# MINNESOTA STATE FORESTS



STATE OF MINNESOTA DEPARTMENT OF CONSERVATION CHESTER S. WILSON, Commissioner DIVISION OF FORESTRY H. G. WEBER, Director

ENJOY THE FORESTS



DON'T DESTROY THEM



## FOREWORD

The state forests of Minnesota belong to the people of the state. As custodial agent for the people, the Division of Forestry presents this booklet to the people so that they may be advised of where their forests are, how they were established and what is being done with them.

## MINNESOTA STATE FORESTS

## CONTENTS

Dage

FORESTED AREA OF MINNESOTA	5
EARLY SETTLERS	5
LAND Early Land Ownership Kind of Land and Ownership	6 6 7
<ul> <li>FORESTRY LEGISLATION <ul> <li>Tree Bounty Law, 1871</li> <li>First Forest Fire Prevention Law, 1895</li> <li>Forestry Board Created, 1899</li> <li>Pillsbury Forest Reserve Established, 1899</li> <li>Burntside State Forest Accepted by State, 1905</li> <li>State Forester Appointed, 1911</li> <li>Itasca State Park Made State Forest Reserve, 1907</li> <li>Forest Reserves Changed to State Forests, 1913</li> <li>Constitution Amended to Permit Establishment of State</li> <li>Forests, 1914</li> <li>Minnesota State Forest Established, 1917</li> <li>Agricultural Land Eliminated from State Forests, 1919</li> <li>Department of Conservation Created, 1925</li> <li>State Land Within Chippewa National Forest Made State</li> <li>Forest, 1927</li> <li>Additional State Forests Established, 1931</li> <li>Conservation Commission Created, 1931</li> <li>Twenty-six State Forests Established, 1935</li> <li>Conservation Commissioner Replaces Commission, 1937</li> <li>Continuing Department of Conservation, 1943</li> <li>Reestablishing 29 State Forests, 1943</li> </ul></li></ul>	13 13 14 15 15
USES OF STATE FORESTS Timber Management Recreation Campgrounds Summer Homesites Wild Life Erosion Control Navigation Power Development CCC Work	15 15 18 19 19 19 20 20 21
MINNESOTA'S STATE FORESTS, NAMES AND LOCATIONS	23
CAMPGROUNDS, NAMES AND LOCATIONS	
SUGGESTIONS TO THE USER OF STATE FORESTS	
LOCATIONS OF FOREST OFFICERS	29

## FORESTED AREA OF MINNESOTA

When the first explorers arrived in the territory which is now Minnesota, they found a vast expanse of prairie and forest. The southwestern portion of this territory was primarily prairie, with a few scattered areas of forest or timber around the lakes and along the streams. To the east the forested areas increased. In this region the trees were hardwoods, or as they are sometimes called, deciduous trees, since they shed their leaves in the fall.

Beginning in what is now southeastern Minnesota, the explorers found an almost solid hardwood forest, the southwestern boundary of which coincided closely with a line drawn through the present towns of Spring Valley, Zumbrota, Mankato, Glencoe, Fergus Falls, Mahnomen, Red Lake Falls and Thief River Falls. This hardwood forest belt varied in width from about fifteen miles near Red Lake Falls to seventy miles or more between Litchfield and Cambridge, the latter point being some distance northeast of the Mississippi River.

From the hardwood belt north, the state was covered by a relatively dense coniferous forest, consisting primarily of cone bearing trees such as pine, spruce, fir, cedar and tamarack. These trees are also called evergreens or softwoods to distinguish them from the deciduous or hardwood trees. In most of the coniferous forests the pines were by far the most important commercially. In the extreme north-central part of the state the pine forests gave way to more pronounced swamp forests of spruce, cedar and tamarack. The largest of these are found in Koochiching, Beltrami and Lake of the Woods Counties. Records of early explorations indicate that the pine forests were interspersed with aspen stands, just as they are today.

## EARLY SETTLERS

After the early explorers came the trappers and voyageurs who traveled by canoe and made use of the lakes and streams as their main routes of travel. This led to settlement along such streams and on the shores of the lakes. Many of these early settlements are now large cities or thriving villages. Other settlers came by wagon and settled on the prairies and in the edges of the adjacent forests. The prairie land was easy to cultivate and on the whole produced excellent crops, while the nearby forest provided the necessary building material and fuel.

## LAND

It was only natural that the most accessible and most easily cultivated land was first put into use. The open land was soon occupied and since most of the hardwood forest grew on rich soil, the next development was on this forest land. Timber was cut primarily for the purpose of clearing the land so that it could be cultivated. Some of the timber was used as logs or sawed into lumber for building purposes, but a great deal of the wood was burned just to get rid of it.

