

INTRODUCTION

Many changes have taken place in the Great Lakes during the past 25 years. Prior to 1940, lakes Huron, Michigan, and Superior supported a stable fish population composed chiefly of lake trout, whitefish, yellow perch, walleye, burbot, several species of small coregonids (chubs), and native minnows. Commercial fishermen annually caught 15 million pounds of lake trout alone.

The invasion of the sea lamprey through the Welland Canal changed this picture dramatically in just a few years. By 1950 the lake trout fishery on lakes Michigan and Huron was gone, and 12 years later the Lake Superior fishery was closed. The lake trout was not the only species to suffer from the lamprey--all were affected. Commercial fishermen that did not hang up their nets switched operations to smaller, less valuable species.

This near absence of fish eating predators set the stage for another invasion. The alewife, a small pelagic plankton feeder closely resembling the shad or herring in both appearance and habits, reached staggering abundance almost overnight in lakes Huron and Michigan. Their numbers are now mounting in Lake Superior.

To add to these natural changes, the Bureau of Commercial Fisheries under direction of the Great Lakes Fishery Commission discovered a selective lamprey poison during the late 1950's. As a result, the control of lampreys and the rehabilitation of the lake trout now seems assured. Whitefish also appear to be rallying in northern Lake Michigan. None of the Great Lakes fishes escaped the impact of the violent changes of the past two decades. Many species have disappeared forever.

The period of change is not over, either. Alewife abundance strikes Michigan's fisheries men as an opportunity--that of converting an efficient but commercially worthless forage fish into valuable sport and commercial fish. Since the bottom dwelling lake trout is only a partial answer, Michigan looked elsewhere for a predator. (Imagine the Pacific and its commercial and sport fishery without the salmons and the tunas--this is the opportunity the Great Lakes presents.)

After a thorough study, the Pacific salmon showed promise enough to justify a trial. In the spring of 1966, 850,000 coho smolts were released in three Michigan streams.

In 3 months coho began showing up in commercial gill nets--first a few, and then substantial numbers of fat silvery coho ranging from 12 inches to 7 pounds.

By September, angler reports were pouring in from the planting streams. The run of jacks created quite a stir among Michigan fishermen. About 2,000 have been caught by anglers.

Eggs taken from this run have hatched out 22,000 healthy fry.

This spring and the following spring more coho from Oregon, Washington, and Alaska will be planted to complete one life cycle in Michigan waters. By then we hope to have our own egg source well established. Also this spring, if all goes well, up to 1 million Washington chinook salmon will be stocked. If chinook take to Great Lakes living as well as the coho seems to have, Michigan anglers are in for a pleasant shock.

This is the first of what we hope to be an annual status report of Michigan's Great Lakes fisheries. It covers most, but not all, of our important fish species with special emphasis on the coho. Noticed by their absence will be smelt, cisco, suckers, rock bass, and a few others. We recognize the importance of these species, but at present our knowledge and capacities are such that we have no management program for them worthy of mention. To include a section on each would be easily recognizable as lip service.

Conversely, sections are devoted to species not yet a part of the Great Lakes fisheries picture--chinook salmon, Atlantic salmon, and summer steelhead. These offer opportunities for the future that we all can hope to see become a reality.