

## INTRODUCTION AND RESUME', 1964-1966

Prior to 1940, lakes Huron, Michigan, and Superior supported a 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 twelve years later the Lake Superior fishery was closed. The lake trout was not the only predator species to suffer from the lamprey--all were affected. Commercial fishermen who 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.

To add to these changes, the United States Bureau of Commercial Fisheries, under direction of the Great Lakes Fishery Commission, developed a selective lamprey poison during the late 1950's. Since then, lamprey control operations and a lake trout restocking program have been undertaken first on Lake Superior, then Lake Michigan. As a result, prospects for control of lampreys and the rehabilitation of lake trout appear bright. 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 three decades. Many species have disappeared forever.

Alewife abundance struck Michigan's fisheries men as an opportunity--that of using this efficient but commercially worthless forage fish as food for valuable sport and commercial fish. Since the bottom dwelling lake trout and steelhead trout were only a partial answer, Michigan looked elsewhere for a predator.

After a thorough study, the Pacific salmon showed promise enough to justify a trial.

From one million coho eggs supplied by the Oregon Fish Commission in the fall of 1964, 850,000 survived to the yearling stage (4 to 5 inches) and were planted in the spring of 1966. Specifically, 394,760 were released into Bear Creek, a tributary to the Manistee River, and 264,000 were planted in the Platte River in late March; and the Big Huron River received 192,400 yearling salmon in mid-May.

During the last week of August, 1966, incidental commercial catches of coho in Lake Michigan near Manistee increased, indicating that a fall

run of "jacks" was imminent. By mid-September coho were being taken in good numbers by anglers in the lower Manistee River, and by late September coho began entering the Bear Creek trap 40 miles upriver from Lake Michigan. A total of 2,734 coho, including 32 females, had been caught in the trap by mid-January when operations were suspended because of ice conditions.

Coho jacks trapped at the Bear Creek weir averaged 18.7 inches in length and 2.2 pounds in weight; the largest fish was 23.9 inches in length and weighed 5.3 pounds.

The 32 female coho trapped at the weir were stripped of 45,000 eggs averaging 110 per ounce. Despite the fact that some eggs were green and others not ideally ripe, these eggs hatched to produce 22,000 apparently normal fry.

Anglers harvested an estimated 1,500 coho from the Manistee River and Bear Creek during the fall season with the peak fishing occurring between September 20 and October 10. Creel censuses revealed that up to 1,450 angler days were expended during a single weekend on the Manistee. Angler enthusiasm was electric. The record coho--jack, 23.5 inches in length and weighing over 7 pounds--was caught on the Manistee. Numerous 4 to 6 pounders were taken and several limits were recorded (the creel limit was then 10 pounds and one fish).

Coho began to enter the Platte River during the first week of September, and first reached the barrier trap on September 10. By early February, 1967, 1,056 salmon had entered the Platte River trap. These fish, all mature males, averaging 16.2 inches in length and 1.5 pounds in weight, were released above the barrier so that their behavior could be observed. By February, 174 coho carcasses had lodged against the upstream side of the barrier weir.

Anglers caught approximately 400 coho jacks in the lower Platte River and in lakes near its mouth.

In late September, coho began to enter the Huron River and reached the electrical barrier in early October. The run apparently was quite small.

Coho caught in the Huron River averaged 14.5 inches in total length and 1.1 pounds, and ranged from 10.3 to 16.2 inches and 0.5 to 1.5 pounds.

Shortly after the first of October, anglers began catching a few coho in the lower river, and continued to do so until the close of the season (November 30).

This impressive success the first year triggered public demand for salmon all over the state. However, the salmon planting program had to be geared to establishing an egg source independent of western egg supplies. Thus, 1967 plants were restricted to a few of Michigan's best streams where adults could be trapped, held to maturity and stripped of their eggs.

The salmon story to this point has been reported by Tody and Tanner (1966) and Borgeson and Tody (1967).

Thanks to salmon, 1967 and 1968 were hectic years for Michigan's fishermen and more so for its fisheries workers. This is a brief account of those two years.