

NATIONAL FORESTS

IN

MICHIGAN



UNITED STATES DEPARTMENT OF AGRICULTURE

FOREST SERVICE

NORTH CENTRAL REGION

MILWAUKEE, WIS.

ERRATA

On the Cover.—Great Conglomerate Falls on the Black River.

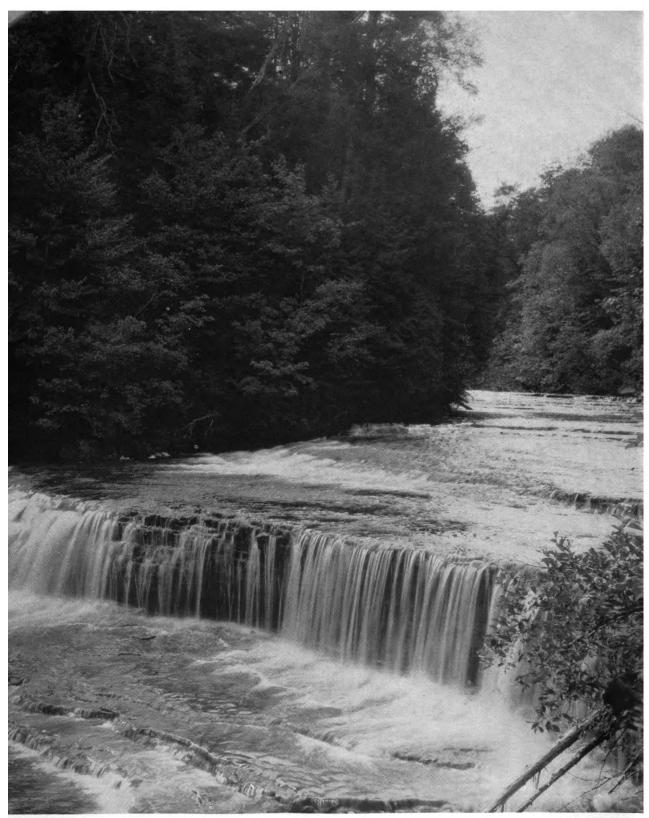
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UNITED STATES
GOVERNMENT PRINTING OFFICE
WASHINGTON: 1941







AU TRAIN FALLS ON THE HIAWATHA NATIONAL FOREST.

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Drama of Michigan Forests

THE DRAMA of the forests of Michigan has been written in several acts each with its colorful pageantry. The action has concerned the magnificent woodlands of the redman, the rapid depletion of those forests in the last century, and their slow but sure rebuilding in the present.

The elusive "northwest passage" to China, Indian furs and Indian souls, iron and land and copper brought the white men to Michigan. In 1621, only 1 year after the Pilgrims landed at Plymouth Rock, young Etienne Brulé, protégé of Champlain, reached Lake Superior and was disappointed to find its waters fresh. Thirteen years later, Jean Nicolet, another protégé of the French governor of Canada, entered the unknown Lake Michigan through the Straits of Mackinac. Though he never found the longed-for route to the Orient, Nicolet did initiate the French fur trade with the Indians in this territory.

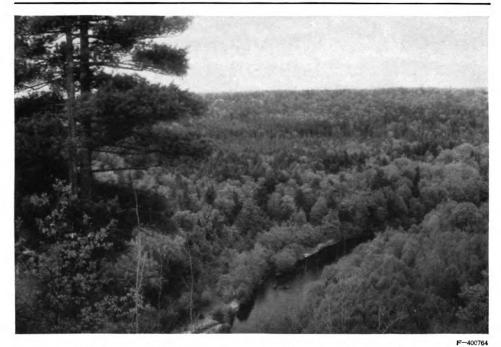
Heroic followers of Brulé and Nicolet were the Jesuit fathers Jogues and Raymbault, who preached to the Ojibwas in 1641 at Sault Ste. Marie, where the first permanent settlement in Michigan was made 27 years later by Marquette and Dablon.

Frenchmen all, explorers, trappers, and missionaries traced the rivers and lakes of this territory—Radisson and Groseillers, Marquette and Joliet, Hennepin and La Salle, but it was not to France that the rich prize of Michigan fell when the ambitions of two great empires clashed. By the Treaty of Paris in 1763 Michigan passed to English dominion. Twenty years later it was ceded to the United States by the treaty closing the War of the Revolution, but not until 1796 did the British garrison withdraw from Detroit.

The Northwest was growing, and in 1805 the Territory of Indiana was separated into the two Territories of Indiana and Michigan (the Lower Peninsula). In 1837 Michigan was admitted to the Union as a State and, in compensation for land lost to Ohio, received grudgingly the little known Upper Peninsula which was to prove one of the richest ore basins in the country.

White sails replaced the bark canoes on the Great Lakes and in turn gave way to steamboats; the war whoops of Chippewas, Ottawas, and Hurons faded to historical echoes; and in Michigan conquest of the Indian tribes was followed by a new struggle—conquest of great natural resources.





IN THE BEGINNING NEARLY ALL MICHIGAN WAS CLOTHED WITH MAGNIFICENT

FORESTS, OF WHICH THIS IS A BEAUTIFUL REMNANT.

None of these was more important than the forests, the pines in the north, and the hardwoods in the south.

The logging era is one of the most colorful periods in the history of the State. Magnificent stands of white and red pine fell before the hungry axes of the lumberjacks. The lumbering industry had exceptional advantages in Michigan because the timber was massed in vast stands, making largescale operations possible, and was located mainly on sizable streams, down which the logs could be floated to mills. The first great surge in pine lumbering came with the exhaustion of eastern forests and the development of railroads. The growth of Chicago and the settlement of the Prairie States furnished a stimulus from the West. In 1890 pine lumbering reached its peak, when Michigan produced 4,245,717,000 feet of lumber and held undisputed first place in lumber production among all the States. Out of the lumber industry grew most of the Michigan cities above the latitude of the Saginaw Valley, the first great pine-lumbering center.

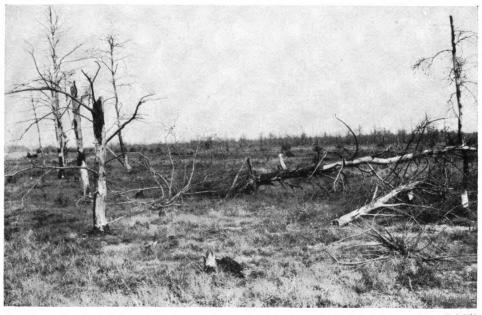
The white-pine forests of this country reached their greatest glory in the Lake States, and for 20 years preceding the turn of the century Chicago and the Middle West cried for the durable, light, and easily worked white pine of Michigan. Michigan woods echoed with the bite of axes and the

swish of saws, interrupted by the cry of "Timberrrr . . ." as the great trees creaked a little, listed, and crashed.

Lumberjacks moved 40 by 40 into the forest primeval of Michigan, and the banks of the Manistee, Au Sable, Muskegon, and Saginaw were stripped. Log upon log left the woods for the sawmills to be manufactured into lumber and shipped south. Long timbers were even floated in rafts to mills in New York, and it is said that half the houses in Buffalo were built from lumber cut in the vicinity of the present Huron National Forest. Finally there was "daylight in the swamps" on the Upper Peninsula and all over the once heavily wooded areas of the State. Even those who once believed there would always be an abundant supply of Michigan pines were disillusioned. And so the stage was set for another scene in the Michigan forest tableau wherein rebuilding of the resources is the dominant theme.

