# COMMERCIAL FISHING ON ISLE ROYALE

1800 - 1967



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by

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FRONT COVER: Mackinaw boat in Chippewa Harbor A. C. Lane photo 1896



"It has been said that a nation that has no past has no future, and that the nation that does not treasure the relics of its past does not deserve a future."

# INTRODUCTION

During its history, Isle Royale has had a variety of economic activities. Of these, commercial fishing has the longest continuous history. Miners came and went in a series of mining rushes. They left scars on the landscape and evidences of their settlement, but these activities were confined to a half century, from 1844 to 1894. Lumbermen made a series of ventures in commercial lumbering between 1892 and 1935, but all of these failed because of strikes, storms, or fire. Tourism began in the 1860's and continues today, but only during the present century has it been of large economic value. By contrast, commercial fishing has provided a livelihood for men from the 1830's to the present.

Fishing, like mining, has left its imprint on the landscape. Nearly every inlet, island, and sound of the archipelago has had its cluster of weatherbeaten shanties, wharves, and fishhouses. On the shore-line of popular fishing grounds such as Hay Bay, Chippewa Harbor, and Long Point are numerous worn-out boats run aground and rotting away. The clearings made in the wilderness by fishermen for gardens, pasture, or buildings have changed the ecology of the area, through modifications in vegetation types and the introduction of plants and flowers from the mainland.

There was probably commercial fishing on Isle Royale before 1800. The Northwest Fur Company got its fish from the north side of the island for its stations at the head of the lake in Western Lake Superior. We have no historical records of the location of these fisheries. There is some archeological evidence that the stations may have been located on Amygdaloid Island, at about the site of the present ranger station, on Indian Point, or on Belle Isle.

#### The American Fur Company

Our historic records of commercial fishing on Isle Royale begin with a venture of the American Fur Company. Ramsay Crooks, manager of the company, became interested in fishing Lake Superior for whitefish, lake trout, and siskowit. By 1834 the company started to explore the lake, and in 1836 began establishing fishing stations. Their headquarters was established at La Pointe, in the Apostle Islands, Wisconsin. Here a settlement was built, including store houses, wharfs and dwellings. Schooners were built to carry the fish to Sault Ste. Marie. Other stations were established near the main fishing grounds at Grand Marais, Grand Portage, Minnesota, Isle Royale, the Montreal River, Michigan, and at L'Anse, Michigan.

The first station on Isle Royale, established in July, 1837, was located on Belle Isle (then called Fish Island) on the site of the present campground. In September of that year Siskiwit Bay was explored, and a fishery set up on Checker Point, which became the main establishment. By 1839 there were seven centers of fishing activities on the island, with a crew of 33 fishermen. The Checker Point establishment had, in addition to the local manager, two coopers to make barrels, and seven voyageurs, employed to fish and to collect fish from the other establishments. The other stations were occupied by three to five fishermen each, and were located on Belle Isle, Merritt's Island, Grace Point, Duncan Bay, Hay Bay, and in Rock Harbor.

The establishments varied in size. The largest was at Checker Point, where there was a dwelling for the clerk, a barrack for the men, a cooper's shop, a store house, salt house, and a fish house. Most of the buildings were built of logs, roofed with the bark of birch or red cedar; but at least one was built of red sandstone. Some attempts at gardening were carried on. At Grace Point a log storehouse was built near the end of the point, and about five acres were cleared for a garden. Several fish houses dotted the shore line between Hay Bay and Spruce Point. At Rock Harbor a large storehouse was built, which was later used by the Siskowit Mining Company. The Belle Isle Station had a large log house, but settlements on the Siskiwit Islands and on the northeastern end of the Island were apparently summer camps only.

The men who fished were largely French and half-breeds. After 1839, the men were for the most part taken to La Pointe to winter, and to work in other fishing grounds during the early spring. In addition to the fishermen, hired at either an annual wage of \$120 to \$300, or at \$4 per 200 pounds of fish, there were coopers to make the casks in which the fish were packed. Some Indian women accompanied them to clean and pack the fish. Twine nets were made at the stations, with the mesh sized differently for the different fish. Fishing was carried on from Macinac boats, barges of oak boards with flat bottom and blunt ends, and having rudder and mast. These were propelled either by oars or sail. The fish were picked up from the stations by two forty-foot schooners, the *William Brewster* and the *Siskawit*. In addition, a scow forty feet long with hold four feet high, and a capacity of 128 barrels of fish, was constructed for inshore work.

