

## **A Presentation to the Standing Committee on Fisheries and Oceans**

**Topic:** Study of the ecosystem impacts and the management of pinniped populations

Presented by:

Robert Hardy

Fishery Consultant

Conception Bay South, Newfoundland and Labrador

[hardyfishco@nf.sympatico.ca](mailto:hardyfishco@nf.sympatico.ca)

March 23 2023

Good morning, Mr. Chairman, Members of the Standing Committee of Fisheries and Oceans and other presenters. I appreciate the opportunity to speak today on the “the Truth about Capelin and its importance to the Ocean Ecosystem.”

While there is always a push by environmental groups, ocean conservationists and animal rights activists to reduce and cease commercial fishing activity especially capelin, there is never any reference to predation by seals. Seals are in fact one of the largest predator groups that consume capelin in significant volume, much more than any commercial fishing effort.

In this case DFO and the international fisheries scientific community agree that capelin are a primary prey specie and food for seals (all species). Much work has been completed on harp diet assessment in the North West Atlantic which concludes capelin as the predominant forage specie. This because capelin is abundantly available over a large geographic area, and can be found both inshore and offshore during different seasons. Capelin are also a small fish which can be consumed whole, are rich in fat (oil) and have roe-eggs. All of which are a preference of pinnipeds.

DFO estimates that harp seals (1 of six seal species in Atlantic Canada) consume up to 1,000,000 MTs. of capelin annually. That in comparison to 14,500 MTS commercial quota in 2022. Just 1.5% of the estimated harp seal consumption and that does not include the other five seal species which also consume capelin.

Table 1: Harp Seal Daily Capelin Consumption Rates

<b>Daily Consumption Low-High</b>	<b>Average No. Capelin per kg</b>	<b>Total Capelin Consumed/Day<sup>1</sup></b>	<b>Daily Consumption per Million Seals<sup>2</sup></b>
Low at 3.3 kgs (CANADA)	60 pcs.	198	198 million capelin
Medium at 5.0 kgs (Norway)	60 pcs.	300	300 million capelin
High at 9 kgs	60 pcs.	540	540 million capelin

Note:

<sup>1</sup> Consumption rates would depend on availability and abundance of capelin and specific season throughout the year;

<sup>2</sup> Total predation will depend on the number of seals in the particular region.

**Viral video of 5 miles of seals off Newfoundland fires up debate about marine mammals' impact on capelin, cod and crabs** [Barb Dean-Simmons · Journalist](#) |

Posted: June 7, 2021, 5 p.m. <https://www.saltwire.com/atlantic-canada/business/5-miles-of-seals-newfoundland-fishermans-video-goes-viral-fires-up-more-debate-about-pinnipeds-100597203/>

“They had encountered a large herd of seals, a patch about five miles wide, he said, adding the boat was steaming east when it intersected the herd heading south. These seals were in prime crab fishing grounds,” he said, adding this is also the time when capelin begin migrating inshore. We were steaming through them for quite a while,” he said.



Figure 1: Photo of seal predation and seal stomach with capelin. Noting the majority are female roe bearing capelin.



Figure 2: Other species targeted for nutrient rich roe-eggs include crab and lumpfish. The latter now at only a fraction of previous commercial production levels in 1970's-80's. Continued declines with practically no fishing activity over the past two plus decades.

The Limit Reference Point (LRP) for capelin has recently been set at 640 kilotonnes (kt) or 640,000 MTs. by DFO. Last year, the capelin biomass index was estimated 262 kt, and it is expected to be at or above that level this year. A decision to impose a moratorium on the commercial capelin fishery because of mounting pressure from environmentalists that have no commitment to industry, to coastal communities or Canadian people is unjustifiable. I suggest that leaving 14,500 MTs quota representing 1.5% of the harp seal consumption will do little to increase capelin stocks.

**The 14,500 MTs (14.5 million Kgs) capelin quota could be consumed by the harp seal population eating 3.3 kgs per in a 1/2 day +/-.**

Our friends in Iceland continue to have prolific bountiful fishery resources (all species). Iceland closed its commercial capelin fishery in 2018 and caught only 25% of its quota that year at 40,000 MTs. In 2019 and 2020 the capelin fishery remained closed. The Icelandic Maritime Research Institute proposed that the capelin catch in the 2022/23 season would not exceed 275,705 tonnes, which was an increase of 57,300 tonnes in the initial advisory of October 2022. This meant that the Norwegian quota also increased from 43,275 to 48,380 MTs. Iceland's Limited Reference Point (LRP) suggests that 400,000 tons should be left of the stock for spawning reproduction each year.

Table 2: Comparison of Canada, Iceland, and Norway Capelin Quotas

Country	Est. Biomass	Quota (2022)	% of Biomass
Canada	262,000 MTs.	14,500	5.5%
Iceland-Norway <sup>1</sup>	763,000 MTs.	324,085	42%

Notes:

<sup>1</sup> Iceland and Norway shared capelin quota for 2022-23 season;

<sup>2</sup> The Icelandic Marine Research Institute conducts two capelin surveys each year and includes predation into all biomass modelling;

<sup>3</sup> While seal predation is a small factor in comparison to Canada, we must recognize the significant predator impact from groundfish species in Iceland and Norway waters.

What are the differences between Norway's and Iceland's fishery apart from the significant difference in quotas and that both countries fish much harder than Canada. They do appear to have a more reliable science program and notably, Iceland has practically no seal predation (25,000 combined species) and Norway has not documented a seal invasion since the mid-1990's. The predominant harp seal species remains further north and entirely offshore.

In closing I include a media quote from a senior DFO scientist;

***“For years, fishermen have been told it’s fishing that drives populations. ....He said DFO manages fishermen, not fish, so it’s only natural fishermen might consider seals as a competitive fishery..... I call it predator envy.”***

<https://www.theglobeandmail.com/canada/article-scapegoat-or-scoundrel-why-scientists-want-to-clear-the-air-about-the/>

From my lifetime fishery experience and perspective, there is **“no envy”** in the current state of Canada's fishery or its science program. It's time for real action and “not endless debate.”

Thank-you.