The development of these prairie lands and these hardwood areas required the building of small towns and the need for additional lumber for this construction soon led to the expansion of logging operations from the hardwoods into the softwood areas because the lumber produced from the softwoods was far more desirable for building purposes.

The cutover land left by logging operations in the softwood areas appealed to the settlers in a rapidly growing state as an additional source of plow land. The people familiar with the cutover land in the southern part of the state knew that most of it was suitable for agriculture and assumed that the cutover land of the more northern regions was equally good. This resulted in rapid settlement following logging. As time went on it was found that north of the hardwood forest the quality of much of the land was too poor to be farmed successfully. It was also found that some of the land which was being used for farming in the central and southern part of the state was not as good as the homesteaders had hoped it would be.

## Early Land Ownership

During the first years of Minnesota's statehood, most of the land in the state still belonged to the United States government although considerable portions had been homesteaded or had come into private ownership in some other manner. About this time large tracts of this government-owned land were granted to the state for various purposes. All of Sections 16 and 36 were granted to the state for schools. When it was found that some of these sections had already gone into private ownership, the state was given what was known as "lieu selection." This meant that the state could select other government lands that were not within Sections 16 or 36 in place of the so-called school sections which were no longer available. Land was also granted to the University and to various institutions. In addition to this a grant was made to the state of a large area of swamp land, 50 per cent or more of which had to be so-called swamp. In many cases this was not true swamp, but flat lands with poor drainage which produced the swamp conifers mentioned before.

All in all, the state was granted 8,455,702<sup>1</sup> acres of land. Of this, 2,895,142 acres were again deeded to various companies to help finance the construction of railroads, roads and similar improvements which were badly needed in opening up and developing the state. The balance, or about 6,550,560 acres, remained temporarily in state ownership. State Laws provide that these lands can be sold for not less than five dollars per acre. Timber on the lands could be sold independently, but there was no provision made for holding in state ownership such of the lands as were unsuited for agricultural use. The Congress of the United States also conveyed to the state 8,313,880 acres specifically for railroads. This land the state reconveyed as directed.

## Kind of Land and Ownership

The sale of land was carried on, but in 1931 the state still owned two million acres, and because of tax-delinquency it was apparent that many more thousands of acres would come into state ownership. It was recognized that certain of the state owned lands and certain of the tax-forfeiting lands were agricultural and fitted into a planned land use program. Certain lands were suitable for and were being set aside as game refuges and public hunting grounds; other lands were valuable for minerals. Examination showed that large areas of the remaining lands owned by the state and lands which would come into state ownership through tax-delinquency were of a character unsuited for any of these specialized purposes but were suitable for the production of timber or for the maintenance of a necessary ground cover, and on that premise the state forest program was established.

The boundaries of the state forests which were subsequently established were determined by one or both of two factors, the first being the concentration of state land ownership in the area, and the second being the presence in large quantities of lands within the area which were unsuited for agricultural use and which were tax-delinquent

<sup>1</sup> Figure from State Auditor's report, 1931-1932.

to such a degree that forfeiture to the state was inevitable. Subsequent legislation placed the sale and management of tax-forfeited lands in the hands of the counties, providing a means, however, for the counties to turn lands over to state agencies. The original plan, therefore, has not developed as far as the tax-forfeited lands are concerned.

As the state forests were scattered throughout the northern part of the state, a great variation is found in the topography as well as in the land itself. The forest land in the northeastern section is the same as most of the land in that territory. It is characterized by hills of almost mountainous proportions, steep rock cliffs and many small swamps. The same territory has numerous lakes, both large and small, some of which are the deepest in the state.

The land within the forests of the central part of the state is much less hilly. The soil is usually sand or sandy loam and there is little or no rock outcrop. In this area the lakes are as numerous as in the northeast.

In the north-central forests the land is quite different from either of the other two areas. There are localities where the soil is very sandy but the chief characteristic is the enormously large peat swamps. Fairly good soil is found under the peat in certain areas. The only lakes worthy of mention are Upper and Lower Red Lake.

Within the exterior boundaries of the state forests land ownership can be grouped into four major classifications, namely state, federal, private and tax-forfeited. The gross area of all of the state forests, of which there are 32 (not counting Itasca State Park and Forest), is 5,332,040<sup>1</sup> acres. The net area of the land within those 32 state forests is 1,958,585 acres. The state ownership is gradually being increased by purchase and gifts of additional lands.

Of the 1,958,585 acres of state owned land within state forest boundaries, approximately one-third or 652,861 acres do not produce merchantable timber. This area is composed primarily of open bogs, rock outcrop and barren land which has not reseeded naturally. The other two-thirds, or 1,305,724 acres, produces timber of some kind. On this land the average acre produces annually about onequarter of a cord of merchantable timber, or a total of 326,431 cords. When converted to a board-foot volume, this amounts to about 163,215,000 board feet per year.