REBUILDING THE FORESTS

Men are planning for better use of the cut-over lands in Michigan; where she is given a chance nature with man's aid is reclaiming devastated areas; through planting and protection from fire lands unsuited to farming are



RECKLESS LOGGING AND FOREST FIRES, MOSTLY MAN CAUSED, RESULTED IN VAST DEVASTATED AREAS LIKE THIS.

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being turned into productive forests. The new forests are producing timber to meet human needs and are helping to prevent further deterioration of the basic resource through soil erosion. They give effective aid in stream flow and water supply regulation; they provide a habitat for wildlife; they provide better fishing, hunting, and other recreation. Most important, perhaps, these forests are and will continue to contribute to employment and stabilization of forest communities.

In this program of forest restoration, State and National forests have been created. Back in 1909 the Michigan National Forest was proclaimed. Now there are five national forests in the State, the Huron and Manistee in the Lower Peninsula; and the Marquette and Hiawatha (administered as the Upper Michigan), and the Ottawa in the Upper Peninsula. All these are public forests and as such are managed so as to be of the highest service to the people.

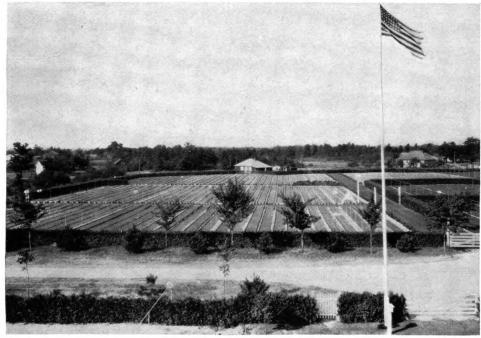
Timber Production.

One great advantage of the forest is that it can be renewed and need never be exhausted. Protection from fire allows natural reproduction in some areas, but on much of the burned-over land the desirable types of trees have been killed and a new forest must be established by planting seedlings. Stock is provided by Forest Service nurseries—the Beal Nursery



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NATURE, AIDED BY PROTECTION FROM FIRE, IS RESTORING FORESTS ON MUCH OF THIS CUT-OVER LAND. (OTTAWA NATIONAL FOREST.)



F-243170

UPON THOUSANDS OF SEVERELY BURNED AND ERODED ACRES FORESTS CANNOT SUCCESSFULLY RESTORE THEMSELVES. MILLIONS OF SEEDLING TREES TO REPLANT SUCH AREAS ARE RAISED IN FOREST SERVICE NURSERIES. (BEAL NURSERY, HURON NATIONAL FOREST.)

at East Tawas, the Wyman at Manistique, the Toumey at Watersmeet, and the Chittenden at Wellston. These nurseries provide an average of 97,000,000 seedlings each year for the national forests of Michigan. Much needed planting has been done in recent years with the help of the Civilian Conservation Corps.

Reforestation of the thousands of acres in need of restocking is undertaken only after careful planning. The requirements of each species of tree are determined, and consideration is given to the areas to be planted. It is known, for example, that jack pine is the least exacting of the three native pines in Michigan, and that it can be grown on poorer areas. It is also most resistant to disease and drought and is, therefore, planted on the more arid and exposed lands. White pine requires better soil and a protecting overstory of other trees in its early growth. Red pine is hardy and requires no overstory, but it must have a somewhat better soil than jack pine.

The Forest Service continually carries on experimental work to learn the best methods of planting trees, the best way of preparing the ground for planting, and the most economical size and age of seedlings to be planted



IN ADDITION TO REM-NANTS OF THE ORIGINAL MICHIGAN FORESTS THERE ARE TRACTS OF SECOND-GROWTH TIMBER. (MANISTEE NA-TIONAL FOREST.)

from the standpoint of survival. Timber-stand improvement is carried on to give the most desirable trees, shaded by worthless or low-value trees, a chance for a place in the sun.

Stands of second growth and mature trees provide timber for sales. Most important of all, perhaps, in scientific forest management is application of the principle of sustained yield, which means the annual cut of the forest will not exceed the annual growth and that the pines and the hardwoods of Michigan will never come as close to extermination as they did at the turn of the twentieth century.

Wildlife.

Forests are valuable as game cover. They provide breeding places, refuge, and food, and they can be managed so as to offer maximum inducements for various species of wild animals, fish, and birds. The people of Michigan, through their State department of conservation, regulate and manage all wildlife whether on or off the national forests. Forest Service rangers cooperate in making the national forests a better place for wildlife to thrive and multiply.

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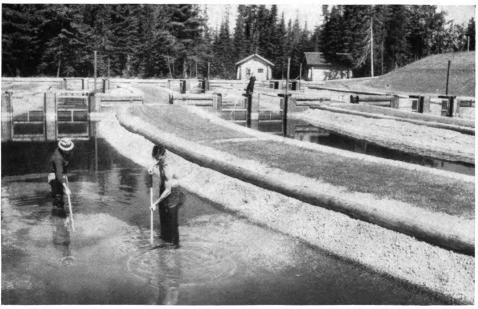


The principal big-game animal of the Michigan forests is the white-tailed deer, which shares its woodland home with the less frequently seen bear, coyote, and fox, and small fur-bearers like the otter, mink, skunk, muskrat, weasel, porcupine, and snowshoe hare.

Ruffed grouse, prairie chicken, and several varieties of ducks provide good hunting. The fisherman is tempted by brook, rainbow, and brown trout in the streams, and, in the lakes, by muskellunge, great northern and wall-eyed pike, lake trout, bluegills, black bass, rock bass, sunfish, perch, bullheads, and crappie.

Recreation.

The forests provide rest, travel, sport, and inspiration to man. They have beauty and peace to satisfy the mind, and unchallenged facilities to exercise the body. Camp grounds, picnic grounds, shelters, and bathing beaches have been built within the national forests to provide for the thousands of vacationists who visit them yearly. Improvements have been made on naturally excellent winter sports areas. Fish and game are provided for the fishing and hunting seasons. Wilderness areas are preserved for the seekers of the forest primeval. In short, the national forests



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FISHING STREAMS MUST BE RESTORED AND KEPT STOCKED. THIS TROUT REARING POND IS ONE OF SEVERAL ON THE MICHIGAN NATIONAL FORESTS,

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NATIONAL FORESTS IN MICHIGAN



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TROUT FISHING REQUIRES SHADED RIVER BANKS AND COOL, CLEAR WATER. STREAM IMPROVE-MENT IS AN ACTIVE PART OF THE PROGRAM ON NATIONAL FORESTS. (MARQUETTE NATIONAL FOREST.)



F-392256

MICHIGAN WINTERS BRING WINTER SPORTS TO THE NATIONAL FORESTS. GLORIOUS AREAS ARE BEING DEVELOPED FOR PUBLIC USE. (NO. 1 SKI HILL, MANISTEE NATIONAL FOREST.)

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are managed with a view to contributing as much as possible to the physical, mental, and spiritual health of America.

Watershed Protection.