#### The Fish That Were Sought

I. Lake Trout, or as they were some times called, salmon trout or Mackinaw trout, were taken almost exclusively by gill nets, though records show the use of some pound nets during the 1880's. They had cyclical fluctuations in numbers, but had few natural enemies save man, until the coming of the sea lamprey during the 1950's.

Those who classify lake trout are divided into two groups, splitters and lumpers. Splitters define many sub-species, while lumpers place all lake trout in a single group. Isle Royale fishermen are confirmed splitters, and classify trout according to their color, depth at which they feed, and spawning ground. The following classification comes from one of the old-time fishermen of Isle Royale:

Redfin-one of the earliest, spawns in shallow outlying ridges with gravel bottoms in 3 to 4 feet of water.

Channel or Silver Salmon-spawn in bays or channels of mud bottom with weeds.

Silver Grey-spawn on outlying ridges and in a little deeper water than the Redfin.

Smoky—spawn after Silver grey on same spawning ground, or possibly in a little deeper water.

Grey Salmon-spawn in 20 to 30 fathoms of water in weeds on mud bottom, such as Rock Harbor channel, inner half of Siskiwit Bay and Washington Harbor.

Paperfin—a small, thin, gaunt fish, never going over three pounds. Spawn in spring and fall, don't know where.

Rock of Ages Trout—at Rock of Ages Reef and occasionally some at Taylor Reef and Menagerie Island. Spawn in September.

Siskiwit—both white and black. Black generally run almost three times as large as white. Spawn in up to 100 fathoms of water.

Mooneyes-spawn on the north side toward Gull Rock, and to Blake Point and Passage Island. Also south to Mott Island, in 35 to 50 fathoms of water.

Unnamed species-breed on Superior Shoal. Don't know name, but it is a different breed and poor eating.

The Siskiwit (siskowit, siskawit) deserves special attention. It is restricted to Lake Superior, while the lake trout is found in the other lakes. It is an extremely fat trout, and unpalatable when eaten fresh; but salted it was considered a great delicacy, and was much sought after during the early days of commercial fishing. As one authority wrote:

This fish, like the former species, came frequently under my eye during my late northern tour; and I rejoice in the possession of a barrel of him in his pickled state, which I procured at the Sault Ste. Marie, on the strength of which I can recommend him to all lovers of good eating as the very best salt-fish that exists in the world. He is so fat and rich that when eaten fresh he is insufferably rank and oily; but when salted and boiled, after being steeped for forty-eight hours in cold water, he is not surpassed or equalled by any fish with which I am acquainted . . . His excellence is so perfectly understood and acknowledged in the lake country that he fetches double the price per barrel of his coarser big brother, the namycush; and he is so greedily sought for that it is difficult to procure him, even in Detroit, and almost impossible in Buffalo.

II. Whitefish. The whitefish was found in all the Great Lakes. It has been known from the time of the earliest explorers as a fine table fish. The earliest

commercial fishing on Lake Superior involved the catching of whitefish in the rapids of Sault Ste. Marie. It ranked with the trout as the most important commercial fish in the lake. During the early 1870's, the Bureau of Fisheries made a great many experiments in the artificial propagation of whitefish.

III. Lake herring. Herring were not sought to a large extent during the early period, since they were of less commercial value than the trout or whitefish. The profit for fishermen was less because of the low price on the market; and the cost of dressing and packing them was greater because of their small size. They became the mainstay of fishermen on Isle Royale, however, when the lamprey decimated the lake trout.

The American Fur Company's fisheries were successful in that a large number of fish were caught. The pack of salt fish for 1837 was 2000 barrels, for 1838, 4000 barrels, and for 1839, 5000 barrels. A system of inspection for quality was developed, and some sales made, but the panic of 1837-41 put an end to the fishing business. An agricultural depression in the Ohio Valley cut off the market there for this new food, and efforts to sell fish in the east failed.