<sup>&</sup>lt;sup>1</sup> By gross area is meant all lands and water within the described boundaries.

## FORESTRY LEGISLATION

Minnesota's first legislation pertaining in any way to forestry was enacted in 1871. Succeeding legislatures have enacted other laws, creating state forests, providing for their protection and management, and modifying previous laws. The various laws relating to Minnesota's state forests are described briefly in the following paragraphs.

#### Tree Bounty Law (Chap. 30, Laws 1871)

The legislature of 1871 passed a law providing for the payment of a certain amount of bounty each year for tree planting on the prairies. This was the first law on the statute books of Minnesota remotely pertaining to forestry.

### First Forest Fire Prevention Law (Chap. 196, Laws 1895)

The easiest method of clearing the land after logging was by the continued use of fire. As time went on and more and more land had been logged and burned over, a realization of the damage due to fire came to the people. This was brought out particularly in the disastrous Hinckley fire of 1894 in which 418 people lost their lives.

The first step to preserve the forests came with the legislature of 1895. A law was passed by this legislature providing for the preservation of forests and the prevention and suppression of forest and prairie fires. It also set up the office of forest commissioner and provided for the appointment of a chief fire warden.

#### Forestry Board Created (Chap. 214, Laws 1899)

On April 13, 1899, a law was passed which created a forestry board. This law also arranged for the establishment and management of forest reserves on forestry principles.

#### Pillsbury Forest Reserve Established (Chap. 214, Laws 1899)

Under the provisions of the 1899 law, Governor John S. Pillsbury, the same year, deeded to the state for forestry purposes, 1,000 acres of cutover land in Cass County. This was accepted by the forestry board and became the first forest reserve in Minnesota, and in honor of the donor was named the Pillsbury State Forest. The law indicated that timber management and protecting the timber against fire and trespass were the main objectives to be accomplished.

## Burntside State Forest Accepted by the State (Chap. 83, Laws 1905)

About the year 1903, the United States government indicated that it was willing to deed to the state a tract of land for forestry and recreation. After examining several tracts in different locations, a selection was made of 20,000 acres of rough, rocky land located north of Ely. Congress on April 28, 1904, deeded this to the state by congressional act, one of the express provisions of which was that the land should be managed for forestry and recreation. The state legislature of 1905 accepted the grant with its terms and conditions. The act accepting the land called it the Burntside State Forest and provided for its management.

## State Forester Appointed (Chap. 125, Laws 1911)

In 1911 the legislature took a further step in the promotion of forestry by placing fire protection and forest reserves under the direction of the forestry board. The board was also directed to employ a state forester, who, the law says, shall be a trained forester. The duty of the forester under the forestry board included protecting forests against fire, managing forests on forestry principles, protecting lands from illegal cutting and the furthering of education in forestry.

## Itasca State Park Made a State Forest Reserve (Chap. 90, Laws 1907)

By act of the legislature in 1891, Itasca State Park was established. It included at that time a tract of land five by seven miles in extent, surrounding Lake Itasca.

On August 3, 1892, the Congress of the United States granted to Minnesota all government lands within Itasca Park, amounting to 6,956.92 acres. A provision of the grant was that the land "... be perpetually used by the state as and for a public state park; provided that the land hereby granted shall revert to the United States, together with all the improvements thereon, if at any time it shall cease to be exclusively used for a public state park, or if the state shall not pass a law or laws to protect the timber thereon." Chapter 15, Laws of 1893, accepts the grant, its terms and stipulations and provides penalties for destruction of the timber.

The park was first administered by a board composed of the Governor, the State Auditor and the Attorney General. In 1907 the administration was transferred to the forestry board. At the same time the park was made a state forest reserve, although the government grant remained a park.

The area was enlarged in 1921 by the addition of a strip two miles wide along the whole west boundary, thus making the park seven miles square. The object of the establishment of the park was to preserve the remnants of a primeval forest around the source of the Mississippi River.

## Forest Reserves Changed to State Forests (Chap. 86, Laws 1913)

The state legislature of 1913 changed the name of forest reserves to state forests. This designation still applies to state lands which have been reserved from sale for timber production and other forestry uses.