Not the least of the services of the forests is the protection of watersheds. A litter of leaves, twigs, and branches covers the ground in a forest, and rain, instead of running off, seeps through the litter into the ground. Gradually it finds its way to springs and streams, contributing to their regular, continuous flow. Forest cover, by holding back the rainfall helps to prevent floods and preserves water for homes, farms, and factories. It also keeps the "good earth" of America, the topsoil which nature patiently builds at the rate of 1 inch in 400 years, from being washed away never to be recovered.

Value to Local Communities.

There are several ways in which the national forests of Michigan contribute to the financial welfare of forest communities and residents.

Much of the land within Michigan's national forest boundaries is in private ownership. Much of it is unsuited for farming and, having long



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FORESTS GIVE PROTECTION TO WATERSHEDS, HELPING TO REDUCE AND CONTROL BOTH FLOODS AND EROSION. (THE HISTORIC AU SABLE RIVER, HURON NATIONAL FOREST.)



F-30081

A CONSIDERABLE LUMBER INDUSTRY REMAINS IN SOME PARTS OF MICHIGAN. PROPER FORESTRY MANAGEMENT OF TIMBER AREAS IS NEEDED TO PERPETUATE THIS INDUSTRY AND PROVIDE PERMANENT EMPLOYMENT. (BONIFAS MILL, OTTAWA NATIONAL FOREST.)

since been cleared of its timber, does not earn its taxes. In many cases land such as this, on which timber can be grown, is bought by the Forest Service with the result that the owners are benefited, the acreage of national-forest land is increased, and wasted land is managed not only so that it pays its own way but also is put to its best possible use.

From stands of mature and second-growth timber on Forest Service lands, sales are made to small local operators. This provides a means of livelihood to many forest residents. Sold on the stump, the timber must be cut, hauled to sawmills, and manufactured into lumber.

Forest projects have relieved acute unemployment problems in recent years, providing worth-while jobs for idle hands. Dead and fallen timber is available for fuel wood at no cost to forest residents.

The forests act as large reservoirs of useful public work. The full value of such work as forest planting will become increasingly apparent and appreciated as time goes on, and especially so when the crop is harvested in the future. In doing this work the Civilian Conservation Corps has furnished a vast amount of labor and local people, paid with funds provided by Congress for that purpose, have rendered important assistance.

A notable contribution to the income of forest communities is made by the thousands of tourists who vacation in the national forests. Their purchases of gasoline, food, and souvenirs, and their rental of boats and other recreational facilities mean cash in the pockets of the year-round residents who provide these materials and services.

NATIONAL FOREST ORGANIZATION

Each national forest is divided into ranger districts, with each district having facilities for storage of equipment and supplies, and the housing of rangers, lookouts, and fireguards. The forest ranger is responsible to the forest supervisor, who manages his forest according to the policies of the region.

There are 10 Forest Service regions in the United States and Alaska, each under the direction of a regional forester. The national forests in Michigan are in Region 9, with headquarters at Milwaukee, Wis. The chief forester's office is in Washington, D. C., and is under the direction of the Department of Agriculture.

Each district ranger has the job of making the resources of his district



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NATIONAL FORESTS ARE DIVIDED INTO RANGER DISTRICTS IN CHARGE OF THOROUGHLY TRAINED FOREST RANGERS. HERE IS ONE MAKING GROWTH STUDIES ON THE HIAWATHA NATIONAL FOREST.



render the greatest possible service to county, State, and Nation. He supervises forest-fire-prevention work and fire suppression, directs the planting program, buys land to be added to the forest, and exchanges land with the State department of conservation. The sale of timber, the improvement of timber stands, the provision and care of wildlife cover, and the construction of recreational sites and the supervision of their use—all fall within the ranger's job and jurisdiction.

No one knows more about the forest than the year-round resident ranger. No one is more eager to help the visitor enjoy to the utmost his stay on the national forest.

PROTECTION AGAINST FIRE

The forest needs protection from fire, for fire takes its toll in the destruction of wildlife, game cover, scenery, and recreation, soil fertility, and the future wood supply. Fires along stream banks and watersheds injure fishing by destroying the cover which keeps the streams cool and clear. Ungainly snags, blackened stumps, and barren wastes give testimony to the horrible effect of fire upon forest cover.

Fire lookout towers and many miles of telephone lines and roads have been constructed to aid in the war against fire. The Forest Service has a well-trained, well-equipped army which battles forest fires efficiently but cannot battle the human carelessness that is responsible for most of the blazes occurring on the national forests of Michigan.

Smokers, campers, and brush burners are responsible for most of the fires in Michigan forests, and they could prevent them by following these simple rules:

- SMOKERS.—Be sure your match is out. Break it in two before throwing it away. Better still, stick it in the ground. Bury pipe heels and butts in the moist ground. When driving, use your ashtray.
- CAMPERS.—Use campgrounds and fireplaces. If in an isolated area, clear a space down to bare soil for your fire. Burn inflammable litter when breaking camp. Be sure your fire is out. Soak and stir it until it stops steaming.
- BRUSH BURNERS.—Secure a burning permit from a forest officer. Burn only in calm weather when the ground is damp or snow-covered.

When you travel in a national forest, you are viewing and enjoying your own property. When it is destroyed by fire it is your loss, and your money





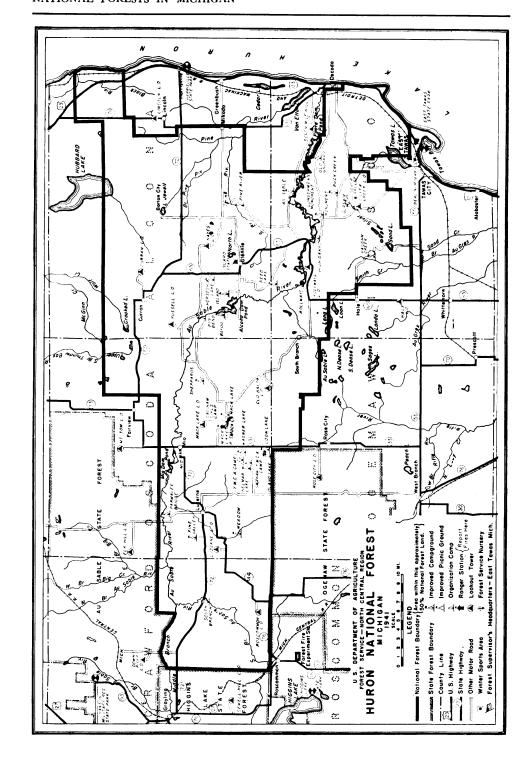
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carelessness causes most areas like this: being careful with fire will prevent them

must be spent to suppress such fires. If you see or smell smoke, do not think someone else has reported it and relieved you of the responsibility. Stop at the nearest telephone and report it to the nearest forest officer. A few minutes of your time can save many dollars and much damage.

The eyes of the forest are its lookout towers. From these during periods of high hazard men watch from dawn to dusk for the smoke signals that tell of another camper who failed to extinguish his fire, or another motorist who flicked his still burning cigarette into a pile of brush. Along road and trail the fire fighters hurry, in trucks where possible, on foot where necessary, to save Uncle Sam's timber from the thoughtlessness of some of his citizens.

Today many people climb the fire towers to look at their forests. Standing there, 80 to 100 feet above the ground, with a view of 8 to 10 miles in each direction, they feel an inescapable thrill of pride and possession in the woodlands preserved and created for America and Americans. They pledge their support to the cause of conservation and fire prevention.