#### Subsequent Fisheries

Fishing continued after the American Fur Company closed its operations, with independent fishermen using the old fish houses. William Ives, when making his survey of the archipelago, found fishermen and Indian women occupying fish houses in the Hay Bay area and at Checker Point. In addition, Indians from the Pigeon River region fished the Grace Point area, and sold fish to the miners. In 1852, three or four barrels of siskowit were shipped to Marquette, in addition to several barrels of fish oil. During the 1860's the old American Fur Company fish house and the Amygdaloid and Isle Royale mining company building on Fish Island were both occupied by fishermen. By 1866 a fishery was established on Wright Island for commercial production of fish oil. Here siskowit were caught, boiled down in iron vats, and the oil extracted. Once or twice during the season a schooner would put in to pick up the fish oil. In 1866 Alfred Merritt, aboard the schooner *Pierpoint*, put in at Washington Harbor with 1500 kegs for the fishermen. On the schooner's return a few weeks later, all the kegs were filled with fish.

By the 1880's there was a boom in fishing on Isle Royale. Several things contributed to this. A major factor was the building of railroads to the western Lake Superior area and the growth of such cities as Ashland and Duluth. A further factor was the development of refrigerator cars and techniques for freezing fish, so that fresh fish could be sold in Minneapolis, St. Paul, Chicago, and in the East. During this time, the technology of fishing changed. Steam vessels supplemented the schooners. These were known as fishing tugs. Some fished with large gangs of gill nets, and were designated gill net steamers; others were chiefly employed in carrying fish to market. These vessels were about 75 feet in length, and propelled by screw propellers; the gill net steamers had net rollers on their bows, and sizeable holds in which to store the fish. In addition, several types of specialized fishing boats were developed. The most famous of these was the Mackinaw boat, about 25 to 35 feet in length, with sharp ends, the bow much fuller than the stern, a shallow keel and, center board. Of this type one writer said:

"She is either schooner rig or with a lug sail forward, is fairly fast, the greatest surf boat known, and with an experienced boatman will ride out any storm, or if necessary beach with greater safety than any other boat. She is comparatively dry, and her sharp stern prevents the shipment of water aft when running with the sea. They have been longer and more extensively used on the upper lakes than any other boat, and with less loss of life or accident.

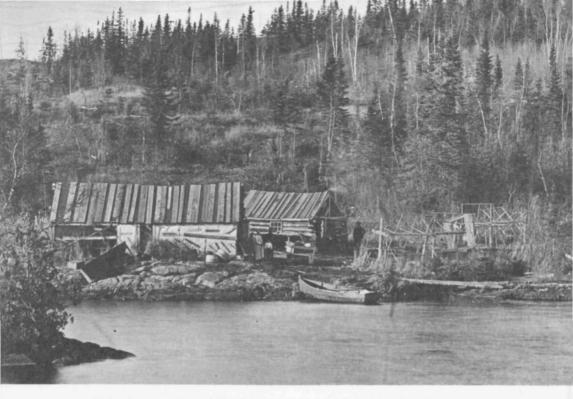
Though gill nets were commonly used, pound nets were also in use. The pound net was introduced on Lake Superior in the 1870's, around L'Anse, and some pound net crews operated off Isle Royale.

Scientific study of the fisheries also began about this time. The office of United States Commissioner of Fish and Fisheries was established about 1871. In that year James Milner made a study of the fisheries of the Great Lakes in cooperation with the Smithsonian Institution; this study is still a major source of information on the economics of the fishing industry, the equipment and the life of the fishermen. In 1887 a lengthy analysis of the fisheries of the Great Lakes appeared. There was at this time much interest in artificial propagation of white fish, and the report carried a series of accounts of these experiments. Dredging experiments, carried on in colaboration with the Army Engineers, gave information on the food of the fish. There was local concern about the decline of the whitefish, and fishermen in Duluth petitioned the Commission to develop fish conservation policies.

Fishermen operating on Isle Royale in the 1880's operated out of Duluth, Houghton, and Bayfield. They had boats and gill nets, and would camp on the island during the fishing season.

During the 1880's from twenty to sixty crews came annually from the mainland, arriving about June and leaving in November. They fished mostly in the Washington Harbor, Siskiwit Bay and Rock Harbor areas. Most fished with gill nets, though there were a few pound nets set in Siskiwit Bay. Steamers from Duluth made regular trips to the island to pick up fish, most of which were sold fresh, and to carry supplies to the fishermen.