## Constitution Amended to Permit Establishment of State Forests (Sec. 7, Art. VIII, 1914)

As time went on it became apparent that much state land was more suitable for timber production and recreation than for agriculture. As the state constitution did not provide for state trust fund land being retained as state forests, it was necessary to have it changed before any of these state-owned lands could be reserved from sale and made state forests. In 1914 the people of Minnesota passed a constitutional amendment which became Section 7 of Article VIII and is quoted as follows:

"Such of the school and other public lands of the state as are better adapted for the production of timber than for agriculture, may be set apart as state school forests, or other state forests, as the legislature may provide, and the legislature may provide for the management of the same on forestry principles. The net revenue therefrom shall be used for the purposes for which the lands were granted to the state."

#### Minnesota State Forest Established (Chap. 448, Laws 1917)

In complying with this express wish of the people, the legislature in 1917 passed a law establishing the Minnesota State Forests. The same general idea of timber production prevailed in this law but it went a step farther and in addition to authorizing the management of the forest for timber production it also stated "and for such other uses as are not inconsistent therewith." The forests included all the land owned by the state in a large area extending from the east line of Koochiching County across northern St. Louis, Lake and Cook Counties, and contained about 350,000 acres of state land.

## Agricultural Land Eliminated from State Forests (Chap. 315, Laws 1919)\*

In 1919 the forestry board was given authority to eliminate agricultural land from state forests. By eliminating such lands, one public objection to the establishment of large areas of land as state forests was removed. The law also provided that any state lands found to be better adapted for the production of timber than for agriculture could be certified as state forests.

## Department of Conservation Created (Chap. 426, Laws 1925)

Chapter 426, Laws of 1925, created a Department of Conservation under the control and supervision of a commission composed of the Commissioner of Forestry and Fire Prevention, the Commissioner of Game and Fish, and the Commissioner of Lands and Timber, the latter at that time being the State Auditor. It abolished the forestry board and the office of state forester.

## State Land Within Chippewa National Forest Made State Forest (Chap. 246, Laws of 1927)

In 1927 all the state owned lands within the boundaries of the Chippewa National Forest were made a state forest by act of the legislature. It has since been named the Bowstring State Forest.

#### Additional State Forests Established (Chap. 124, Laws 1931)

The legislature of 1931 set up a large acreage as state forests. This consisted of the state-owned land within certain designated areas and was to be managed in the same manner as other state forests.

#### Conservation Commission Created (Chap. 186, Laws 1931)

The same legislature established a new Conservation Department, consisting of a five-man, non-political Conservation Commission, which in turn appointed a Conservation Commissioner. In the \*This Law was repealed in 1943. new Department of Conservation were included the Divisions of Forestry, Game and Fish, Lands and Minerals, Drainage and Waters, and the Tourist Bureau. At this time the Division of Forestry was given charge of all state timber as well as state parks. (In 1935 the legislature created a separate Division of State Parks as a part of the Department of Conservation, and all state parks were placed under its jurisdiction.)

## Twenty-Six State Forests Established (Chap. 419, Laws 1933, and Chap. 372, Laws 1935)

The legislatures of 1933 and 1935 established or reestablished twenty-six state forests under much broader conditions of management and use than had pertained to the forests established earlier. The enabling act governing these forests is quoted, as follows:

"For the purpose of vesting the state with title to lands in the area hereafter described which are suitable primarily for state use and development for the purpose of preserving, propagating and breeding wild life of all kinds, including all species of game, fish and furbearing animals and birds of rare and useful species, and especially for the development of forests and the prevention of forest fires, and for the preservation and development of rare and distinctive species of flora native to such area, including the state flower, and for the protection of watershed areas, valuable for domestic and commercial uses, and for the establishment and development of recreational areas. There are hereby created and established certain state forests to be managed in the same manner as other state forests comprising all lands and water within the following described area now owned by the state or hereafter acquired by the state in the counties and townships described as follows: . . . " (The forests established under the above act and their locations are listed, beginning on Page 24.) "Said lands will be under the management and control of the Conservation Commission, which will have and is hereby given full power and authority to make, establish, promulgate and enforce all necessary rules and regulations not inconsistent with the laws of the state for the care and management of state forests and fire prevention and establishment and management of public shooting grounds and game refuges."

It should be noted that up to and including the 1931 act, only the state land within designated boundaries was made state forests. The 1933 and 1935 laws provided that land acquired within these areas also became state forests.

Conservation Commissioner Replaces Commission (Chap. 310, Laws 1937)

The Department of Conservation was again reorganized by the legislature of 1937. The major change under this act was the elimination of the five-man Conservation Commission and replacing it with a Commissioner appointed by the Governor.

## Continuing Department of Conservation (Chap. 60, Laws 1943)

The legislature of 1943 passed a new law which gave the Commissioner of Conservation full authority and responsibility over all the divisions in the department of conservation and power to transfer assignments and funds from one division to another.