Huron National Forest

The huron national forest, named for a once powerful Indian tribe, sweeps westward 50 miles from the western shore of the great lake which bears the same name. It covers 770,000 acres in the heart of what was once the virgin forest of Michigan and ranges in length north and south from 15 to 50 miles. Once the home of the redman, it is rich in Indian lore. East Tawas, its headquarters, was named for the Chippewa Chief O-Ta-Was, and numerous arrowheads found on the site of the Beal Nursery indicate that this area was once an Indian camp.

Re-creation and Recreation.

The Huron is re-creating the rich forests of earlier days and is at the same time providing recreation for the public. During the last few years forest recreational developments on the forest have grown from a few scattered tables and fireplaces to well developed areas for the public enjoyment of



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ENTERING THE HURON NATIONAL FOREST.

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REPLANTED FORESTS ARE RECLOTHING THE HURON NATIONAL FOREST.

camping, picnicking, winter sports, and visiting historic sites. The use of these areas is free. In order to keep woods and water attractive, the cooperation of visitors in preserving the natural beauty of the forest is encouraged and appreciated.

Timber.

The Huron Forest as created in 1909 consisted of scattered areas of the poorer timberlands which were considered worthless by private timberland buyers. These areas have been consolidated by purchase and exchange and are now contributing materially to the economic welfare of this section of the State.

Management plans provide for the annual harvest of 8,000 cords of pulpwood, 600,000 board feet of sawlogs, and 50,000 Christmas trees, in addition to a considerable volume of fuel wood, posts, poles, cabin logs, and other forest products needed by local industries and farmers in and adjacent to the forest. The harvesting and primary processing of these forest products provides annually more than 20,000 man-days of employment. In addition, as on all the national forests, 25 percent of the revenue from the timber is returned to the counties for schools and other purposes, and another 10 percent is expended for roads, thus contributing many thousands of dollars to local governmental units.

With continued protection and proper forest practices the area is gradually becoming more productive, and in 50 years should provide 120,000 man-days of employment a year in utilizing its timber resources.

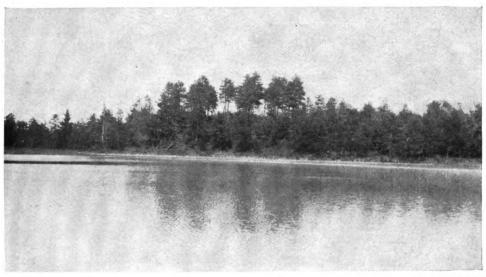
The Beal Forest Tree Nursery at East Tawas covers 37 acres and has a capacity of 12,000,000 trees annually. Trees from this nursery are all planted within the Huron Forest, and each year from 5,000 to 10,000 acres of denuded lands are again placed in production.

The nursery provides seasonal employment for from 35 to 50 men, and it attracts hundreds of visitors, who learn to identify the jack pine by its pairs of needles, the red pine by its clusters of three, and the white pine by its clusters of five.

Campgrounds.

The 16 campgrounds on the Huron National Forest provide pure water, fireplaces, tables, sanitary facilities, and cleared spaces for pitching tents or parking trailers. All are situated close to water, 3 have excellent places for swimming, and 5 have shelters where campers may gather for campfire tales or for an evening's impromptu entertainment. In addition to the campgrounds, there are 6 picnic grounds with similar facilities and central parking areas.

A map showing the location of the campgrounds may be secured from the forest supervisor at East Tawas or from the ranger at Mack Lake or Silver Creek. Information may also be secured at any time at the fire towers.

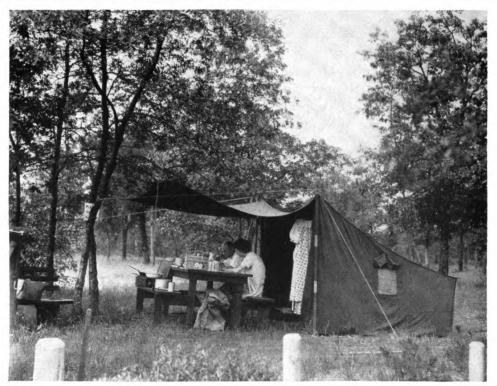


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RED PINES ON THE SKYLINE ABOVE PERCH LAKE.

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ROLLWAYS PUBLIC CAMPGROUND.

Winter Sports.

For the winter recreationist the winter sports area at Silver Valley, 10 miles northwest of the Tawases, offers skiing, skating, coasting, tobogganing, and snowshoeing. Skiing and snowshoeing are not limited to the developed runs, however, as the surrounding forest is ideal for cross-country trips.

A large warming shelter is provided for users of the area, and no charge is made for the use of the slides, shelter, and other facilities. You may bring your own equipment or rent it from the concessionnaire.

The development of winter sports provides recreation for thousands of Michigan residents and extends the business season for those engaged in the recreation industry, thus contributing to the general welfare of the community and the State.

Places to Go.

Lumberman's Monument on the Au Sable River, north and west of East Tawas, depicts in bronze the "Landlooker, Lumberjack, and Riverman" of early days.

[18]



Impressive young forests established by Kiwanis, the Flint Chamber of Commerce, and the Michigan Federation of Business and Professional Women's Clubs lie within the vicinity of the monument and contain trees ranging in height from 4 inches to 30 feet.

At Iargo Springs visitors may rest a bit while listening to the rush and roar of water.

At Pine River, near Glennie, and at the Silver Creek Ranger Station are fish-rearing ponds with thousands of young trout to make life more abundant for the fisherman.

Along the historic Au Sable River are power dams at Mio, Alcona, Loud, Five Channels, Cooke, and Foote, and three free public campgrounds on the banks of the ponds.



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TOBOGGANING AT SILVER CREEK.

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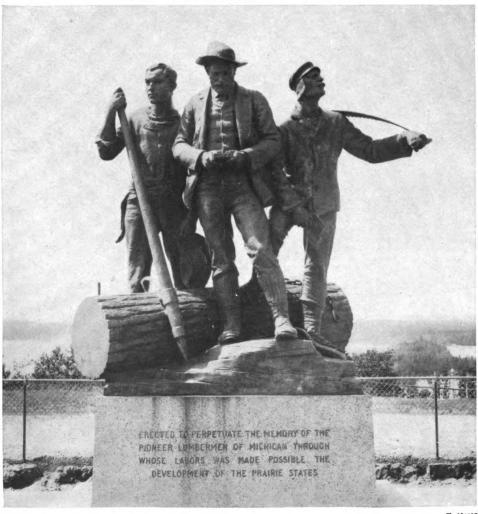


The Michigan Department of Conservation maintains a State park and campground for public use at East Tawas.

Things to Do.

You may come to the Huron to hunt or fish, as 90 percent of the campers on the forest do, or you may sight-see, take pictures, or merely rest in the great outdoors. But whatever you do—

Leave your camp site as if you were coming back. Keep lakes and streams free of fish scales and soapsuds.



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LUMBERMAN'S MONUMENT.

