken from these fish will provide eggs for future stocking purposes.

GREENSTONE MINERAL LEASES - The first copper-nickel leases in the Greenstone areas of northern Minnesota were issued in the summer of 1968. The Department's expanded program of mineral leasing in these new areas has stimulated exploration for non-ferrous minerals on both state and private lands.

UNDERGROUND GAS STORAGE - The first underground gas storage project in the state was initiated at Waseca in the summer of 1968. If successful, the leasing company has stated that considerable savings would result which would be passed on to the consumer in the form of lower rates. Success of this venture could lead to similar projects elsewhere in Minnesota.

LAKE REHABILITATION - A lake rehabilitation program has been started and is gaining momentum which hopefully will lead to major lake improvement throughout the state in the years ahead. Examples of lakes in different parts of the state requiring immediate attention are Big Stone in western Minnesota, Sally near Detroit Lakes and Minnetonka.

PUBLIC ACCESS IMPROVEMENT - The 680 public access sites in the state, which were subject to legislative criticism in 1966 have been greatly improved through new acquisition, management, development and adoption of specific maintenance standards. Recently, federal inspectors commended the improvements in parking areas, boat launching ramps and entrance roads and noted that trash barrels and toilets were being installed as rapidly as possible.

ST. CROIX RIVER - The Department has participated, as one of the main partners, in the development of a unique conservation program for the Upper St. Croix River. Under the provisions of the Wild Rivers Act passed by the Congress, the primitive and natural character of the river will be preserved forever under the authority and management of the National Park Service, the Minnesota Conservation Department and the Wisconsin Department of Natural Resources. Title to some 14,000 acres of land will pass to the Department of Conservation from Northern States Power Company.

VOYAGEURS NATIONAL PARK - The Department was requested to assist in gathering information on the proposed park area and conducted studies of land ownership, use of the area by sportsmen and evaluated the forest and wildlife resources of the site. Recommendations were made, including that the area continue to be opened to hunting and fishing after the park was established. The Department suggested possible land exchanges, transfers or purchases that could lead to establishment of the state's first national park. Location of the area is between Kabetogama and Rainy lakes in northern Minnesota.

PREDATOR CONTROL PLAN - A predator control program has been developed and proposed as an alternative to the bounty. In some areas of the state, livestock losses are a problem, but in the Department's opinion bounties are not an effective method of control. The proposed predator program directs a supervised control effort toward specific animals in specified areas and is the most efficient and effective method yet devised to deal with the problem.

SNOWMOBILES - The Department has promoted snowmobiling as a winter recreation in Minnesota and printed a brochure showing 64 trails located on state and federal lands offering more than 1,000 miles of scenery and sport. Modest regulations have been established to prevent potential hazards to wildlife and property.

LAND USE STUDY - A major land use and land classification study was completed by the Department's division of lands and forestry. The study shows that the badly mixed land ownership pattern in northern Minnesota is a severe handicap to the management and development of natural resources and the forest industry. A study has also been initiated on a county basis to determine the best utilization of state-owned lands.

#### ADMINISTRATIVE DIVISION

The creation by Chapter 905, Laws of 1967 of the position of Assistant Commissioner meant that the Service Bureaus were assembled under one Division and rededicated to the providing of service to the line Divisions. To accomplish a greater efficiency, the Bureaus were realigned with each move designed to accomplish a given objective. These moves were made:

### \* Personnel Office

Taken out of the Bureau of Business Management with the Payroll activities left in that Bureau.

OBJECTIVE - To provide a greater personnel service, particularly in the area of Employee Relations and greater effort toward training.

#### \* Systems Analysis

Reports directly to the Assistant Commissioner.

OBJECTIVE - Created to professionally examine and challenge existing systems and procedures, fiscal and organizational, with the purpose of preparing the Bureaus and the Divisions for computerization, consolidated budgeting, and greater organizational efficiencies.

#### \* Business Management

Taken over the licensing and registration functions.