#### Reestablishing Certain State Forests (Chap. 171, Laws 1943)

The 1943 legislature reestablished a total of 29 state forests. The purpose of this was to place as many as possible of the state forests under one law, thus assuring uniform authority for managing them and placing this authority all in one law where it could readily be found. The same act repealed most of the old laws pertaining to state forests.

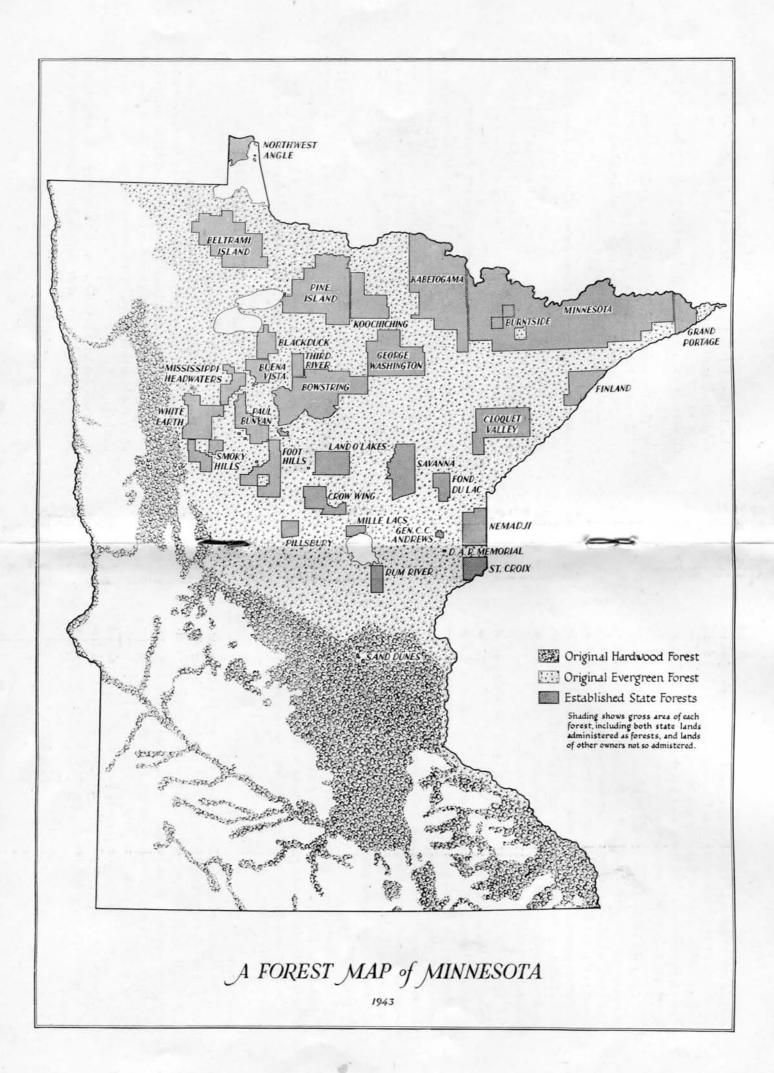
No new forests were established, but some forests were combined, with the result that the total number was reduced from 40 to 32. Changes in the boundaries resulted in a small reduction of the gross area. Three of the old forests were not included in the new act but remain forests under the old laws which originally established them.

## USES OF STATE FORESTS

#### **Timber Management**

During the early days in Minnesota the timber supply seemed unlimited. Land was wanted for farming and the lumber produced by the sawmills was needed in the development of Minnesota as well as adjoining prairie states. There was no restriction on logging, and when the best timber had been removed fire often destroyed what was left.

It was not until near the turn of the century that the people of Minnesota really became aware that the huge timber resources were



rapidly being depleted. They began to realize that it was useless to plant trees or to reserve young ones for future growth unless there was reasonable assurance that they would not be destroyed by fire. The appointment of a chief fire warden was the first organized effort to prevent and control forest fires.

After the establishment of the Pillsbury State Forest, a small forest nursery was started and in the following years some planting was done, and plans were prepared for the management of this small forest to the end that it would produce a continuous crop of timber. There was very little merchantable timber on it, or on the Burntside State Forest, at the time of establishment. The timber management at this time, therefore, was limited almost entirely to fire protection, planting and making plans for the future.

In the Minnesota State Forests there was a great amount of timber still left uncut. After the establishment of the forests, the Division of Forestry immediately began reserving immature timber on state land for future growth and leaving seed trees of the most desirable species, to seed the land after most of the mature timber had been cut. Unfortunately, similar measures were not taken on adjacent privately owned lands. Much slash resulted from logging operations and with the small fire fighting organization available at that time, the seed trees and immature timber were often destroyed by forest fires.

In recent years much more management work has been accomplished. Fires have been more efficiently controlled with the result that considerable areas now are producing a second crop of trees which have been planted or which have been seeded naturally by seed trees left in the forest.