During the early period the fishermen had been mostly Cornishmen, Englishmen, and Frenchmen. By the turn of the century these nationalities



Fisheries at Chippewa Harbor-A. C. Lane (man on right) photo, 1896

Booth Fisheries Barnum Island-A. C. Lane photo, 1896





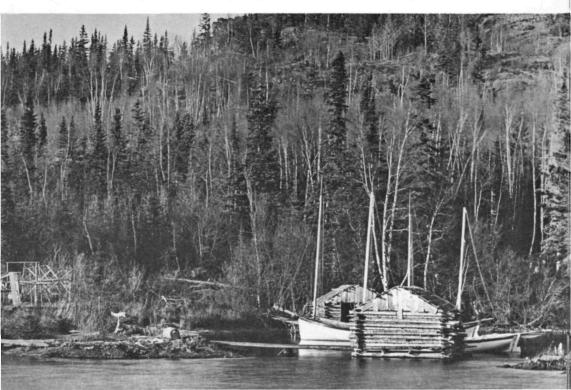
Middle Passage Islands—A. C. Lane photo, about 1896

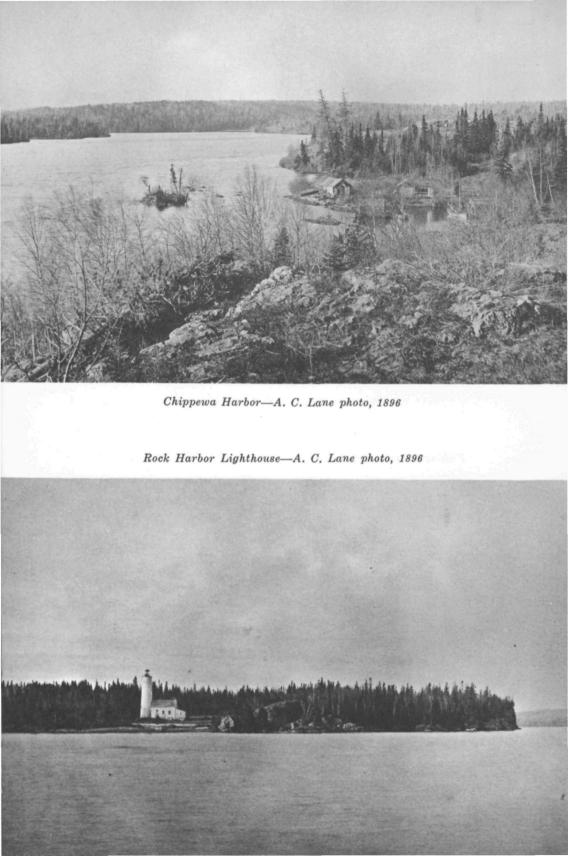
Chippewa Harbor-A. C. Lane photo, 1896



Conglomerate Bay-A. C. Lane photo, 1896

Fishing Establishment, Chippewa Harbor-A. C. Lane photo, 1896



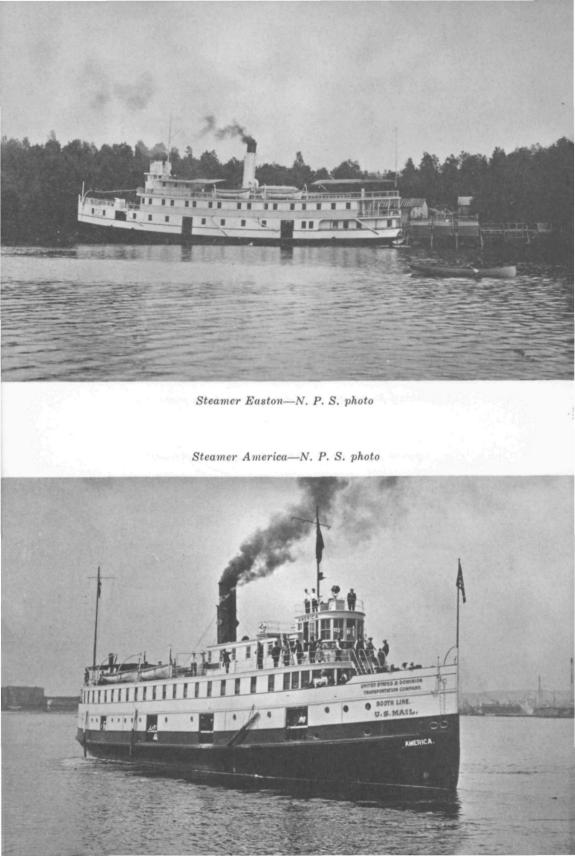


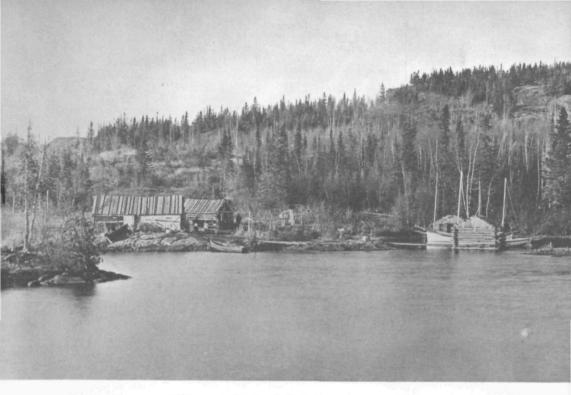


Mackinaw Boats, Barnum Island—A. C. Lane photo, 1896

Captain Francis and others-A. C. Lane photo, 1896







Chippewa Harbor-A. C. Lane photo, 1896

Isle Royale Coastline-A. C. Lane photo, 1896

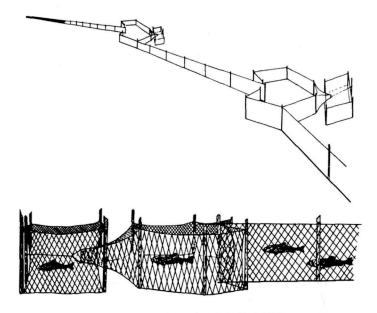




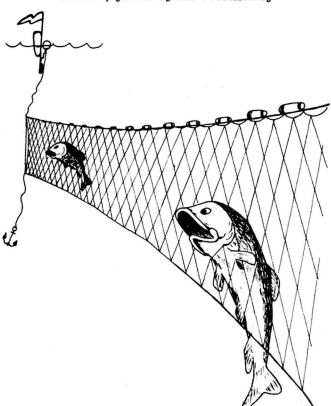
Edisen Fishery-N. P. S. photo, about 1962

Wright Island Fishery-N. P. S. photo, 1950's

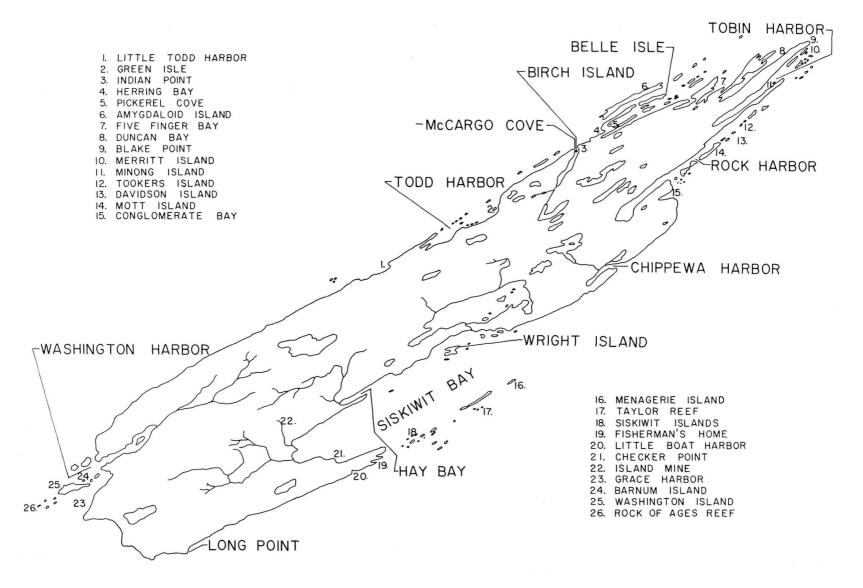




Sketch diagram of pound net by Zeb V. McKinney, 1967



Sketch of gill net by Zeb V. McKinney







began to drift to other occupations, and their places were taken by Scandinavians. Norwegians, Swedes, and Swede-Finns (Finns who lived in Finland but spoke Swedish) came to Isle Royale, either as seasonal fishermen or as year around residents. Both the physical environment and the occupation were comparable to that of their home lands; and early fishermen wrote letters home, which brought brothers and neighbors to the Lake Superior area.

Changes occurred at the turn of the century with the development of the gasoline boat. Often the sail boats would become becalmed and the crews would have to row the boats back to shore. About 1905 or 1906 the first power boats were used. They were powered by what was called the "hot head" or "hot tube" engine. A rod in the cylinder head would be heated by a blow torch until it became red hot, and then gasoline from a tank with 30 pounds of pressure would be turned on, and would ignite. These were one or two cylinder engines and were reliable so long as the blow torch operated; however, they could not be used in a closed boat because of the gasses that escaped from them. The engines were considered quite reliable, and fishermen around Isle Royale used them for many years, until they began using the spark ignited engine.