OBJECTIVE - Expanding its fiscal service to all divisions; addressing itself to work toward consolidating the budget and fiscal functions.

#### \* Information and Education

Included Outdoor Safety Section and additional Conservation Volunteer staffing.

OBJECTIVE - Increasing emphasis on Conservation-Education and Outdoor Safety programs.

#### \* Engineering

Modifying and improvement of entire job and project flow methods.

OBJECTIVE - Provide greater efficiency in project handling by the inclusion of a feasibility study step.

#### BUREAUS OF THE DIVISION

In addition to the five operational divisions in the department we find it necessary to have six service bureaus namely: Boat and Water Safety, Business Management, Engineering, Information and Education, Legal, and Planning. Much credit is due these agencies for the successful operation of the Department of Conservation. These services are indispensable to departmental operation.

The BUREAU OF BOAT AND WATER SAFETY took on a new dimension during the biennium with the passage by the 1967 Legislature of a law requiring that in order to operate on any public owned easements, trails, accesses, lands, lakes, rivers or streams, a snowmobile must first be registered with the Minnesota Department of Conservation, and the assigned numbers be placed on the vehicle.

Responsibility for the registrations was placed with the Bureau of Boat and Water Safety. As of June 30, 1968, a total of 32,000 owners had registered their vehicles at the fee of \$8.00 for 36 months.

In the Bureau's Boat Registration function, there were 253,000 boats registered in the state as of June 30, 1968, an increase of 23,000 over the figure at the close of the previous biennium.

The BUREAU OF ENGINEERING provides engineering, architectural and land surveying services for the various divisions of the department.

During the past biennium the Bureau prepared plans and specifications for 120 construction projects totaling \$1,480,900. In addition to contract projects, plans and material lists were prepared for 90 force account projects totaling \$734,000. The three survey crews completed 300 property surveys and 190 topographic surveys.

I am sure you will agree practically all conservation development and acquisition projects require engineering services. As these programs increase it is obvious that the need for engineering will increase proportionately. Modern technology is rapidly producing new methods and procedures to help expedite this work.

The BUREAU OF INFORMATION during the past biennium carried out an accelerated program of public relations and public information in the fields of conservation and outdoor safety.

The Bureau prepares a weekly newsletter which reaches all dailies and weeklies in the state (more than 500 newspapers), as well as special news releases, feature stories, and photographic releases.

A major conservation-education effort with which the Bureau is charged, involves publication of The Conservation Volunteer, departmental magazine which boasts a circulation of 50,000. Informational pamphlets and brochures on various subjects prepared by Bureau staff were mailed at an average of 3,000 pieces per month during the biennium.

The Bureau's weekly radio program is now in its 21st year. Produced in cooperation with the University of Minnesota's School of the Air, this program has added materially to the more than 125 sound-tape programs now available to schools.

The Bureau's Film Loan Library now stocks 135 color films on 63 different conservation subjects. Films are available to the public on request. During the biennium more than 340,000 people viewed one or more of these films.

The Department's major showcase, the Conservation Building at the Minnesota State Fair, continued during the biennium, to draw capacity crowds - 800,000 or more for the ten-day exhibit.

Legal matters in which the Department is involved are handled by a DEPUTY ATTORNEY GENERAL and his staff appointed by the State Attorney General.

Legal services provided to the Department by this staff are varied and highly technical and include the following matters: Land acquisition for state parks, forests, and game and fish activities, such as wetlands, refuges and spawning areas; exchanges of land by the state; leases of state-owned minerals; assistance in the preparation of contracts, leases and agreements relating to the sale of state-owned timber and the sale or use of state trust fund and certain acquired lands. Also, representation of the Department in court proceedings, legislative claims proceedings, and public hearings such as hearings on applications for permission to use, appropriate, or make changes in state waters; and assistance to the Department in the preparation of legislative bills.

