

of the Wilderness Study Report. The Coast Guard is not opposed, but pointed out that the lighthouse in the Huron Islands proposal will be manned for an indefinite period.

The Department of Army, Corps of Engineers, was not represented at the hearing. A letter expressing the views of that agency is in the appendix of the Wilderness Study Report. The Corps of Engineers was not opposed to designating the Huron Islands as wilderness, but pointed out that the Department of the Army retains the right to quarry stone when required. They feel the need to conduct quarrying operations is not anticipated for more than 20 years.

CHANGES IN WILDERNESS BOUNDARIES AFTER THE PUBLIC HEARING

The Boundary of the Huron Islands Wilderness proposal has not been modified or adjusted from the boundary presented at the public hearing. The boundary of the Seney Wilderness proposal was enlarged by 6,000 acres after the public hearing.

SYNOPSIS OF MICHIGAN ISLANDS WILDERNESS PROPOSAL

A. BACKGROUND

The Michigan Islands National Wildlife Refuge was established by Public Land Order No. 365 of April 10, 1947, as a refuge and breeding ground for migratory birds. The refuge is used extensively by waterfowl and colony nesting birds.

Three islands make up the Michigan Islands National Wildlife Refuge—Shoe, Pismire, and Scarecrow.

Few people have heard of Shoe and Pismire Islands or, if known, they are usually avoided as dangerous shoals. Consequently, the visitors to these islands are confined primarily to bird enthusiasts making the trip for bird banding and bird observation purposes. In addition, Shoe Island may become submerged. Even when the island is exposed, it is difficult to find an approach to it.

Scarecrow Island is much nearer to population centers, but is unattractive to many people because of the heavy use of its beaches by gulls and its trees by great blue herons and cormorants.

The three islands of the study area could sustain a limited amount of public use after the nesting and brooding period.

B. DESCRIPTION

The wilderness study unit includes the entire Michigan Islands National Wildlife Refuge containing three small islands and totaling 12 acres.

Shoe and Pismire Islands are small parts of the Beaver Island group of islands and shoals that stretches southward through the northern part of Lake Michigan. The islands are within Charlevoix County. Scarecrow Island is in Thunder Bay of Lake Huron. Alpena is the largest city on the bay with a population of 15,000. It is located in Alpena County.

Shoe Island is a gravel bar ranging from $\frac{1}{2}$ to 2 acres in size and is devoid of trees or shrubs. The island supports a few volunteer plants such as cinquefoil and scattered clumps of grass. Its maximum elevation is approximately 4 feet, but in some years it may be submerged. The island is part of a large shoal area of glacial ridges and large rounded boulders.

On Pismire Island, trees have grown only to be lost to the high water or angry lake waters. In 1966 the island contained $3\frac{1}{2}$ acres and rose 10 feet above the lake. Six elms along with a few short, dead white cedars make up the tree cover. Shrubs are more abundant and include chokecherry, elderberry, scattered willow clumps and red osier dogwood. Various herbs and grasses cover the exposed beaches below the high-water mark.

Scarecrow Island, containing 7 acres, is composed of large glacial boulders and is protected from action of the lake waters by its location in Thunder Bay. It has some soil overlaying the boulders and gravel which reaches an elevation of 15 feet above the lake level. The better soils on the higher elevations support considerable tree and shrub growth. The island contains three small, shallow water basins which are attractive to waterfowl and shore birds.

C. MANAGEMENT REQUIREMENTS

The Michigan Islands National Wildlife Refuge is administered from the Shiawassee National Wildlife Refuge, Saginaw, Michigan. The prime management consideration in the case of these three islands will continue to be the