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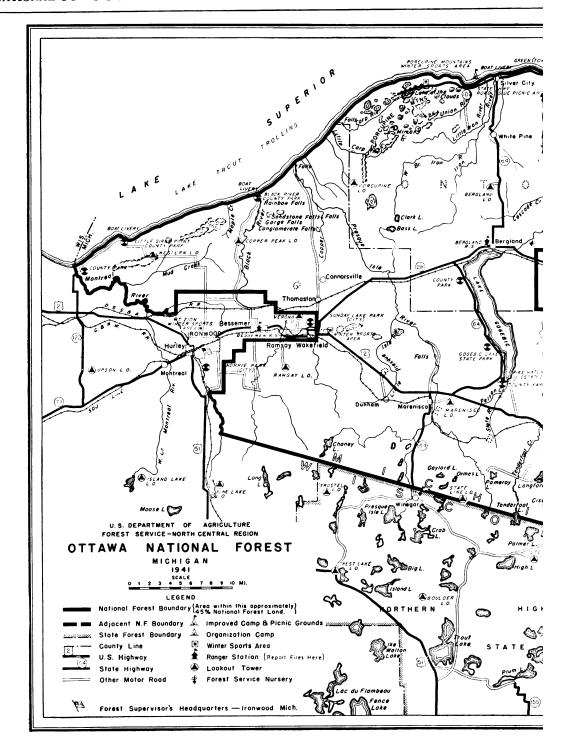
THERE IS BEAUTY ALL ALONG THE AU SABLE AND GOOD TROUT FISHING, TOO.

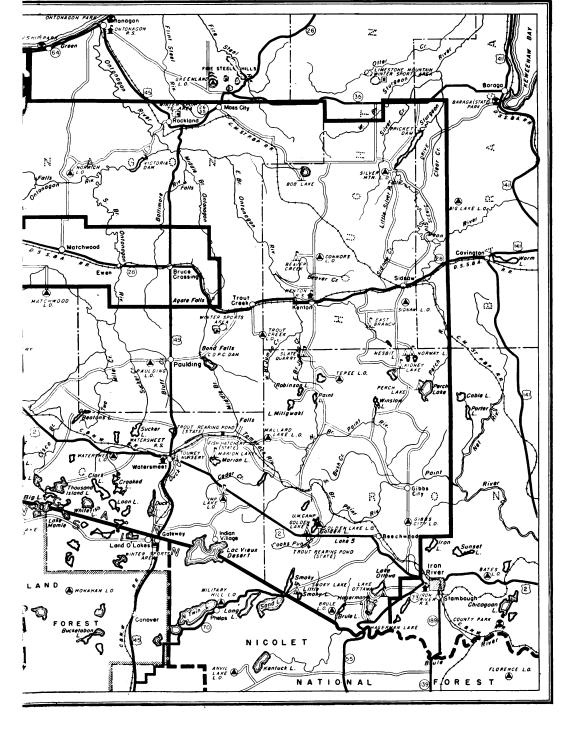
Bury excretions and garbage a foot deep.

Remember the ember.

Drop in and see the men who work for you at the supervisor's office and Beal Nursery at East Tawas and at the ranger stations at Silver Creek and Mack Lake. The lookout towers near Luzerne, Mack Lake, Old Baldy, Rollways, Hayes, Russell, and Silver Creek are also points of interest, and the towermen will welcome your visit.

BE EXTRA CAREFUL WITH FIRE, CIGARETTES, AND MATCHES—ALWAYS URGE OTHERS TO BE CAREFUL—ALWAYS







Ottawa National Forest

In the extreme western part of the Upper Peninsula are the 1,743,000 acres of the Ottawa National Forest, dotted by 400 lakes and veined by 1,200 miles of streams. The largest national forest in Michigan derives its name from the Indian word "adawe," meaning trade. The first authentic record of a white man in this territory is found in the history of Rene Menard, a French priest who came to the Upper Peninsula in 1659. While traveling over the old Indian trail from L'Anse to LacVieux Desert on the Wisconsin-Michigan line, Father Menard became separated from his companions and disappeared. Because of its historical interest, the Forest Service has retraced and marked parts of the old Indian trail which still exist.

Timber.

Up to and including 1939, 63,900 acres were planted on the Ottawa to



THE FOREST IS A RESERVOIR OF EMPLOYMENT.

F-300815



red, jack, and white pine, and to white and Norway spruce. Approximately 73,000 acres remain to be planted with seedlings supplied by the 83-acre nursery at Watersmeet.

Timber on the Ottawa National Forest will be managed for saw timber as the final crop, but intermediate crops are pulpwood, chemical wood, cross ties, box bolts, fence posts, and fuel wood. The present annual yield of 10,000,000 feet is expected to increase as younger stands reach merchantable size.

Hunting and Fishing.

Fish and game management consists of stream and lake improvement; stocking lakes and streams; planting food and cover for waterfowl, deer, upland game birds, and fur bearers; and the treatment of various areas by thinning and by timber sales to increase food and cover.

The principal big-game species is the Virginia white-tailed deer. Bears are not uncommon. Beaver, coyotes, timber wolves, bobcats, fox, otter, skunk, mink, muskrat, and porcupine range from scarce to abundant throughout the forest.



F-371800

A WHITE-TAILED DEER AT HOME ON THE OTTAWA NATIONAL FOREST.

Various species of waterfowl make their breeding grounds in this locality. They include the bluebills, mallards, black duck, teal, and many others.

Lake trout, muskellunge, great northern and wall-eyed pike, bluegills, black bass, sunfish, perch, bullheads, and crappies are found in the Ottawa's lakes; and brook, rainbow, and brown trout are abundant in most streams within the forest.

Recreation.

A vast area of virgin wilderness contributes to the appeal of the Ottawa. Four major highways pass through the forest, and a system of county and Forest Service roads reaches into many more inaccessible areas.

Developments for the use of picnicking and camping visitors have been completed at nine desirable locations, and more will be provided as need requires. Here, in forest settings but little disturbed by the conveniences installed, all kinds of outdoor recreation are available. Other smaller areas throughout the forest allow the vacationist a variety of sites and developments.



F-293655

THE FOREST SERVICE LEADS THE CCC IN IMPROVING TROUT STREAMS.



STATE QUARRY CAMPGROUND.

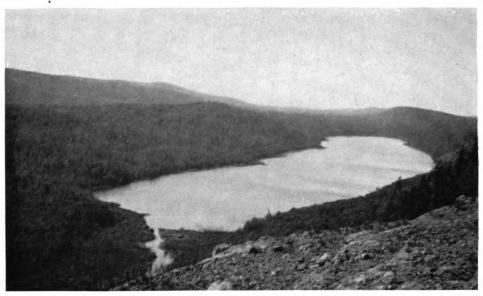
On Nesbit Lake, south of Sidnaw, is the Nesbit Lake Organization Camp, with accommodations for 96 campers. It is available to organized groups such as the Boy Scouts, 4-H Clubs, church organizations, and private non-profit organizations at a nominal rental to cover upkeep. It is completely equipped with buildings, water and power systems, and bathing and play facilities.

In the northern part of the forest on Lake Superior, 22 miles west of Ontonagon, lie the Porcupine Mountains, a rough, rugged, timbered wilderness of some 100,000 acres. Roads have not penetrated this area, and it is accessible only by foot trails.