The BUREAU OF PLANNING was established in 1964 in the midst of the recreation boom that is sweeping the country. This Bureau is designed to cope with this mounting demand for outdoor space and facilities. The Bureau's chief function of long-range planning involves close liaison with the Divisions and other agencies making long-range plans that affect the resources for which the Department of Conservation is responsible.

One of the first tasks of the new planning staff was to prepare a state-wide outdoor recreation plan - the first of its kind for Minnesota. A preliminary plan was prepared, establishing Minnesota's eligibility for participation in the federal Land and Water Conservation Fund Act Program.

In addition to the planning functions, this Bureau implements the Outdoor Recreation Plan with the administration of the federal grant-in-aid to outdoor recreation program mentioned above. This administration of from 1 to 1.5

#### LANDS AND FORESTRY

In Minnesota approximately 40 per cent of all forest land is privately owned. Cognizant of this fact, Division foresters assisted some 7,849 owners in the management of 158,974 acres of forest land. The owner's needs, desires and capabilities are considered when preparing plans which coordinate all the resources of the woodlot. The aim is to improve and maintain the productivity of the small owners woodland. Proper management of these forest acreages of private ownerships will provide for the great needs of tomorrow's citizens.

The Division of Lands & Forestry has jurisdiction over 4,637,967 acres of state lands. Of this total, 2,996,659 acres are included in the Division's 54 state forests. This was a gain of 61,251 acres during the biennium. The Commissioner of Conservation accepted 24,047 acres of county tax-forfeited land for management as state forest land under the provisions of M.S.A. 89.034 during the biennium. Of this amount, 12,098 acres are outside present state forest boundaries and have not as yet been designated as state forests by the legislature.

A number of Federal Forest Service programs are serviced by the Division of Lands & Forestry through agreement between the two agencies. The Agricultural Conservation Program, Watersheds, Resource Conservation and Development, and Title IV are the major ones.



Division of Lands and Forestry has furnished 400 million trees for planting on public and private lands. Photo shows pine seedlings growing in the beds at the division's General Andrews nursery near Willow River.

The Division of Lands & Forestry is charged with the responsibility of Land Exchange for all the divisions of the Department of Conservation. The land exchange program consolidates state land in state forests, state parks, state wildlife areas and other state conservation areas. In so doing, it consolidates other landowners holdings such as federal, county and private. Land exchange proposals are investigated and recommendations are made to the Land Exchange Commission. During the past biennium, applications and exchange completions have shown a slight increase. Twenty-five land exchanges were completed.

Planting stock needs have stabilized at predicted levels of 20,000,000 trees annually. The number of trees shipped the past year totaled 19,951,357, of which 10, 428,895 constituted private sales and 9,522,462 planted on public lands.

The Division is charged with forest fire protection on 17,653,000 acres of forest and grass land. During the biennium there were 3,101 fires reported which burned 147,241 acres. The combination of the fall of 1967 and the spring of 1968 is considered to have been one of the worst fire seasons on record.

There are now 44 school forests in Minnesota comprising 3,783 acres. These outdoor laboratories are devoted to conservation education.

As of June 30, 1968 there were 41 campgrounds, 12 day-use areas in addition to those provided at campgrounds, 21 hiking and riding trails, and four canoe routes. These facilities together total 70 recreational areas provided by the Division of Lands & Forestry.

The timber harvest from State Lands increased more than 40 per cent over the previous biennium, to 518,481 cords. This is still considerably below the allowable cut but the trend is encouraging.

Marketing and Utilization advice and assistance to Forest Product Operators and Forest Industry Development increased by 130 per cent during the biennium.

State Land Management consists of land sales, leases and records. During the biennium, the Division sold 24,316 acres of land. They also had 3,951 leases of various types to administer.