#### Fishing in the Twentieth Century

Fishermen came to Isle Royale from their homes on the North Shore— Two Harbors, Grand Marais, or Duluth—as early as possible in the spring, but generally by April 15th. They travelled either in their own boats or by lake steamer. The first fishing in the spring was done with gangs of hook lines, baited with herring and set in deep water. Then in July or August gill nets were set in the harbors or off the reefs. Nets were from 350 to 400 feet long, the size of the mesh varying according to the type of fish sought. They were set at a given depth, weighted by stones and marked by floating buoys. Each fisherman had several "gangs" of such nets. In fall the nets were reset to catch the spawning runs of whitefish, lake trout, and herring. This was the season of the heaviest catches. By November 15th most fishermen would again leave for their homes on the Minnesota shore. Some fishermen wintered on the island, carrying in supplies to last them from late November to April, staying in such areas as Chippewa Harbor, Rock Harbor or Hay Bay.

Isle Royale had several favorite grounds for commercial fishermen. The conditions needed were the combination of reefs and deep water favored as a habitat by the commercial fish, and harbors as a base of operations. Fishing grounds were allotted among the fishermen themselves, accoring to prior use and location of fishing stations, so that no fisherman would encroach on the fishing grounds of another. The practice was analogous to the custom of stockmen in the west, dividing grazing grounds in the days of the open range. The sheltered waters of Washington Harbor had numerous reefs and shoals where trout spawned. The southwestern shore, from Long Point east, was favorite fishing ground. Here the trout and whitefish came to spawn earliest in the fall and the heaviest catches were made. This area, however, necessitated long runs from Washington Harbor and Grace Harbor on the west, and from Fisherman's Home on the east. Long Point and Little Boat Harbor were the only good havens on the southwest coast, and they were not continuously occupied.

Siskiwit Bay, with its numerous reefs, its series of protective offshore islands and its good harbors, was frequented by fishermen. Wright Island has been continuously occupied for a century; Hay Bay has had a series of fishing settlements in or near it for almost an equal length of time. Between Siskiwit Bay and Rock Harbor only Chippewa Harbor offered refuge. A large number of fishermen had homes in Rock Harbor and Tobin Harbor.

On the north shore, the coast is more abrupt and there are few good harbors. Belle Isle was continuously occupied by fishermen from 1866 until the Scofields established their resort. Amygdaloid Island, at the site of the present ranger station, Green Isle in Todd Harbor, and Little Todd Harbor were long occupied. Temporary camps were made at the site of the old Indian portage between Pickerel Cove and Herring Bay, and kegs of herring were rolled over the portage and taken out in small boats to be picked up by the steamer *America*. Birch Island, and Indian Point, in McCargoe Cove, were occupied for many years by Captain Francis. A short, white-bearded man, who kept an immaculate cabin, he fished with pound nets in Five Finger Bay and Duncan Narrows, and experimented with artificial propagation of whitefish, maintaining a hatchery on Birch Island.

Fishermen occupied sheltered coves or harbors, with water deep enough inshore to accommodate their boats. Ownership of the land varied. Some had only squatters' rights until comparatively recent times. Many on the northeastern end of the island acquired title after 1900, when the demand for summer homes caused the government to resurvey the area. Some bought from mining companies or land speculators. Typically, the fishing station consisted of a few frame or log cottages, store houses, a net house, a fish house, a wharf suitable for small boats, and a series of racks for drying nets. Buildings were constructed of the materials at hand. Drift wood, and on the southwestern coast red sandstone were used for buildings. Abandoned buildings of the mining settlements, such as the Island Mine and Minong, were dismantled and their lumber rafted off to fishing stations. A logging disaster in Washington Harbor, in which a logging company lost thousands of board feet of logs when flood and winds broke their booms and scattered their logs, gave fishermen in the harbor the material for wharfs, fish houses and fuel. The homes of the fishermen varied a great deal. Some were crude shacks of wood and tarpaper, with a stove, homemade table, bed and cupboards made of soap boxes and orange crates, decorated only with calendar art, and poorly maintained. Others were set up as family homes, with good furniture, decorated with photographs and paintings, nets, or relics of shipwrecks. Wood burning stoves were universally used, and the shores of the island furnished an inexhaustible supply of fuel. Outside, the wives of fishermen usually grew flower gardens, and sometimes vegetable gardens. One fisherman kept a cow, which he would row in a a skiff from one island to another to graze. Eventually the cow learned to swim from island to island in search of browse. At Long Point, both cattle and hogs were raised.