Some of the grandest scenery in the Upper Peninsula of Michigan is within the boundaries of the Ottawa National Forest. Black River Falls, north of Bessemer, Lake of the Clouds, about a 20-minute drive west of Ontonagon, and Bonds Falls, west of Paulding, are three beauty spots. At Black River Park, at the mouth of Black River, about 20 miles north of Bessemer, and at Little Girls' Point, 18 miles north of Ironwood, boats and guides may be engaged for trout fishing in the deep waters of Lake Superior, from which the big ones come, fresh and hard.

[27]





F -362655

LAKE OF THE CLOUDS IN THE RUGGED PORCUPINE MOUNTAINS, HIGHEST LAKE AND HIGHEST LAND IN MICHIGAN.

Presque Isle River and the deep valley through which it rushes over cascades and falls, just before it flows swiftly into Lake Superior, possess unusual scenic attraction. Comparatively few persons have seen and enjoyed this beauty for the only way of reaching it is by boat from the mouth of the Black River or by canoe from the point where the river crosses Highway M–28 east of Tula. Most of those who have visited this spot have traveled by boat on Lake Superior from Black River. The more adventurous persons, if they have several days to spend on the trip, take the route by canoe from Tula.

Many other recreational possibilities are offered to the visitor on the Ottawa. Visitors are welcome to stop at camps, climb fire towers, visit the nursery, and call at the supervisor's office at Ironwood and the ranger stations at Bergland, Bessemer, Iron River, Kenton, Ontonagon, and Watersmeet.

IF YOU DON'T KNOW—ASK THE FOREST RANGER

[28]



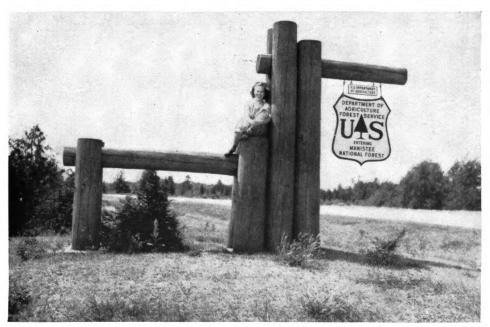
Manistee National Forest

Manistee, according to the records of early white men in Michigan, is the Indian equivalent of "the spirit of the woods." The Manistee National Forest, in west central Michigan, takes its name from the river which flows through its northern portion and which, in turn, derived its name from the constant murmur of the forest at its headwaters. The forest adjoins the eastern shore of Lake Michigan and covers an area of 1,256,000 acres.

Reforestation.

Some of the most extensive pine plantations in the world are on the Manistee National Forest. Since 1933, 75,000 acres have been planted to pine. Growth has been rapid and survival satisfactory.

Plans call for planting 12,000 to 20,000 acres a year until all idle lands of true forest soil are producing a valuable forest crop. It is estimated that nearly one billion trees will be needed for this, and to supply them the Forest Service has established the Chittenden Nursery at Wellston on

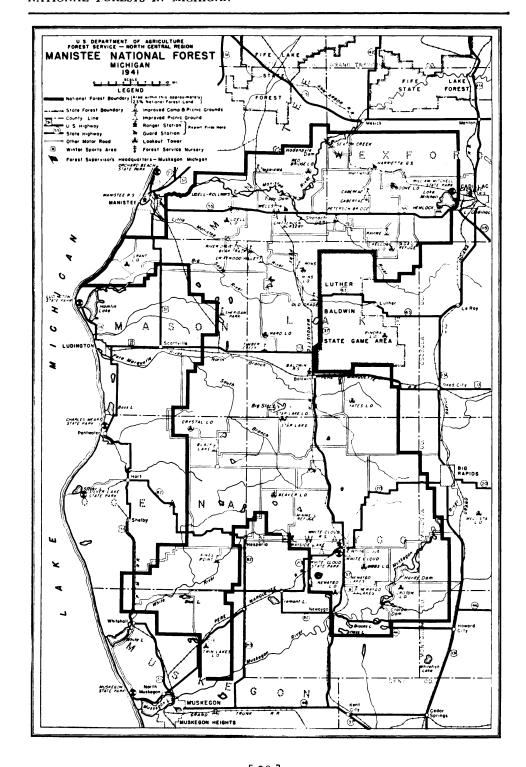


F-367739

ENTERING MANISTEE NATIONAL FOREST.

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[30]





F-367713

MILLIONS OF SEEDLING TREES ARE RAISED EVERY YEAR AT THE CHITTENDEN NURSERY FOR USE IN REFORESTATION.

Highway M-55. This is one of the largest nurseries in the United States and has a capacity of over 50,000,000 trees annually. During the height of the planting season more than a million trees per day are often shipped to the field planting crews.

Reforestation cannot be successful without protection from fire, and the forest supervisor, at Muskegon, and the Manistee rangers, located at White Cloud, Baldwin, Manistee, and Cadillac, ask forest visitors to be careful with fire in the woods.

Fishing and Wildlife.

Fishing in the clear, fast streams of the Manistee National Forest—for brook, rainbow, and German brown trout—is good, largely because of the restocking program of the Michigan Department of Conservation. The Manistee, White, Pere Marquette, and Pine Rivers are among the important trout streams.

Hunting for the native white-tailed deer is good around Big Star Lake, Baldwin, Wolf Lake, Peacock, Irons, and the Pine River country in the

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southwestern section of Wexford County. Ruffed grouse have increased from year to year, finding an ideal habitat in the forest cover, brush lands, swamps, and old fields. Black duck is the most abundant of the waterfowl, but broods of ring-necked, golden-eye, and blue-winged teal are also found.

Campgrounds.

Numerous lakes, streams hills, and swamps make the Manistee a vacation paradise. Twenty well-planned campgrounds and picnic areas are available to the summer visitor. They are easily accessible, but are screened from the main routes of travel. Each area has its special attractions, and all have excellent drinking water and essential sanitary and protective conveniences, including latrines, garbage pits, incinerators, parking areas, fireplaces, tables, and fuel-wood supply.

To prevent vandalism and to preserve these places in their simple, natural beauty, the cutting of boughs and picking of flowers is prohibited within



F-367718

LITTLE MANISTEE RIVER FROM RIVERSIDE CAMPGROUND.



SNOWSHOEING IN CABERFAE WINTER SPORTS AREA.

F-364609

camp areas. Fires are restricted to designated places, and boisterous and improper conduct is prohibited.

Udell Rollway Campground is a beautiful spot on the Big Manistee River directly east of Manistee and 2 miles north of Highway M-55. On the Pine River, east and south of Cooley Bridge near Wellston, is the Peterson Bridge Campground, frequented by fishermen and other vacationists from early spring to late fall. Timber Creek Campground, directly adjacent to U S 10, halfway between Walhalla and Baldwin, is primarily a camp for tourists, but it is in the midst of one of the best deer hunting areas on the forest.

Forest rangers will gladly give advice concerning campgrounds and picnic areas to suit individual needs.

Winter Sports.

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Winter sports enthusiasts enjoy the Caberfae Winter Sports Area on the Cadillac Ranger District. The area surrounds the Caberfae lookout tower about 14 miles west of Cadillac and just north of M-55. Here are 10- and 15-meter ski jumps, slalom courses, and two toboggan slides, each 2,600 feet in length. Longer slides are being planned. Ashcan slides are available for youngsters, and ski runs are provided for those not wishing to jump. A ski tow and warming shelter are included in plans for future development of the area. There is plenty of parking space for automobiles.