Fire Prevention Education and Law Enforcement are additional responsibilities of the Division. During the biennium, 620,000 pieces of educational material were distributed. Awards were presented to 81 individuals and organizations for their outstanding contributions to Forestry. Local newspapers published 837 articles furnished to them by our personnel. Seven hundred and fifty-eight radio and 24 TV programs were sponsored by the Division of Lands & Forestry. Fire weather was broadcasted from 39 radio and four TV stations during periods of fire danger. The Division personnel furnished speakers and films for more than 2,100 meetings with a total attendance of 99,000. Exhibits were placed at many conventions, business places and local fairs.

#### ENFORCEMENT AND FIELD SERVICE

The 1967 Legislature authorized the Commissioner of Conservation to create a separate Division to be composed of Conservation Officers administrated by a Chief Conservation Officer. The Commissioner exercised this authority and the former Section of Warden Service of the Division of Game and Fish was reorganized as the Division of Enforcement and Field Service. Paul R. Martz, former Chief of the Highway Patrol, was appointed as Chief Conservation Officer. The field organization is comprised of five regions and 11 areas.

The Division administrates the Youth Firearms Safety Training Program within the state. During the biennium, more than 60,000 youths were trained in the safe handling of firearms. A new law making firearms training a prerequisite for small game hunting and the purchase of a firearms deer license for youths between the ages of 12 and 16, resulted in an increased enrollment of nearly 20,000 over the previous biennium. Since the beginning of the program in 1956, a quarter of a million young people have been trained.

In 1968 the program was improved by a series of Firearms Training T.V. Programs televised over nine stations. The T.V. educational series, valued at \$15,000 was provided as a public service by a Twin Cities T.V. station. Of additional benefit is the film strip which will be used as a training aid. Minnesota is the first state known to have made available to the public this type of educational program.

There are 600 state-owned public accesses to Minnesota lakes under the management of this Division. Additional sites are being purchased and developed to the limit of available funds. The emphasis has shifted from acquisition only to acquisition and immediate development. Future plans include a policy for maintenance of sites after development provided funds are available.

A major effort has been made to improve the enforcement service by upgrading the procedure for selection of new officers and training programs for existing personnel. The entrance requirements for appointment of Conservation Officers were upgraded to include a BS or BA degree, or four years as an officer with an established police force or law enforcement agency, or four years in conservation work involving enforcement of conservation laws. In addition to a rigid physical examination, new applicants must now pass an agility test.

In 1968 all Regional Supervisors attended a 60-hour police management supervision course. All Division personnel are required to attend the annual 60-hour in-service school designed to update and improve the Division's operation. The Division's Administrative Assistant attended a 60-hour course in police management procedures. Nine new officers completed a 100-hour training course conducted by Division personnel before they were assigned to Regional Supervisors for final training under actual field conditions. A clarification of the operating procedures was obtained from the Attorney General which resulted in the inclusion of Conservation Officers in the mandatory State Police Training Program established by the legislature.

A new and detailed operations manual is being prepared as a source of information on all phases of the Division's assigned responsibilities. The primary objective of this manual is to provide a state-wide uniform application of Game and Fish Laws and Regulations.

An improved program has been instituted for the use of aircraft in enforcement, census, surveys, pollution control and executive travel including air transportation for other Divisions of the Department upon request of Division Directors.

A number of administrative changes have been instituted to improve the operational efficiency. Among them are a time and cost management records system to provide much needed budget planning and supervisory information.

The management of Minnesota's wild rice crop is one of the many responsibilities of the Division of Enforcement and Field Service. The Division has established and maintained communications with all segments of the wild rice industry to better regulate and control this commodity.

Conservation Officers have been outfitted in a new and distinctive uniform. In a state that plays host to hundreds of thousands of tourists, it is important they be met with people who are unmistakably identified with Minnesota outdoor recreational activities. Equipment used in the performance of the Division's functions are snowmobiles, boats, motors, and radio-equipped planes and patrol cars.

The Division, with personnel distributed in some 125 communities, is cast in the role of Public Relations Agents for the Conservation Department. Field people carry out a public information function through radio, T.V., newspaper columns, county fair exhibits, and speaking engagements at Sportsmen's Clubs, 4-H Clubs and schools. Through these media, officers publicize Departmental programs and inform sportsmen relative to Game and Fish laws.