### Recreation

The forests and lakes of Minnesota give to the state a characteristic and peculiar charm that is unsurpassed anywhere. It is for this reason that people from all over the United States spend their summer vacations here. Some people enjoy camping in the outdoors, others prefer to stay at modern resorts, many have built summer homes on one of the numerous lakes and spend almost the whole summer in the forest. There are still large areas of undeveloped wilderness, the greater part of which will always remain so and furnish unexcelled recreation for the person who loves to travel by canoe. The use of state forests for recreation increased rapidly as more roads made them accessible to people driving automobiles. The roads also made possible numerous resorts on privately owned lands within the forest. On state land it was found advisable to provide accommodations for the many people who did not go to commercial resorts. These accommodations consist of campgrounds and summer homesites.

## Campgrounds

The first campgrounds prepared were rather primitive and had few improvements except that the area was cleared of brush and the location designated as a public campground. As time went on many of the campgrounds were supplied with water, fireplaces, benches, tables, latrines, facilities for refuse disposal, and even an enclosed fish cleaning house in one instance. (Campground locations are listed beginning on Page 26.)

## Summer Homesites

The summer homesites, or cottage sites as they are sometimes called, are laid out somewhat like city lots, except that they border on a good lake instead of a street. The sites usually have a lake frontage of about one hundred feet and extend back from the lake approximately two hundred feet.

These sites are leased to individuals for summer homes. The lessee builds his own cabin on the site according to his own plans, but subject to certain state regulations. Many of the sites can be reached by automobile but some of them are accessible only by boat or on foot. (The Division of Forestry bulletin entitled "Minnesota's State Owned Lakeshore Homesites," lists the sites available and contains information regarding leases, etc.)

#### Wild Life

Until recent years not much thought had been given to the preservation of the conditions or environment which is necessary for all species of wild life. Each species of bird, animal and fish thrives best under certain conditions. Each must have suitable food, protection and living conditions. For nearly a hundred years we have been changing, damaging and destroying natural conditions without concern about what effect it would have on wild life. The logging of spruce thickets has taken from deer, moose and other animals the winter protection they must have. The burning of a meadow may destroy nests of eggs or young birds in addition to berries, fruits and seeds which birds and small animals live on. The drainage of swamps with the resultant drying up of streams has destroyed the homes of many fur-bearing animals. The lowering of lake levels and irregular flow of streams has meant destruction of fish life.

The restoration of animal and fish populations depends almost entirely upon the reestablishment of natural forest conditions. Proper control and management of state forests can provide the best environment for all wild life of the region.

#### **Erosion Control**

It is a well known fact that forests reduce the rapid runoff of surface water after heavy rains and thus help to prevent floods. The force of the rain is broken by the leaves and branches of trees and bushes and the water reaches the ground in the form of a fine spray. On the ground it is absorbed by the thick layer of leaf mold and humus, from where it is carried away underground to feed the springs.

When the timber has been removed a great change takes place. The rain now beats directly onto the ground with force. Drop joins drop and soon a torrent rushes down the hill, washing out a channel and flooding the stream below.

Erosion is also a very serious nuisance in the operation of irrigation projects. The silt fills up the reservoir and destroys the value of the dam, often the only suitable dam site available. It fills up the ditches and sometimes spreads a layer of sterile sand over a fertile field.

## Navigation

River navigation which has played such an important part in our national transportation is greatly impeded on streams which are subject to floods. In the spring the water is so high that navigation is dangerous. During the dry season the shallowness of the water makes the crossing of sandbars dangerous and often impossible.

#### Power Development

Water power is affected in much the same way as navigation. During the flood season much of the water overflows the dam in such volume as to frequently cause great property damage. In the dry season there is not enough water left to turn the wheels of the power plants. A steady, uniform stream flow such as comes from well forested watersheds is far better for both navigation and water power. The average flow of the stream is unimportant—it is the steady, uniform flow that determines its usefulness.

## CCC Work

In June of 1933 the State Department of Conservation obtained its first Civilian Conservation Corps camps. In the years following, the number of camps doing work in the state forests increased to a total of thirty-six. The work consisted almost entirely of forest development, such as road construction, fire prevention, fire fighting, removing fire hazards, the construction of buildings, recreational development, and the planting of millions of small trees. While this work has now been discontinued, the results of the CCC efforts will be felt for a long time. Undoubtedly, if the time ever comes when the supply of labor cannot be used in industry, the CCC camps or something similar will be reestablished. The forests are a huge reservoir of useful labor.