Vessels made regular trips to and around the island to carry the fishermen to their homes, supply them with salt, groceries and mail, and to carry the fresh or salt fish to market. They were owned, for the most part, by Duluth fishing firms—Booth Fisheries, Sivertsen Brothers, and Christensen Brothers were among the most recent. Some ships plied between Washington Harbor and Duluth or Grand Portage; others made a trip around the island two or three times a week, increasingly, as the time went on, carrying summer home owners or tourists as well as serving the fishermen. The *America*—by common consent among the old-timers the best vessel that ever served Isle Royale—the *Easton*, the *Detroit*, the *Dagmar*, the *Redwing* and the *Winyah* were among the boats used. Their successors, the *Voyageur* and the *Hiawatha*, carry on this tradition.

Fishing was a dawn to dusk occupation. Fishermen went out at four or five o'clock in the morning, making their runs to the fishing grounds. There they tended their nets, and by late morning or afternoon returned home with their catches. The fish were cleaned and processed—packed in ice or, in the case of herring, salted and packed in kegs. There was always an abundance of work to be done around the station, cleaning or repairing nets, maintaining boats and machinery or preparing to move nets to new fishing grounds.

Life for the fishermen was not all work. The wild fruits of the island wild strawberries, raspberries, and blueberries—were gathered and preserved. The bi-weekly call of the mail and fish vessel, or calls by visitors, were always social occasions. Many of the fishermen and their wives were accomplished musicians, and played at dances held in Washington Harbor or Rock Harbor. There was always the store of stories to be told and retold—of large hauls of fish, with herring hanging from the nets like grapes from a vine, or of large siskowit or trout caught from hooks; of the mines and copper finds; of storms at sea and shipwrecks; of the caribou, the coyotes, the mink and beaver, and other wild life of the island, and of the strange ways and wonderous errors of the summer visitors. There was always good food at the social gatherings—smoked or fresh whitefish or lake trout, wild berries in season, cakes and coffee.

Fishing as a way of life has seen few changes over the past fifty years. Some changes in fishing technology have occurred; boat engines have improved, nylon nets have replaced those of twine, and plastic floats those of wood. The radio and the airplane have made the fishermen less isolated than in the past. Three major changes, however, have occurred that have affected the life of fishermen. One is the advent of tourism, especially after 1910; second, the creation of a National Park, and third, the coming of the sea lamprey.

Isle Royale had some reputations as a health resort as early as 1855. During the 1860's and 70's excursion boats carried travelers to the island, to picnic at the site of the Siskowit Mine or near the Rock Harbor lighthouse. With the advent of photography, commercial artists produced stereopticon slides of Isle Royale. By the 20th century there was a boom in tourism from two sources. Resorts were established as commercial ventures. In Washington Harbor, the Wendigo Copper Company, disappointed in its attempts to find copper in paying quantities, decided to mine tourists instead, and two resorts-the Singer resort on Washington Island, and the highly exclusive Washington Club on the mainland-were established. On the other end of the island, resorts were established in Snug Harbor-where the present lodge is located-on Tooker's Island, Davidson Island, Minong Island in Tobin Harbor, and to the north on Belle Isle. At about the same time, businessmen, clergymen, and teachers from Minnesota, Michigan and Illinois began buying up the small islands in Tobin Harbor and south of Belle Isle for summer homes. The story of tourism on Isle Royale is a fascinating one in itself. However, we are here concerned with its relationship to the fishermen. It aided the fishermen economically. Fishermen had a new market for fresh or smoked fish at the resorts. Some took in summer visitors as paying guests. Fishermen served as guides for the tourists and summer home owners, and in this performed much the same interpretive service to the visitors that park naturalists do at the present time.

A movement to establish Isle Royale as a National Park began in the 1920's. Several groups were concerned with the movement. They included Senator Vandenberg and Representative Cramton of Michigan, the *Detroit News*, and a number of Duluth businessmen. The summer home owners, particularly those on the northeastern end of the island, were strong in support of the movement. The policy of the National Park Service was to acquire all the holdings. To this end, the lands and buildings belonging to the fishermen and summer residents were purchased and the owners given life leases.

