

Thank you for taking the time to hear from the Fish, Food and Allied Workers Union on this important issue. The Committee will also hear from Ms. Dwan Street, President-Elect of our Union. As the Senior Fisheries Scientist of the FFAW, I will focus my remarks on lessons learned – and lessons forgotten – from the collapse of the northern cod fishery in the 1980s and 1990s and will also comment on our concerns with how the federal government chose to end the cod moratorium.

Over 30 years after the collapse of the northern cod fishery, the timing and explanations for the collapse remain contentious. When the northern cod assessment model was developed, it included extremely high estimates of natural mortality between 1992 and 1994¹. Subsequent variations of the northern cod assessment model, including the one used in the 2024 assessment, all attribute the collapse to an **unknown natural mortality event**.

At its most basic a stock assessment model tracks recruitment, growth, and death in a fish stock. There are only two ways to kill a fish in an assessment model; mortality is either attributed to fishing or it is considered ‘natural mortality’, which includes unaccounted for fishing mortality as well as everything else. In the official DFO stock assessment version of events, something *unknown* knocked out millions of fish in the early 1990s. The loss of capelin can explain some, but not much, of that mortality event².

However, the DFO stock assessment is not the only peer-reviewed and published account of the stock collapse.

Academic research from the mid-1990s showed sequential declines in fishery catch rates of inshore gillnet fisheries, midshore/offshore gillnet and then catch rates from Canadian trawlers declined in the late 1980s even as reported landings remained high, meaning trawler effort increased to get the same landings as previous years³. Research papers from the mid-1990s showed that offshore catch rates declined first in the north⁴ and these Canadian draggers were fishing on pre-spawning and spawning aggregations⁵.

Multiple research papers on the collapse of northern cod showed that northern cod became increasingly concentrated, shifted south, and were distributed deeper throughout the 1980’s and early 1990’s⁶. These changes contributed to (1) increased vulnerabilities, particularly to the offshore dragger fleets, and (2) contributed to overestimation of stock health. The term

¹ Cadigan 2015. CJFAS

² DFO SAR 2024/049

³ Hutchings and Myers 1994. CJFAS

⁴ Kulka et al. 1995. ICES J Mar Sci

⁵ Wroblewski et al. 1995 Fish Oceanog

⁶ Rose and Kulka 1999. CJFAS

“hyperstability” was used to describe how fishing fleets can maintain high catch rates even during stock collapse. That paper by George Rose and Dave Kulka has been cited by over 400 other papers.

More than 30 years later there is still no agreement on how, why, when and **where** northern cod collapsed but one of the lessons that could/should have been learned was that changes in fish distribution matter.

Northern cod is a stock complex. This means that codfish are not evenly distributed throughout Newfoundland and Labrador waters. There are multiple distinct spawning areas, and most fish annually migrate between offshore spawning areas and inshore feeding areas. Updated information and research on these questions is fundamental for rebuilding a sustainable fishery.

One of the reasons why I object to the re-opening of trawler fishery is that there has been no recent work on cod distribution, recovery and vulnerability. The most recent acoustic survey of spawning aggregations occurred in 2015⁷. Which pre-spawning and spawning aggregations are recovering, and which are not?

I expect that recovery is not evenly distributed across historic spawning areas, in part because recovery of the fishery is uneven in the inshore, with much improved catch rates in from the inshore sentinel survey in the north but no increase in catch rates in southern 3L.

Historically, inshore fishing grounds were linked with particular offshore spawning areas. Is the recovery reliant on one or two spawning areas? None of these questions were reviewed at stock assessments prior to the Minister’s decision. Why did the Minister re-open the northern cod fishery to the Canadian and international bottom trawl fleets without doing due diligence and assessing stock distribution and vulnerability?

Due diligence – and a lesson learned – would have meant research and review of up-to-date acoustic data on linkages among feeding and spawning areas. It would have meant identification, documentation and, importantly, conservation of spawning aggregations.

The motion also included reference to groundfish in the Gulf of St. Lawrence, one of the major changes in the Gulf is the new Unit I redfish fishery, which I hope we may also have time to discuss today. The reopening of that fishery does include spatial and seasonal management measures,

⁷ Rose & Rowe 2015 CJFAS

some of which will need to be evaluated against up-to-date information on target and bycatch species and which we can also discuss today.

Thank you, members, for your time today.