## NAMES AND LOCATIONS OF MINNESOTA'S STATE FORESTS

The state forests established by various acts of the legislature are listed herewith:\*

- 1. Beltrami Island State Forest. Located in Lake of the Woods and Roseau Counties, south of Warroad. Gross area, 480,000 acres.
- 2. Blackduct State Forest. Located west of Blackduck, in Beltrami County. Gross area, 90,880 acres.
- 3. Buena Vista State Forest. Located in Beltrami County north of Bemidji. Gross area, 79,641 acres.
- Cloquet Valley State Forest. Located in St. Louis County, about 35 miles north of Duluth. Gross area, 307,011 acres.
- Crow Wing State Forest. Located north of Brainerd in Crow Wing County. Gross area, 120,760 acres.
- 6. D. A. R. Memorial State Forest. Located in Pine County near the village of Askov. Gross area, 240 acres.
- 7. Finland State Forest. Located in Lake County, 40 miles north of Two Harbors. Gross area, 149,240 acres.
- 8. Fond du Lac State Forest. Located in Carlton and St. Louis Counties, about 15 miles west of Carlton. Gross area, 71,680 acres.
- 9. Foot Hills State Forest. Located in Cass and Crow Wing Counties, southeast of Park Rapids and south of Walker. Gross area, 202,900 acres.
- 10. General C. C. Andrews State Forest. Located near Willow River in Pine County. Gross area, 8,325 acres.
- 11. George Washington State Forest. Located mostly in Itasca County, north of Grand Rapids. A portion is in St. Louis County, north of Hibbing. Gross area, 371,000 acres.
- 12. Grand Portage State Forest. Located north of Grand Marais in eastern Cook County. Gross area, 105,880 acres.
- Kabetogama State Forest. Located in the northern portion of St. Louis County. Gross area, 789,800 acres.

\*Areas based on close estimates, 1943.

Natural Reproduction of Norway Pine

- 14. Koochiching State Forest. Located in Koochiching County, southeast of Big Falls. Gross area, 208,855 acres.
- 15. Land O'Lakes State Forest. Located in the southeast corner of Cass County, south of Remer. Gross area, 139,521 acres.
- Mille Lacs State Forest. Located in Aitkin County, north of Mille Lacs Lake. Gross area, 29,980 acres.
- Mississippi Headwaters State Forest. Located southwest of Bemidji in Beltrami, Hubbard and Clearwater Counties. Gross area, 217,180 acres.
- Nemadji State Forest. Located in Carlton and Pine Counties, south of Carlton. Gross area, 150,537 acres.
- 19. Northwest Angle State Forest. Located in Lake of the Woods County, surrounded by Canada and Lake of the Woods. Gross area, 79,276 acres.
- 20. Paul Bunyan State Forest. Located northeast of Park Rapids in Hubbard County. Gross area, 152,920 acres.
- 21. Pillsbury State Forest. Located in Cass County six miles west of Brainerd. Gross area, 52,767 acres.
- 22. Pine Island State Forest. Located in southwestern Koochiching County. Gross area, 587,829 acres.
- 23. Rum River State Forest. Located in Mille Lacs and Kanabec Counties about six miles east of Onamia. Gross area, 57,600 acres.
- 24. Sand Dunes State Forest. Located six miles west of Zimmerman in Sherburne County. Gross area, 1,320 acres.
- 25. Savanna State Forest. Located north of McGregor in Aitkin County. Gross area, 213,860 acres.
- 26. Smoky Hills State Forest. Located in Becker County, twelve miles west of Park Rapids. Gross area, 109,874 acres.
- 27. St. Croix State Forest. Located in Pine County, about 15 miles east of Sandstone. Gross area, 78,282 acres.
- 28. Third River State Forest. Located in Itasca County, about 20 miles southeast of Blackduck. Gross area, 46,227 acres.

29. White Earth State Forest. Located in Becker, Clearwater and Mahnomen Counties, 25 miles south of Bagley. Gross area, 203,-285 acres.

It should be noted that the Kabetogama and Grand Portage State Forests were included in the original Minnesota State Forests, which were established in 1917.

In addition to the 29 state forests enumerated, which were reestablished by Chapter 171, Laws of 1943, there are three others which were made forests under other laws. These include only the land owned by the state at the time the forests were established.

They are:

- 1. Burntside State Forest. Located in St. Louis County, northwest of Ely. Area, 20,000 acres.
- 2. Bowstring State Forest. Located between Cass Lake and Deer River in Cass, Itasca and Beltrami Counties. Area, 114,760 acres.
- 3. Minnesota State Forests. Located in the extreme northern portion of St. Louis, Lake and Cook Counties. Area, 217,180 acres. Although Itasca State Park and Forest is managed entirely as a state park, it is listed here as a forest because it is established as such:
- 1. Itasca State Park and Forest. Located in Hubbard, Clearwater and Becker Counties. Area, approximately 32,000 acres.

