

Regarding the Senate Order of Reference 2022-10-04 "Examine and report on Canada's seal populations and their effect on Canada's fisheries," by the Fisheries and Oceans Standing Committee, a brief from Harpseals.org, a nonprofit organization based in the United States:

Seals and sea lions are highly visible marine mammals whose consumption of fish and other sea life has engendered hatred of them among many fishermen. Fishermen have acted upon this hatred by shooting them, throwing explosives at them, clubbing them, gaffing injured seals in their mouths after shooting them, and even skinning them alive. Fishermen have claimed that seals and sea lions eat too many fish or more than "their share" of fish and have made juvenile calculations to estimate the seals' or sea lions' consumption of fish and compare this to their fishing quotas. In so doing, fishermen have exposed a complete lack of understanding of ecosystems.

In the 20<sup>th</sup> century, Canada allowed fishermen/sealers to kill hundreds of thousands of harp seal pups each year until their population nearly collapsed. In the 1950's and 1960's, over a quarter million harp seals were killed almost every year until the population was decimated to just over one million harp seals, roughly 11% of the estimated historic population (prior to the arrival of Europeans) of 11 million. Canada was then forced to institute a quota system, but the quotas and killing rates still were in the ranges of hundreds of thousands of seal pups, even exceeding 350,000 twice in the early 2000's. The population did not collapse again thanks to victories by animal rights activists in 1983 and 2009.

The victory in 1983, a ban on whitecoat harp seal pup pelt imports into the European Union, resulted in a dramatic reduction in the demand for seal pelts in Europe. This led to a reduction in the numbers of harp seals killed to an average of about 52,000 seal pups annually from 1983 through 1995. At this time, the Canadian government decided to skirt the ban on whitecoat imports into Europe by instituting a regulation requiring sealers to wait a few more days to kill the pups, until they began to molt. At this time, they would be considered ragged jackets, not whitecoats, and several days later, beaters. Thus sealers could exploit a loophole and sell seal pelts to Europe again. For the next 14 years, sealers went on a rampage in the seal nurseries, killing an average of almost 262,000 seal pups each year. In 2009, the European ban was finally broadened to close that loophole, at last, giving the harp seal herds some relief from the bloodbaths.

The current harp seal population has been estimated by DFO scientists to be between 6.55 million and 8.82 million, less than their historical abundance. Since 2013, over half a million harp seal pups have been shot and bludgeoned to death for their fur and blubber. This continues despite the threat that this species faces as a result of climate change, which is reducing the extent and quality of the sea ice on which they depend for whelping. In some years in this century, all or nearly all pups born in the southern Gulf of St. Lawrence have died before they learned how to swim due to the poor sea ice.

The diets of the three different harp seal populations (Northwest Atlantic, Barents Sea/White Sea, and Greenland Sea) have been studied by several scientists over the years and found to vary geographically and temporally. In no case, has a population of harp seals been found to feed primarily on North Atlantic cod throughout the year. Rather, polar cod, capelin, sand eels, and herring are among many species commonly consumed by harp seals.

Capelin is a species that merits a closer look. This species is also a critical component of the diet of North Atlantic cod. In fact, DFO scientists have determined that the lack of capelin availability, not the presence of harp seals, is hindering the recovery of the cod. It is important to note that, when the cod population collapsed due to over-fishing, so did the capelin population since capelin were caught by fishermen along with cod, as by-catch. The capelin population still has not recovered.

Though there is no significant demand for capelin flesh for consumption by humans, fishermen continue to jeopardize this population and prevent it from recovering. Fishermen collect capelin roe (eggs), indiscriminately removing the future generations for the sake of a foreign luxury use. They also kill capelin for bait, animal feed, and fertilizer. The DFO continues to allow this key species – both adults and eggs - to be killed in extremely large numbers despite having essentially no idea of its abundance. "Capelin have certainly fluctuated over time. We don't have extremely good methods to estimate the abundance of capelin, but I think sometimes some people have presented information on capelin which suggests that we have more confidence and more knowledge about trends in capelin than we actually do," asserted the late Dr. Jeffrey Hutchings in our 2019 interview.

The implications of the myopic mismanagement of capelin are magnified as capelin are facing additional threats besides fishermen and the DFO: their prey, phytoplankton and zooplankton, are also in short supply.

The North Atlantic cod is not only facing struggles to find sufficient prey to survive and attain good health, the species is also still targeted by fishermen, thanks to the DFO's ill-advised pandering to fishermen rather than basing its management decisions on science, guided by the Precautionary Principle. The fishing moratorium was eased far too soon. The cod population was so severely depleted that it could not be expected to recover in the time the DFO allotted it, especially since its main prey population had also collapsed.

"Over the last ten years where we have seen some positive signs of cod increasing in abundance, we have also seen the quota creep up in the inshore part of the fishery. Northern cod is at, is estimated to be at less than half of its limit reference point. So it's not even at that limit. And yet last week the Minister of Fisheries and Oceans announced a 30% quota increase on cod," Dr. Hutchings admonished in 2019.

The collapse of the cod and its failure to recover are DFO's failures. Unfortunately, DFO has not learned from those failures, and continues to make the same mistakes. These mistakes are based on the same fallacies that are on display with this Senate study: the idea that fishermen and sealers - people with no expertise or formal education in ecology or marine biology - should dictate fishery policies.

It is time for Canada's fisheries regulators to face facts: over-fishing, destructive fishing practices, climate change, pollution, and other human factors have caused great destruction to marine life and ecosystems. The solution is not to kill more marine life; it is to kill less marine life. It is to restore the oceans, remove the massive pollution that fishermen leave behind, give ecosystems a chance to recover, and reduce fossil fuel emissions to put the brakes on climate change, before it's too late.

For more information and to see interviews of Dr. Hutchings and other scientists, visit <https://www.ScapegoatSeals.org>