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Marquette National Forest

In Chippewa and Mackinac counties in the Upper Peninsula of Michigan is an unbroken forest area interwoven with lakes and streams, bounded on the north by the cold waters of Lake Superior and on the south by the warmer waters of Lake Michigan. It is the Marquette National Forest, named in honor of the great missionary-explorer, Pére Marquette.

Timber.

The Marquette National Forest area shared the colorful logging era of Upper Michigan, and it shared, as well, the barren areas and rampant fires which marked the progress of that period. Reforesting these areas is one of the main activites on the Marquette, and more than 30,000 acres of red, white, and jack pine plantations have been established. Approxi-



SPECTACLE LAKE, WITH LAKE SUPERIOR IN THE DISTANCE.

F-29213





JACK PINE HAS BECOME VALUABLE

mately 50,000 acres are still in need of reforestation, and at present the forest has an annual planting program of 6,000 acres. Additions to the Marquette have increased its size from the original 25,456 acres to 503,175.

Fish and Game.

Sound management has increased the game on the forest during the past few years. Deer, bear, snowshoe hare, and partridge provide excellent hunting and are numerous enough to be seen frequently. The beaver, under proper trapping regulations, has become a common inhabitant of many lakes and streams, and beaver, muskrat, mink, and weasel provide a sizeable income to many local trappers. The moose, which provided meat for early settlers, has been maintained only by introduction from other areas.

The porcupine, known as the woodsman's friend because of the ease with which it can be captured for food in case of emergency, is very common. The coyote, wolf, bobcat, and fox are present, but are seldom seen because of their habits and comparative scarcity. In certain localities on clear nights the cry of a lone coyote can be heard from some distant hill.

Twenty-seven lakes, varying in size from 5 to 4,000 acres, offer fine fish-



ing for black bass, perch, bluegills, northern pike, wall-eyed pike, rock bass, bullheads, and sunfish. Muskellunge are found in Brevort Lake. Trout fishing is a favorite sport for local people and tourists, and 37 forest streams provide rainbow and brook trout. A Forest Service trout feeding station near Raco has an annual capacity of 250,000 fingerlings. In recent years fishing for the smelt that come up to spawn in many of the streams flowing into Lake Michigan has become a popular sport. It also provides income for many local people.

Recreation.

The Marquette provides ample facilities for fishing, hunting, boating, bathing, hiking, and winter sports. The extensive Great Lakes shore line and the inland lakes and streams offer many beautiful spots for picnicking and camping. At strategic points 15 camp sites and picnic grounds have been developed with sanitary water supply, fireplaces, tables, tent sites, and sanitation facilities.

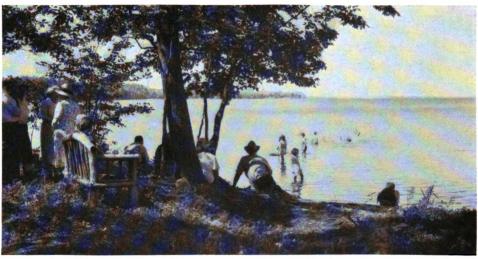
Brevort Lake, only 20 miles northwest of St. Ignace, has a surface area of 4,000 acres and excellent facilities for bathing, boating, and fishing. At



FISHING THE "RUSHING TAHQUAMENON."

F-384471





BREVORT LAKE SWIMMING BEACH.





BLUEBERRY PICKERS IN MICHIGAN.

F-384483

the Lake Michigan Picnic Ground, 19 miles west of St. Ignace, is a fine, sandy beach, where a bathhouse and picnic facilities are offered for the public's use. On the shore of Lake Superior, 1 mile west of Dollar Settlement, is a picnic ground in a lovely setting of mature red pine. In the heart of the blueberry country, ideally situated for trout-fishing and hunting parties, are the Dick and Pine River Campgrounds on the Pine River. The Three Lakes Campground has been developed in a beautiful stand of



FRY YOUR HAMBURGERS (OR TROUT) HERE.

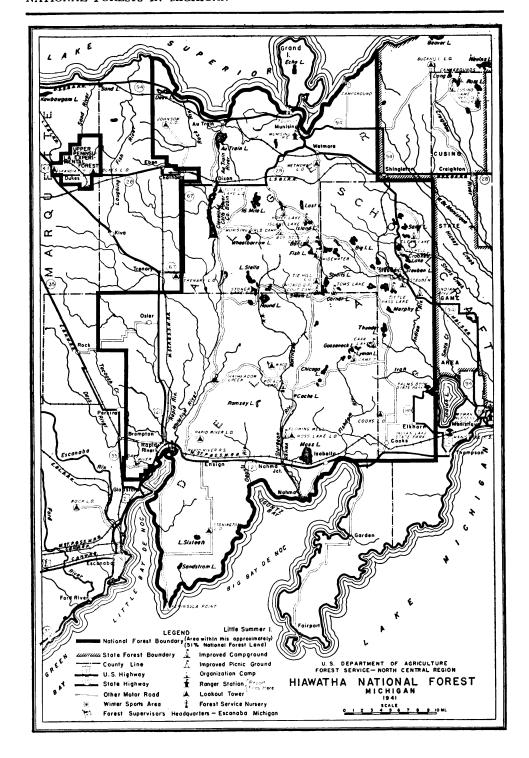
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white birch bordered by three small lakes. West of the forest boundary are the Taquamenon Falls, one of the outstanding scenic points of interest in the Upper Peninsula.

Information concerning these places may be obtained from the forest supervisor at Escanaba or from the rangers at Raco and Moran.

St. Ignace, southeastern gateway to Upper Michigan, is located in the southeast corner of the forest. From it U S 2 runs north to Sault Ste. Marie, with its famous international locks, and west to Manistique across the southern part of the forest. Unusual scenic attractions line this road along the shore of Lake Michigan for a distance of 25 miles from St. Ignace. Many county and Forest Service roads branch from the main highway into the interior of the forest to make streams, lakes, and hunting areas easily accessible.

More than 500,000 people visit the Marquette National Forest each year. It is open for the use of all the people. The only requirement is that they use the forest without destroying any of its features, so that those who come after them will have equal opportunities for enjoyment. Care with fire maintenance of sanitary conditions, proper use of facilities, restraint from injury to the forest, and the observation of State fish and game laws will assure visitors a perpetual welcome.



Hiawatha National Forest

Like the Marquette National Forest, the Hiawatha National Forest lies in the Upper Peninsula of Michigan between the great Lakes Superior and Michigan. It embraces approximately 822,000 acres in the counties of Alger, Schoolcraft, and Delta.

No area in Michigan has a richer background of Indian lore than this forest, named for the hero of Longfellow's Song of Hiawatha. Its northern boundary is washed by Lake Superior, the "Gitche Gumee" or "Shining Big-Sea-Water" of the Ojibwas, and it was over this largest of inland seas that Hiawatha paddled his canoe into the sunset. South of Superior were the hunting grounds and fishing waters of numerous tribes. According to legend, the wigwams of Nokomis and Hiawatha stood on the present site of the city of Munising, and the west wind, Paupakeewis, found a haven



HIAWATHA'S GITCHE GUMEE.

F-295318





TIMBERED SLOPES AROUND PERCH LAKE.

in "the Pictured Rocks of sandstone."

Timber Management.