The passage of time, coupled with the coming of the lamprey, has resulted in a decrease in the number of fishermen on the island, and at present there are no more than six active fisheries. The activities of the fishermen do not clash with the recreational values of the park, and on many occasions the fishermen have been of good service to park personnel. They have served as guides to park officials and furnished them with historical and ecological information needed to carry on interpretive work; have carried on rescue work with their boats, and during the 1936 fire were of tremendous service in carrying men and supplies to the fire areas. In general, relationships between park officials and fishermen have been extremely cordial.

The sea lamprey made its first appearance in Lake Suprior in 1952. This parasite has a sucking mouth, with which it attaches itself to trout and drains the blood and body juices from the fish. It multiplied rapidly in Lake Superior, and threatened the very existence of the lake fishing. Commercial fishing for lake trout was curtailed on Isle Royale because of the lamprey, and only one fishery on the island was permitted to make sample catches. The result of the lake trout decline was a shift to herring fishing. These fish, salted and packed in kegs, have a large market in Virginia and the Carolinas, but are small, require more preparation than do the trout, and sell at a cheaper price. The lake fishermen, who had relied largely on the lake trout for their livelihood, suffered economically.

The American and the Canadian governments spent millions of dollars in research, to find a way of controlling the lamprey. A solution was found, in the use of chemicals placed in their spawning grounds, which killed the lamprey but did not affect the commercial fish. In 1967, with the control of the sea lamprey and subsequent increase in lake trout numbers, the commercial fishermen at Isle Royale were allowed a small annual quota of trout. Each commercial fisherman is assigned an area and dates for net fishing which are planned to avoid conflict with recreational fishing. The lake trout caught by the commercial fishermen are carefully measured and scale samples are taken to determine age and growth rate. By gathering data, the fishermen at the island aid the state and federal biologists in the management of this species.

Eventually some of the fisheries will be preserved as historical exhibits, so that the visitor may see what life was like here in the past.

# **BIBLIOGRAPHIC NOTE**

Grace Lee Nute, Lake Superior (New York, 1944), and "The American Fur Company's Fishing Enterprising on Lake Superior," Mississippi Valley Historical Review 12:4 (1926), has summarized the Activities of the American Fur Company. Her accounts are supplemented by Gabriel Franchère, "Journal of his voyage in the 'Brewster' with Mr. Scott to Grand Portage, Isle Royale and the Ance in August, 1839." The original is in possession of the Minnesota Historical Society, St. Paul. The Houghton office of the National Park Service has a photostatic copy. Microfilmed copies of the American Fur Company papers in the Detroit Public Library were also utilized. The Survey Notes and Plats of William Ives, 1847, were of value in locating sites of the posts, as was Tyler Bastian's unpublished report on the archeology of Isle Royale.

For the later period two reports of the U. S. Commissioner on Fish and Fisheries, that of 1872 and 1887, were particularly useful. In addition, Kenneth McMurry's "General Description of Isle Royale" (manuscript, n.d., Mott Island library, NPS), Dr. Robert Halkala, *Isle Royale: Primeval Prince* (National Park Service, 1955), Lynn H. Halvorson, "The Commercial Fishing of the Michigan Waters of Lake Superior," Michigan History, 34:1 (1955), p. 1 - 18, and the log of the Menagerie Island Lighthouse, 1874-93 (Mott Island Library) have been valuable. Most valuable of all however, has been tape recorded interviews with fishermen and other "old-timers." They have furnished a wealth of information not otherwise available. Peter Edisen, Milford Johnson, Glen Merritt, Ed Holte, Sam Rule, Stan Sivertsen, Edgar Johns, Roy Oberg, and John Skadberg have contributed immensely to this study.

The historical photographs were originally taken by W. W. Stockley, superintendent of the Wendigo Mining operation, and Alfred C. Lane, state Geologist of Michigan. The negatives are now in possession of the author. Contemporary protographs are from NPS files.

This study is part of a historical project financed by the National Park Service. Some members have contributed greatly to this study, including Superintendents Schmidt and Johnson; William Dunmire, William Bromberg, George Pine, Charles Lomas, Zeb V. McKinney, and Warner Forsell. Gordon Haber, now a graduate student at Northern Michigan University, aided me in the field map and oral history projects. The St. Louis County Historical Society of Duluth, and the Marquette County Historical Society, Marquette, Michigan, furnished valuable data. My wife, Mary, aided me in both the field work and in editing the manuscript.