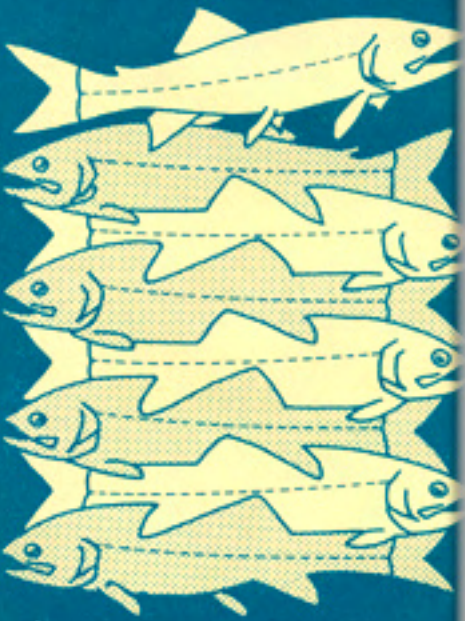
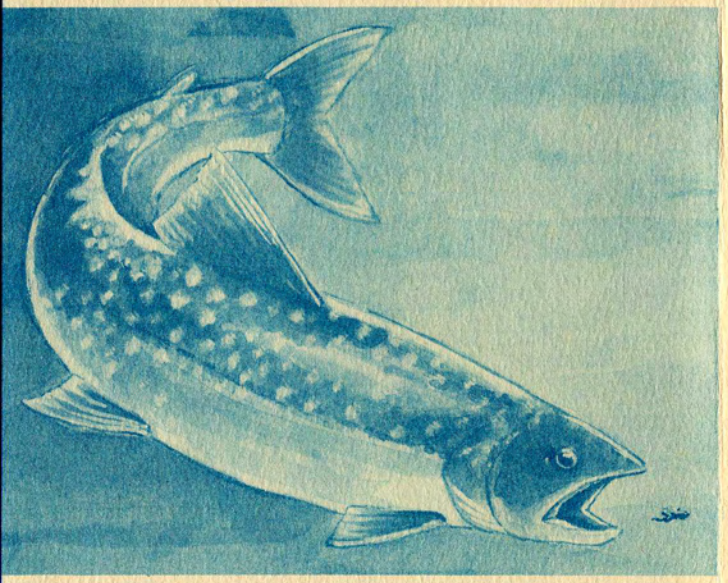
Lake Trout Rehabilitation in the Great Lakes



The Lake Trout in the Great Lakes



From this - A Depleted Resource

The lake trout resource of the Great Lakes collapsed in the late 1940s and early 1950s after supporting essentially self-regulated and highly profitable commercial and recreational fisheries for almost a century. Acting together or in rapid sequence to hasten its breakdown were:

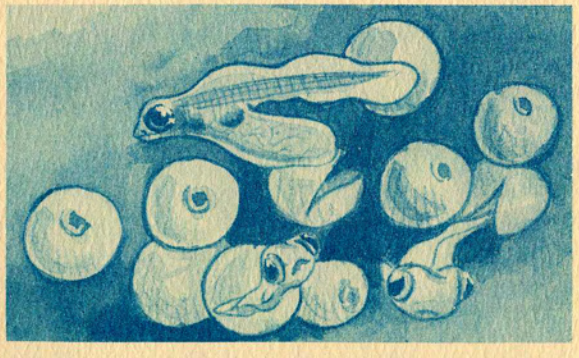
- overfishing
- sea lamprey predation
- habitat degradation
- contaminants.

To This - A Rehabilitation Program

The need for corrective measures led to the establishment of the Great Lakes Fishery Commission in 1955. With funds from the federal governments of the United States and Canada, the Commission began lake trout rehabilitation efforts through:

- Control of the sea lamprey (Canada and
- Fish stocking (Fish and Wildlife Service, Ontario and States).
- Regulation of harvest (States and Ontario).
- Research on lake trout and other fishes (U.S. and Canada, Ontario and States).

The feasibility of a restored, self-sustaining lake trout resource in the Great Lakes was viewed with optimism when lake trout stocking began in earnest 20 years ago. Nevertheless, some doubt prevailed then about the ability of stocked trout and their offspring to endure a degraded environment. In recent years, suppression of the lamprey and improvement in habitat quality have considerably brightened prospects for lake trout restoration. The goal of a self-sustaining resource in a rejuvenated environment is not only achievable now but economically desirable as well. Moreover, the lake trout is perhaps the species most capable of fully tapping the productive potential of the Great Lakes because of its superior adaptability to available habitat.



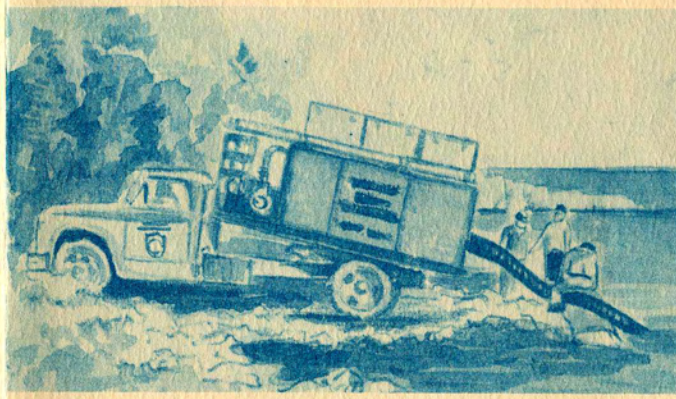
The major elements which are necessary to achieve restoration of the lake trout resource are:

Suitable Habitat

- Some progress has been made in improving habitat for lake trout.
- Pollution problems in some areas have been identified and eliminated through the actions of local, state and provincial governments.
- Research has begun to identify suitable

Lamprey Control

- Reduction and control of sea lamprey populations have been successful.
- Control measures on this parasite must be continued to assure the continued success of lake trout.



Stocking

- In Lakes Superior, Huron, Ontario, and Michigan, adult populations of lake trout have been reestablished through stocking.
- The stocking of lake trout is accomplished under a joint program, coordinated by the Great Lakes Fishery Commission.
- Factors which are considered in the stocking program include the genetics of lake trout broodstock, the behavioral characteristics of their young, and selection of suitable habitat areas in which to place hatchery-reared fish to achieve the greatest survival.

Controlling Harvest

- To achieve the goal of a self-sustaining lake population in the lakes, a large stock of spawning-size fish must be maintained.
- Both sport and commercial fishing must be regulated.
- The catch must be monitored to prevent overharvest.
- The fishery management agencies of the States and the Province of Ontario play vital roles in this important element of the

The Lake Trout's Future - Still Fragile

The prospect of restoring the lake trout resource in the Great Lakes is clearly within our grasp. The accomplishments are considerable, but much is still to be done.

- Lake trout are again an important but somewhat fragile resource in the Great Lakes.
- With public support for restrictions on fishing, larger numbers of fish will be given a chance to reach spawning size.
- Years of investment of money and effort are paying dividends and the long-term outlook is excellent.

The Great Lakes Fishery Commission was established by the Convention on Great Lakes Fisheries, between Canada and the United States, ratified on October 11, 1955. The Commission has two major responsibilities: the first, to develop coordinated programs of research in the Great Lakes and, on the basis of the findings, recommend measures which will permit the maximum sustained productivity of stocks of fish of common concern; the second, to formulate and implement a program to eradicate or minimize sea lamprey populations in the Great Lakes.

Great Lakes Fishery Commission
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