During 1967 Conservation Officers arrested 4,493 persons who paid \$91,947 in fines for violation of Game and Fish laws. One-half of this amount is retained by the county in which the violation occurred. Half of the total fines (\$45,973) and the sale value of confiscated game and equipment (\$18,879) for a total of \$64,852 were deposited to the Game and Fish Receipt account.



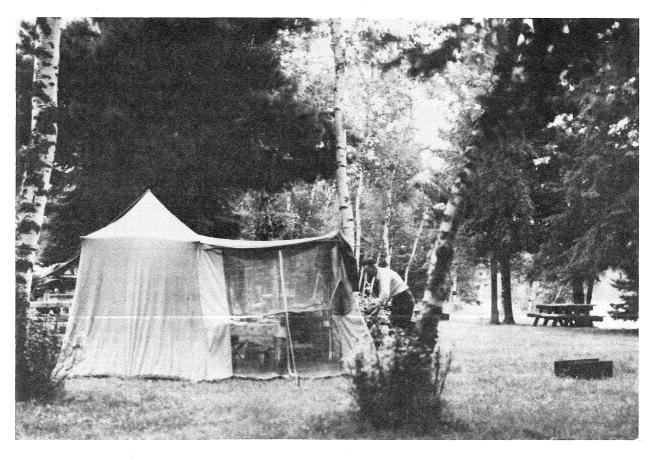
Conservation Officers checking licenses of ice fishermen on a northern Minnesota lake. Aircraft and snowmobiles are a big aid in this work.

#### PARKS AND RECREATION

The need to set aside lands for public parks in the State of Minnesota was not recognized until after 50 years of statehood. A park to commemorate the release of prisoners - mostly women and children - taken captive by the Indians in the Sioux Uprising of 1862, was established in the 1889 legislative session. It was named Camp Release State Park.

In the legislative session of 1891 Itasca State Park was established to set aside for public benefit the important geographic feature - the source of the great Mississippi River. Thirty of the 36 legislative sessions between 1889 and 1967 each established one or more state park or monument sites. At the present time, Minnesota has 86 state parks, recreational areas, waysides and monuments comprising 146,730 acres of land and 5,362 acres of water, or a gross area of 152,092 acres.

A Division of State Parks was established under the Minnesota Conservation Commission in 1935. This new Division proceeded to inaugurate and implement a plan for a statewide system of parks and recreational areas designed to perpetuate and protect all scenic, historic and scientific values in all regions of the state which are of significance to the people of the state.



Camping at Itasca State Park. The campground can accommodate 200 camping families. Nearly one million persons visit Itasca during an average year.

The Division is also responsible for the administration of an emerging statewide system of trails which will accommodate the hiker, horseback rider, cross-country skier, bicycler, and snowmobiler. Presently, approximately 1,000 miles of single and multiple purpose trails are operational. The Division also carries the responsibility for the development of 16 boating rivers designated by the legislature. Limited planning toward eventual development and informational signing on these rivers has been carried out to date. The Division is also responsible for a growing system of natural and scientific areas. Two hundred and fifty-five sites have been identified of which 93 are in publicly administered lands. One hundred and sixty-two additional ones are being considered for inclusion in a system of scientific and natural areas.

The 1967 Legislature established the Casey Jones Trail from Pipestone to Lake Shetek State Park and designated an additional 12 rivers as canoe waterways to supplement the original four named in 1963. Compliance is currently in progress in the work program of the Division of State Parks.

As a result of the 1967 snowmobile legislation, the Division was charged with the responsibility of "promotion and development of recreational facilities for snowmobile users". A listing of trail areas was published in the winter of 1967-68 and additional information presently in the process of publication shortly to be made available to the general public.

State park attendance estimates are accounted for on a calendar-year basis and use by the visitor unit, and reflect the impact of demand on facilities. "One visitor day" is one person in the park for any part of a day; if he camps overnight he is counted as "two visitor days".

