

Bold Measures Needed to Protect Lake Trout

Where have all the lake trout gone? This seems to be the question that most of the property owners on lake trout lakes in Haliburton have been asking for the last few years. Trout populations on most of the lakes are noticeably reduced and those trout that are caught are usually smaller in size.

It was because of this growing concern that The Coalition of Haliburton Property Owners' Associations (CHA) surveyed all of the lake stewards in 2012 to ensure we had a clear picture of the situation. CHA felt that we needed to bring the representatives together in a workshop to provide a greater awareness and understanding of both the past and the future of the lake trout situation.

We were fortunate to enlist the services of Dr. John Casselman, Adjunct Professor, Biology Department, Queen's University, and former Senior Scientist Fisheries Research, Ministry of Natural Resources, who has done extensive fisheries research in Haliburton and around the world.

A workshop held in Haliburton at the Stanhope Firehall on May 25th, 2013 was attended by representatives from almost every lake in Haliburton with a capacity crowd of 100 including M.N.R. personnel from Peterborough, Minden, Bancroft and Bracebridge. Dr. Casselman's presentation proved to be the wake-up call needed.

We tend to take lake trout for granted in Haliburton until you realize that only 1% of the lakes in Ontario are lake trout lakes, and these lakes represent ¼ of the world's lake trout lakes. We Highlanders have a unique recreational fishing opportunity, which contributes significantly to the tourism and economy of the area. It is a rare resource we cannot afford to lose.

Lake trout's survival is our best indicator of acceptable water quality. Just as a canary's survival in a coal mine was an indicator to early miners of noxious gas-free air, the extra-sensitive lake trout will not survive in oxygen-starved water.

The M.N.R. and Ministry of the Environment are currently monitoring 32 Haliburton County lake trout lakes for declining oxygen levels. The cause is too much enrichment reaching the lakes from faulty septic systems, fertilizer runoff from lawns and loss of natural shoreline vegetation which would ordinarily absorb much of the nutrients.

Studies presented by Dr. Casselman have identified four main threats to the sustainability of lake trout and the sport fishery: (1) Overfishing (2) Ecological Changes (3) Environment and Habitat Degradation (4) Loss of Genetic Diversity. Numbers 1 and 3 are the ones we are trying to address.

Much of the threat to water quality is caused by increasing urbanization of the Highlands predominately from the rapidly growing areas of Southern Ontario which puts increasing pressure on all aspects of our environment.

Severe water fluctuations by the Trent System, particularly during the October spawning period and the March hatching period, can lead to severe or even total loss of that year's reproduction.

Dr. Casselman, in his research in Haliburton, identified a critical aspect of overfishing that has had a devastating effect on reproductive results. His studies revealed that lake trout are caught more readily in August and September, particularly females of spawning age. With each fish producing several thousand eggs, they build energy reserves for egg mass and are more susceptible to being caught during this period. Loss of potential spawners can quickly reduce the productivity of a given lake as many lakes have witnessed.

Dr. Casselman stresses that we must reduce the selective harvest of female fish from midsummer onward. In Haliburton Forest where this was done, there was a marked improvement in the fishing, with some fishermen stating that fishing has never been as good.

In Zone 15, which includes Haliburton, Bancroft and Muskoka, the closing date is currently the end of September, which is only a week or two before spawning begins. CHA lake stewards are **requesting a mid-August** closing date. In addition, a complete review of all aspects of the lake trout fishing regulations must be taken, including slot size restrictions, catch limits, and winter fishing, if we hope to save the fishery.

With the severe staffing cuts to the M.N.R., Oceans and Fisheries and the Trent-Severn Waterway, it is critical that the public and politicians become involved before our unique lake trout and their importance to the economy become only a memory.

Don Benson, CHA Environment Committee Chair

N.B. Two significant studies were distributed to all those attending Dr. Casselman's workshop: you can read them at the following sites.

"Ontario's lake trout – In Peril?" Eco Issues

www.fisheries.org vol. 27 no. 1 "Canada's Recreational Fisheries: The Invisible Collapse?"
[Post, Sullivan, Cox et al]