## NAMES AND LOCATIONS OF CAMPGROUNDS IN STATE FORESTS

Many of the campgrounds which have been developed on the state forests can be reached only by boat or on foot. The location of others is difficult to describe so that they may be readily found. The following list, therefore, contains only those which can be reached by automobile, and are not too difficult to find:

- 1. Ash River Campground. Near the ranger station at the mouth of the Ash River, in St. Louis County, 40 miles north of Orr and 10 miles east of Trunk Highway No. 53.
- 2. Bear Lake Campground. About 25 miles north of Nashwauk in the George Washington State Forest, Itasca County.
- 3. Beatrice Lake Campground. In Itasca County, 35 miles northwest of Hibbing.
- 4. Big Falls Campground. Near Big Falls in Koochiching County.
- 5. Bemis Hill Campground. Fifteen miles south of Warroad, in Roseau County.
- 6. Chief Woodenfrog Campground. On the northwest corner of Lake Kabetogama, in St. Louis County.
- 7. Cotton Campground. On the White Face River about a mile west of Cotton, in St. Louis County.
- 8. Finland Campground. At the inland town of Finland in Lake County.
- 9. Gappa's Landing Campground. On the south side of Lake Kabetogama, in St. Louis County.
- 10. Greer Lake Campground. About 20 miles northeast of Brainerd, in Crow Wing County.
- 11. Gulch Lake Campground. Twenty miles north of Park Rapids in Hubbard County.
- 12. Indian Lake Campground. About two miles south of Brimson, in St. Louis County.
- 13. Island Lake Campground. In St. Louis County, about 10 miles north of Duluth on the Vermilion Trail.

- 14. Mississippi River Campground. On the river and located about 12 miles northeast of Brainerd, in Crow Wing County.
- 15. Owen Lake Campground. In the George Washington State For est, about 20 miles north of Grand Rapids, in Itasca County.
- 16. Pelican Lake Campground. On the west end of this lake, near Orr, in St. Louis County.
- 17. Pequaywan Lake Campground. About 15 miles northwest of Two Harbors in St. Louis County.
- 18. Pickerel Lake Campground. Fifteen miles northeast of Effie in Itasca County.
- 19. Pine Ridge Campground. In St. Louis County, 12 miles north of Cook.
- 20. Ronglin Campground. In Beltrami County, one mile south of Wilton, not far from Bemidji.
- 21. Roy Lake Campground. Approximately 20 miles south of Bagley, in Clearwater County.
- 22. Stony Brook Campground. In Itasca County, 35 miles northwest of Hibbing.
- 23. Thistledew Campground. On Thistledew Lake in northern Itasca County, and 30 miles almost due north of Nashwauk.
- 24. Wake-Em-Up Campground. Six miles northeast of Cook on Lake Vermilion, in St. Louis County.
- 25. White Face River Campground. About 40 miles north of Duluth on the old Vermilion road.

## SUGGESTIONS TO THE USER OF STATE FORESTS

- 1. The Minnesota Division of Forestry calls upon all Minnesotans and visitors to cooperate in the wise use and protection of the state's forests.
- 2. Consult the State Forest Ranger regarding campground locations, etc. He will be glad to assist you.
- 3. Leave the forest unspoiled so that future vacationists can enjoy it.
- 4. Put campfires out with water.
- 5. Feel campfire ashes with your hand to make sure there are no sparks left.
- 6. Clean up your campground before leaving, and deposit refuse in the proper place.
- 7. Take only the game and fish you can use, even if it is less than the law permits.
- 8. Report any damage or destruction of state property to the nearest state forest ranger.

Report all unattended fires to the nearest forest officer or local telephone operator.

Following is a list of stations where rangers are located:

Aitkin Bagley Baudette Bemidii **Big Falls** Birchdale Birch Lake \*Black Bay Blackduck Brainerd Cass Lake Clear River Cloquet Cloquet Valley Cotton \*Crane Lake Cromwell Culver Deer River Duluth Eaglehead Elbow Lake Emily Faunce Finland Floodwood Garrison Grand Marais Grand Rapids Gull Lake Hibbing Hill City Hovland

Kabetogama Kelliher Link Lake Littlefork Loman Malmo Mantrap Valley Moose Lake Nickerson \*Nimrod Norris Northome Orr Palmers Park Rapids Pequot Pinewood Plum Creek Roy Lake Sandy Lake Schoolcraft Side Lake Smoky Hills Thistledew Toivola Tower Warroad Washburn Lake Waskish \*Warman Wilton Wolf Lake

Itasca Park

\*Summer months only.