Total estimated attendance in 1966 passed the four million mark - actually amounting to 4,121,490. The 1967 attendance showed a further increase to 4,194,800. The parks newly opened for use contributed to the increased attendance. The increase in total campsite capacity from 2,450 to 2,700 sites was another factor permitting accommodations for a larger number of tourist camp visitors.

There is a trend toward longer park use seasons. The rapid growth in snowmobiling and winter sports is compounding the demand for winter park operation and facilities.

## WATERS, SOILS AND MINERALS

In the 1967 legislative reorganization of the Department a new Division of Waters, Soils and Minerals was established. The new Division is comprised of the former Division of Waters and the Minerals Section of the former Division of Lands and Minerals. The management of these valuable resources is the responsibility of the Division.

Minnesota is blessed with an abundance of water. Our water resource includes more than 15,000 lakes, over 25,000 miles of rivers and streams, and vast quantities of ground water. This abundant water supply is needed to promote

the economic growth of the state; to provide the demands for recreation; to produce industrial products; to grow our agricultural products; to provide you with your individual water needs; and to provide for a multiplicity of other uses.

Water surprisingly enough provides a paradoxical challenge in a land of plenty. Although there is presently no shortage of water, its continued abundance will require wise management and planning to insure an adequate supply with the quality required in the areas where it is needed. It is necessary to promote a balanced conservation and utilization of the water by the many competing users of the resource.

The management of this resource is performed through: collection, analysis and dissemination of basic water resource data; regulatory control of Minnesota's water; water resource studies and investigations; and water resource planning.

The present water resource programs must continue to expand and new programs must be developed to meet new and increasing demands. Minnesota's continued growth depends on this valuable resource.

The Minerals Section of the Division is responsible for the administration of more than five million acres of trust fund minerals owned by the State and approximately five million acres of tax-forfeited minerals. The revenue from rentals and royalties on these minerals totaled \$3,442,700 for the biennium ending June 30, 1968. Approximately \$585,000 of this amount was returned to the local taxing districts with the remainder going to the trust fund and the general revenue fund.

The primary goals of the section are:

- \* To promote and regulate, through frequent public lease sale and lease negotiations, the exploration and extraction of state-owned minerals.
- \* To provide for the orderly development of potential mineral areas and the release of mineral-barren areas for other types of development.
- \* To provide equitable rental and royalty income from state-owned mineral lands for the school and university trust funds and local governmental units.

Minnesota continues to produce more than 60 per cent of the total ore mined in the United States. We have witnessed the decline of the natural ore mining in Minnesota but a tremendous new industry has grown out of taconite. This new industry has grown rapidly and now boasts a total annual plant capacity of 32.4 million tons. It has been estimated that the open pit formation of the mesabi Iron Range contains about 45 billion tons of crude taconite rock that may be concentrated on a commercial basis.

Minnesota now stands on the threshold of another potential mineral industry, copper-nickel and associated minerals. It has been known since 1948 that there was a possibility of commercial copper, nickel and associated minerals being discovered in north-eastern Minnesota. A copper-nickel lease sale held on

December 20, 1966, resulted in the issuance of 267 leases covering approximately 87,000 acres. This first sale of leases expanded the interest in the Duluth Gabbro complex which extends through portions of St. Louis, Lake and Cook Counties. This interest holds promise of the development of a new mineral industry that may approach the scale of Minnesota's taconite operations.



A taconite processing plant and water recovery basin.

Large taconite operations as shown in the above photo are
dependent upon the state's valuable water and mineral resources.

#### PLANNING FOR THE FUTURE

Planning for the future is as important as anything we may do today, in fact more important than any biennial report. It is not enough to carry on the immediate work-load of the present. In order to progress we must chart the road ahead. This summation of the long-range objectives of the Department of Conservation is what we choose to call Planning for Tomorrow's World.

