

Seals and Fisheries Interactions

"The collapse of the cod stocks was due to over-fishing. It had nothing to do with the environment and nothing to do with seals."

- Ransom Myers, former Canadian Department of Fisheries and Oceans scientist

When European explorers first arrived off the east coast of Canada, they described an ocean teaming with fish—of cod stocks so plentiful they literally impeded the progress of boats. These images stand in sharp contrast to the grim realities of today: cod populations on the brink of extinction, and no prospects for recovery in sight.

The collapse of northern cod stock has been called the greatest resource management disaster in history. Close to two decades after the moratorium was imposed on the cod fishery, there are no signs that the stock is rebuilding. And with northern cod at one percent of their historic population, scientists are beginning to grasp that the ecological damage caused by decades of overfishing just might be irreversible.

Back in the 1990s, as the public demanded answers, fisheries managers searched for scapegoats for their own misconduct. And despite a scientific consensus to the contrary, seal predation on cod was at the top of their list. Today, calls for an expanded seal hunt echo throughout Atlantic Canada, and myths about seal interactions with ground fish stocks abound. But a careful examination of the facts reveals that harp seals were not a factor in the collapse of the cod stocks, and there is no evidence that culling seals will bring fish stocks back.

The eradication of the cod

Until the 1950s, Newfoundland's fishery was conducted in a relatively sustainable fashion with small, inshore boats. But over the next decade, the fishing industry developed new technologies. With huge nets, industrial fishing vessels could haul up as much as 200 tons of fish in one hour-- twice the amount a typical 16th century boat would have caught in an entire season. Cod catches steadily increased over the 1950s and 60s, from an average of 250,000 tons to a peak of 800,000 tons in 1968.

"When you fish a species to commercial extinction, it may never recover."

- Brian Tobin, former Minister of Fisheries and Oceans, April 2003

At the time, foreign fishing fleets were taking the lion's share of the fish caught off the east coast of Canada. And they not only took the cod – they also took the main food source for the cod. The northern cod stock was diminishing under the double threat of a decreasing food supply and overfishing.

By 1977, the decrease in ground fish stocks had become so evident that Canada imposed a 200 mile limit off its coasts as a means to stop the foreign fishing fleets. But rather than using the new protected zone to allow fish stocks to rebuild, Canadian fishing companies saw a chance to increase their own take. In a senseless cash grab, Canadian fishing fleets dramatically increased the size of their catches, and in Newfoundland, the number of registered fishers increased by 41 percent. Fisheries biologist Richard Haedrich elaborated: "The idea was that the streets were paved with fish and that now that the Europeans were gone it would come to the Canadians."

Over the next decade, the concerns of inshore fishermen who were noticing a serious decrease in their catches and the size of the individual northern cod were ignored. The DFO continued to set unsustainable quotas until it was absolutely clear the northern cod population could withstand no more. In 1992, a moratorium was placed on the commercial cod fishery. But by then, many believe it was already too late.

Suppression of science

In the wake of the 1992 moratorium, the public demanded to know how DFO scientists could have missed the obvious signs of a declining population when inshore fishermen had been predicting the collapse for decades. By the mid-1990s, the answer became clear.

In 1997 two former DFO scientists published an article entitled "Is Scientific Inquiry Incompatible with Government Information Control?" Their report cited a pattern of suppression of scientific info at DFO.

The authors cited numerous examples where DFO scientists had warned the Minister that ground fish stocks were in a dangerous decline, and these findings were either ignored or suppressed as high quotas continued to be allocated. In one of these instances, a DFO scientist named Ransom Myers was apparently threatened with termination of his job when he concluded that the true cause of the cod collapse was simply human over-fishing rather than predation by seals.

Scientific information was also selectively excluded in the 1995 Stock Status Report on Gulf of St Lawrence groundfish, according to the authors. The original draft of the document said that seal predation was unlikely to be responsible for cod mortality trends. But this statement was allegedly removed from the published version, contrary to scientific advice.

What the Experts Say

- "...there is no evidence that increased seal predation of juvenile cod led to the recent decline and subsequent closures of several cod fisheries."
- A. Sinclair, R.Myers and J.Hutchings, 1995; Also see R.Myers and N.Cadigan, 1995.

The seal cull approach to "cod recovery," although strongly favoured by the fishing industry, is naïve, and is based on outdated myths about predators in general, and on misperceptions about the natural relationship between seals and cod. Twenty-first century science, including DFO Science, knows better.

- Debbie Mackenzie, <u>www.fisherycrisis.com</u>
- "All scientific efforts to find an effect of seal predation on Canadian groundfish stocks have failed to show any impact. Overfishing remains the only scientifically demonstrated conservation problem related to fish stock collapse."
- From a petition signed by 97 scientists from 15 countries at the 11th Biennial Conference on the Biology of Marine Mammals, Dec.1995
- "...interactions between seals and fisheries are complex and often misunderstood...The truth is we do not know what the effects of a change in seal numbers would have on commercial fisheries."

 W.D. Bowen, 1992
- "It is not yet possible to predict the effects of an increase or a decrease in the size of the harp of seal population on other ecosystem components, including commercially exploited fish populations, or on the yields obtained from them."
- Harp Seal-Fishery Interactions in the Northwest Atlantic: Toward Research and Management Actions. International Scientific Workshop, St-John's, Nfld., Feb, 1997