The days of widespread logging operations on this area are gone, and only two large companies now operate on holdings within the forest. From scattered stands of mature and second-growth timber on Forest Service lands, sales are made by the Forest Service to small local operators. It is expected that the volume of sales will gradually increase as the stands develop.

The Civilian Conservation Corps program has helped restock burned-over areas, and about 35,000 acres of plantations have been established. Stretches of verdant green now meet the eye in stands where a few years ago there were only fire-scarred stumps and fallen timber. It is expected that the first im-

portant product of the reforested areas will be pulpwood.

There are still some 70,000 acres within the forest in need of planting for the production of future timber and cover suitable for wildlife. To supply the planting stock for the reforestation program, a large tree nursery has been developed at the junction of the Indian and Manistique Rivers on the outskirts of Manistique. Here 20 million tree seedlings are produced annually. The public is cordially invited to visit the nursery and view the first step in the program of reforestation.

Game and Fish.

Important game species abundant enough to provide good hunting with gun and camera are deer, bear, partridge, and snowshoe hare. Mink,

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beaver, weasel, and muskrat are fairly abundant, and the more ambitious forest visitor can visit his natural haunts and observe this forest engineer at work. Local hunters and trappers derive some income from the bounty on coyotes, wolves, and bobcats, but these predators, like the fox, are seldom seen.

The forest is not located on a main migratory fly-way, but duck hunting is excellent on many of the larger inland lakes and on the shores of Lake Superior and Lake Michigan.

Numerous lakes and streams make the Hiawatha particularly attractive to fishermen. Within the forest 135 lakes offer good fishing for wall-eyed pike, black bass, perch, bluegills, northern pike, sunfish, rock bass, and bullheads. In recent years lake trout fishing in Lake Superior and smelt fishing in the mouth of streams flowing into Lake Michigan have become popular. Thirty-seven fast streams support brook, rainbow, and brown trout. Several lakes fed by cold springs are also inhabited by trout.

Recreation.

A cool, tempered climate, ideal for outdoor vacationing, invites thousands of visitors from the large centers of population in Lower Michigan, Ohio, Indiana, Illinois, Wisconsin, and Minnesota.

Many of the picturesque areas on the Hiawatha are preserved in their natural condition, and there are many places of outstanding interest within or near the forest, The famed "Pictured Rocks," the high bluffs of rain-

THE FOREST YIELDS HEALTH—WEALTH— SECURITY



EVERYBODY LOSES WHEN TIMBER BURNS BE SURE YOUR FIRE IS OUT—DEAD OUT



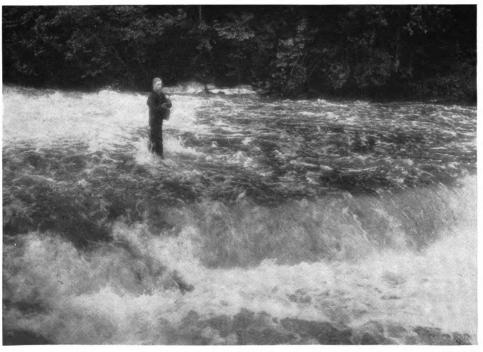
colored sandstone which have been molded and shaped since the recession of the ice cap, are a particularly beautiful sight and are located about 4 miles west of Munising and 6 miles north of State Highway M-94.

Kitchitikipi, or the Mirror of Heaven, a big spring resembling a huge bowl of ice-cold, bubbling water, lies on the west side of Indian Lake 3 miles west of Manistique. The spring is 400 feet long, 300 feet wide, and 60 feet in depth. The surrounding area has been developed as a State park.

Many beautiful waterfalls may be seen on streams flowing into Lake Superior. Wagner, Munising, Au Train, Tannery, and Miners Falls can be easily reached by paths leading from the main highways. A large State fish hatchery is located at Thompson, 1½ miles east of the forest boundary. At Nahma on the Stonington Peninsula visitors may see a typical lumbering community.

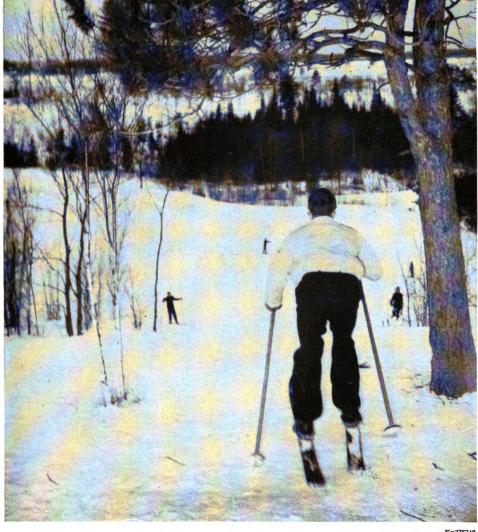
Pleasant drives may be taken through the forest along heavily wooded roads past numerous lakes and streams. A particularly lovely drive is that along Lake Superior west of Munising.

Ten of the most desirable picnicking and camping sites have been devel-



F-384472

THERE ARE TROUT BELOW THE AU TRAIN FALLS.



F-375218

SKIING HAS A PERFECT SETTING.

oped for public use. Detailed information concerning them can be obtained at the forest supervisor's headquarters in the post-office building at Escanaba, or from the rangers at Manistique, Munising, and Rapid River.

Forest camps are provided within the forest for such groups as under privileged children, Girl Scouts, Boy Scouts, 4-H Clubs, and various civic organizations. The camps are available at a nominal cost per individual. Ideal snow and weather conditions permit winter sports for 4 or 5 months



each year. In Munising a fine ski jump is available, and throughout the forest are numerous hills suitable for skiing and tobogganing.

The lakes, streams, and woods of the Hiawatha National Forest are for everyone who wishes to enjoy them, but to preserve them the forest user is asked to abide by the following rules:

- 1. Use extreme care with campfires, matches, and "smokes."
- 2. Use the campgrounds and picnic areas, but leave them clean and unspoiled.
- 3. Avoid unnecessary destruction of forest cover and wildlife.
- 4. Abide by the State fish and game laws.

FINAL SCENE OR EPILOGUE

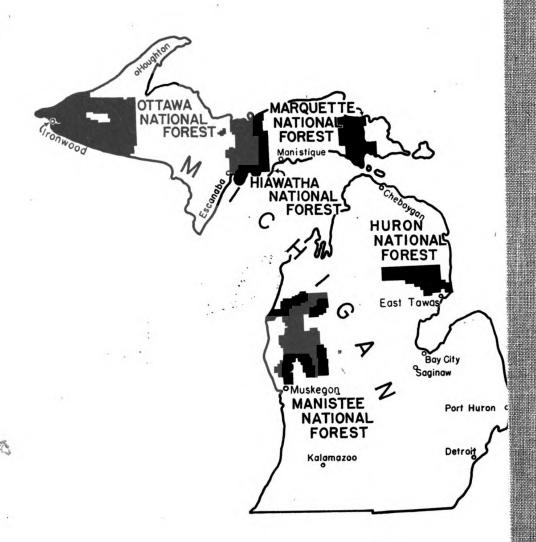
The final scene or epilogue in the drama of Michigan's forests will be written by the people who use these forests. With care and intelligent use these great resources can be made to serve the immediate needs of our country as well as those of future generations. The rest of the drama and the best of it is still to be written.

FORESTS ARE JOBS—TREES MEAN TRADE
PROTECT THEM



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