#### Game and Fish

- \* Rehabilitate some of the large northeastern lake trout lakes by use of fish toxicants to increase production of lake trout.
- \* Increase production of walleye fingerlings through reconstruction of old rearing ponds.
- \* Develop newly acquired Spire Valley hatchery and rearing site in Cass County; including buildings, raceways and other facilities for production of salmon and lake trout.
- \* Increase production of walleyes through extensive removal of suckers in selected northeastern walleye lakes.
- \* Increase acquisition and development of natural fish spawning areas, and accesses to trout streams for development and angling.
- \* Increase evaluation of natural reproduction of fish in lakes, to better utilize fish produced in hatcheries, rearing ponds, and from fish rescue operations.
- \* Greater emphasis on active deer management program with extensive use of prescribed burning, planting and harvesting of forest lands (for grouse as well as deer).
- \* Encourage continued expansion of private land development program. Establish pheasant winter and nesting cover, and waterfowl marshes.
- \* Recommend acquisition of as much as possible of the 670,000 acres of desirable wildlife wetlands remaining in agricultural areas for "Save Minnesota Wetlands" program. Funds needed to exceed original goal of 250,000 acres.
- \* Continue land acquisition program on major wildlife management units at current rate or faster if funds are available.
- \* Multiple use of wildlife management areas will be stressed wherever this is compatible with primary project objectives.
- \* Emphasis will be given to improvement of wildlife habitat on private lands.

- \* Accelerate lake sounding and mapping program to make basic data available by 1980 for majority of the more important fish lakes of the state.
- \* Accelerate fish lake and game lake surveys to make needed data available to managers and administrators by 1980 on the more important waters of the state.
- \* Carry out special fish and wildlife surveys in an increasing number of watersheds and river basins where other agencies are planning comprehensive development programs.
- \* Increase emphasis on growing water problems affecting fish and wildlife -- aquatic nuisances, pollution, eutrophication and lake shore development. Review and monitor proposed power generating plants to determine effects of heated discharges on fish, wildlife and the aquatic environment.

# Forestry

- \* PRIVATE FOREST MANAGEMENT SERVICE To increase the present and future productivity of private forest lands.
- \* LAND CLASSIFICATION Develop and activate a land use classification system with the cooperation of the counties, the federal agencies, and the other divisions of the Department of Conservation.
- \* FOREST RECREATION To provide forest oriented recreational areas with minimum facilities affording safe and sanitary conditions for the public enjoyment.
- \* MANAGEMENT PLANS Complete and keep current a workable forest management plan for each district of the division.
- \* FOREST PROTECTION To protect our forests from fire, insects and disease, and wind and water erosion.
- \* TIMBER MANAGEMENT Increase the yearly harvest of state timber by 80 per cent.
- \* MARKETING AND UTILIZATION To promote greater and better utilization of Minnesota's forest resources through improved marketing.
- \* FOREST ROADS Construct and maintain carefully selected forest roads on state land for recreational use, timber cutting operations, and fire access.
- \* ORGANIZATION To reorganize the administrative boundaries of the division to coincide with county lines for more efficient operations.
- \* REFORESTATION Improve the productivity of state-owned forest lands through reforestation of non-productive lands, by encouraging natural reproduction, planting seedlings and by artificial seeding.

- \* FOREST DEVELOPMENT Improve the quality and productivity of existing stands on state lands by thinnings, improvement cuts, and other cultural work.
- \* NURSERIES To produce suitable tree planting stock for public agencies and private individuals for reforestation purposes.

# Enforcement and Field Service

- \* Training Continued emphasis on In-Service Training and Supervisory schools.
- \* PERSONNEL Continual upgrading and improving personnel selection standards by educational, physical and age requirements.
- \* SUPERVISION Increased emphasis on improved supervisory techniques with special attention at the operational level.
- \* COMMUNICATIONS Better equipment and improved communications.
- \* PUBLIC SERVICE Continued emphasis by all personnel on improved public service.

# Parks and Recreation

- \* Acquire four major park units in Twin Cities Metro Area and accelerate land acquisition through \$20 million in certificates of indebtedness.
- \* Accelerate state park development program.
- \* Accelerate the parks interpretation program and expand naturalist services, nature trails, museum exhibits and field demonstrations.
- \* Continue development of the 16 boating rivers system with emphasis on boating and camping accommodations and interpretation program, in cooperation with state, municipal and private agencies involved.
- \* Continued expansion of trail system to provide multiple-use and integration with national, public and private trails.
- \* Establish system of scientific and natural areas including site acquisition and management programs.
- \* Continue cooperative park management research program with National Park Service and University of Minnesota to perpetuate natural values.
- \* Establish position of Chief of Visitor Service to expand interpretive, and employee safety programs; and add a Staff Ecologist to program management techniques necessary to perpetuation of natural values and supervise the buildup of a scientific and natural areas system.

- \* Improve maintenance and operating efficiencies in state parks.
- \* Expand cooperation effort with surrounding states to establish more uniform rules, regulations and operational procedures.

# Waters, Soils and Minerals

- \* Promote exploration and extraction of state-owned minerals lease sales and lease negotiations.
- \* Provide equitable rental and royalty income from state-owned mineral lands for the school and university trust funds and local taxing districts.
- \* Expand data processing program for exploration mineral testing data used in evaluation of state-owned mineral properties.
- \* Update mineral lease laws.
- \* Expand flexibility of Division's applied mineral research and testing facilities.
- \* Adopt royalty accounting to a data processing system.
- \* Develop mine land reclamation program.
- \* Develop flood plain management program.
- \* Develop shoreline protection program.
- \* Improve water management policies.
- \* Provide inventories and informational reports on surface and underground water resources of the State.
- \* Provide periodic public information reports on surface and underground water levels and water usage in the State.
- \* Provide comprehensive administrative services concerning water resources activities throughout the State.
- \* Provide a coordinated water resources management plan for Minnesota.
- \* Provide long range plans for hydrologic studies and investigations in the State.

# Administrative Division

- \* Bureau of Information and Education Increased emphasis on the educational functions of the Bureau; improved communication both within the Department and with news media; increased production of informational documentary projects.
- \* Bureau of Engineering Changes will be made in procedures involving engineering services in order to achieve greater efficiencies.
- \* Bureau of Planning A closer look at the total open space need and the environment as it relates to conservation programming and laison with Federal agencies.
- \* Bureau of Boat and Water Safety Establishment of a new License Center to handle all registrations and licenses issued by the Department; bring the fiscal functions under financially oriented managers; improvement of public service and good administration practices.
- \* Bureau of Business Management Increased use of computer services to speed handling of Department business; streamline accounting procedures and revise auditing methods to improve overall efficiency; these activities will be an initial step toward consolidated budgeting.
- \* Personnel New programs recruiting and in service training; college intern programs; increased emphasis on employee relations; greater individual services for departmental personnel.

#### - DEPARTMENTAL CONCLUSIONS -

In conclusion, our guidelines in achieving the objectives of reorganization and conservation of natural resources can be enunciated as follows:

- 1. The laws and regulations governing the protection of our wildlife are geared to allowing equitable, but not excessive harvests.
- 2. In Minnesota good hunting and fishing coupled with an abundance of wildlife does not come by accident. Improved game and fish management techniques, research and enforcement of game and fish laws are essential.
- 3. Forests, a multiple resource, are a prime requisite for Minnesota's wildlife, recreation and industry.
- 4. Expansion of our state park system must keep pace with population and the encroachmentof domestic and industrial development.
- 5. Minnesota has no shortage of water, but proper management and use of this resource is vital.
- 6. Our mining industry requires supervision and deserves the support and encouragement of the department. Taconite and Copper-Nickel promise continued prosperity for our North Country.

# CEGISLATIVE REFERENCE ' IBRARY STATE OF MINNESOTA