

**Fisheries Resource Conservation Council
Herring Consultations**

SUSTAINABILITY FRAMEWORK FOR ATLANTIC HERRING

**EASTERN SHORE FISHERMAN'S
PROTECTIVE ASSOCIATION**

Inshore Herring Fishery – Herring Fishing Area (HFA) 20



Presented by:

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ESFPA History

The ESFPA has been in existence since 1957 and incorporated in 1973. In 1998 we were accredited under provincial legislation, the Nova Scotia Fisheries Organization Support Act.

At present, we represent over 200 core fishermen from Halifax Harbour to Canso. The majority of our members hold multi-species licenses.

ESFPA Herring Fishery Background

There has always been a herring fishery along the Eastern Shore but in 1997, we submitted a proposal to monitor (survey) the herring stock and work with DFO science to assess and determine biomass estimates to properly manage the inshore herring stock on the Eastern Shore of Nova Scotia. We have developed a well managed herring roe fishery over the years where we feel it has reached an optimal economic boost to our communities.

Our association has paid out over \$80,000 which includes the purchase of two pieces of acoustic equipment (sonar used to survey the fish), yearly calibration of the acoustic equipment, tagging, and paying for independent (not DFO science) survey results.

Last year the herring fishery added over \$650,000 to our local economy and communities from this small fishery alone. Over all the years, this fishery has generated over 5 ½ million in gross revenue not including the spin offs for fish plant workers, fuel distributors etc. We are interested in conserving and protecting this resource for the future.

Major Risk Factors/Threats

Purse Seiners

Our concern is for our inshore herring stock which is connected to the outer bank stocks. We saw evidence of the connection when the purse seiners landed more than normal, 11,800 tons in 1996 and 18,770 tons in 1997. Due to their reduced landings after 1997 our landings for inshore herring went from 1500 tons in 1997 to 4100 ton in 2004.

We have consistently asked the purse seiners that fish the outer banks to participate in a tagging project to show that the inshore and outer banks stocks are integrated. We are also interested in tagging but were told by DFO science that they were not interested in an ad hoc tagging program as they had enough on their plate to deal with considering the resources that they had to work with. Their budget has continually been slashed to the point that we will only have one scientist for the whole region to work on herring.

Chebucto Head Fishery

For many years the purse seiners have put in proposals to DFO to fish off Chebucto Head (inshore). Science do believe there is a mixture of this stock with the Bay of Fundy and Coastal NS but are unclear on what the percentage is as there isn't enough tagging. There is no way to determine if all of the catch is from the coastal stock or not, therefore they could be harming the stock due to large catches. We oppose this fishery until more is known about the mixing.

Excerpt from the 2003-2006 Scotia Fundy Fisheries Integrated Herring Management Plan

As technology advanced, the purse seiner was introduced and was able to fish farther offshore. Vessels became larger and more efficient. By the 1960's, a moderate size purse seine fleet on the Atlantic Coast was landing enough herring to sustain a viable fish meal industry. This period of economic stability did not last long. In 1968, overexploitation of herring on the Pacific Coast resulted in the collapse of the British Columbia purse seine fishery. Following the collapse, 16 large vessels from B.C. set sail for the Atlantic Coast where they became active in the herring fishery. Very quickly, large fish processing industries were developed in Newfoundland, the Gulf of St. Lawrence, Chedabucto Bay, Sydney Bight and the Bay of Fundy to accommodate the large build-up in fishing capacity and the associated capitalization demands.

The cumulative effect of fleet expansion and technological innovations in gear types and harvesting techniques was the depletion of the herring stock. Catches in Atlantic Canada dropped from about 500,000 t in 1968 to 226, 000 t in 1973. The economic state of the herring fishery became fragile.

Excerpt from Fixed Gear Herring Research Council (ESFPA) letter dated December 1, 2004 to Neil Bellefontaine/Claire MacDonald in regard to the Purse Seiner Fleet request to fish off Chebucto Head

Seiner fleets in the past has shown that they can completely annihilate the herring stock along coastal areas. In the early seventies the herring stocks in the southern Gulf of St. Lawrence and the Bay of Fundy were practically decimated by the seiners who were selling most of their catch for fish meal. The Minister of Fisheries took action at that time and forbade herring to be made into fish meal. He further tried to strip the processing companies of the purse seine fleet and the taxpayers subsidized the fishermen to buy these same seiners so that there was some competition but the processors now once again own the seiners and again they are searching for more fish.

*It is only within the last decade that the herring fishery has returned to the Magdelin Islands and that only came about because fishermen protested long enough to have the seiners removed from the edge fishery in the spring. Other areas have seen herring fisheries disappear namely, the Chedabucto Bay winter fishery in Cape Breton, and the Trinity Ledge fishery in South West Nova Scotia. Trinity Ledge has still not completely recovered. In 1992/93, Little Hope was almost decimated as well; however there are signs of recovery. **This recovery is closely linked to the Department's establishment of a 25 mile closure line along the coast of Nova Scotia which we strongly support.** We do not want to have the Eastern Shore quoted as another statistic of what can happen when the seiner fleets have access to inshore areas.*

The seiner fleet has a very poor track record of reporting their catches and have repeatedly been charged with misreporting. In fact, in August 2000 the Herring Advisory committee was shown a video of a "gizmo" that had been detected by fisheries officers. The gizmo was a devise intended to mislead the dockside monitor and during that session Mr. Stewart explained that the DFO had forced the fleet to cheat. Trinity Ledge is still recovering from the over exploitation and may never fully recover.

Due to the very small numbers of fish documented during the last few years of the seiner scientific survey we feel at this time that DFO should not approve another scientific /commercial fishery off Chebucto Head.

The ESFPA strongly support an extension of the 25 mile closure line to include Chedabucto Bay.

Mid-Water Trawl

In 2005, we were told of a proposal to explore for Mackerel using mid-water trawl vessels. We expressed our concern and were invited to meet with DFO and the participants of the project. We were told that this project was sanctioned by the “Atlantic Mackerel Integrated Fisheries Management Plan”.

The proposal went through as exploratory Mackerel licenses against our concerns. Not just our concerns but also all of the inshore associations that attended the meeting with DFO.

Then, to make matters worse, the proposal was adjusted to be Small Pelagics, not just a mackerel fishery. We were told by the first participants that they would explore the Scotian shelf (offshore) for the mackerel, as there was history of mackerel years ago in those areas. When the new players came on board this changed. We were told they could explore (fish) anywhere ie outer banks and the Scotian Shelf. We asked about a bycatch of herring and were told it would come off the existing quota. This existing quota was the outer bank herring which hasn't been fished to any extent since 1998. The Mid-Water Trawl vessels had landed 4371 tons of herring as a bycatch out of 55 tons of Mackerel. This came off the outer bank quota, as did the purse seiners landing of 4544 tons. We were very concerned that this will affect our inshore herring roe fishery. Our understanding of a by catch is that you need to catch more of the species that you are directing for.

We felt betrayed by DFO. We have put a great deal of work and money into building up the inshore herring fishery and we felt manipulated by DFO. They found a loophole/ another avenue to get what they wanted in the first place. **“Mid-Water Trawl Herring fishery on the Outer Banks”**

The Minister and his department continually speaks of “preserving the independence of the inshore fishery”. The inshore fishermen will not be able to survive if our resources are continually given away under the pretence of an exploratory fishery to big company's who seem to be able to efficiently deplete a stock at our expense. This has been done before in Chedabucto Bay and we thought we have been vigilant in making sure it didn't happen here.

It was only when we applied pressure to the Minister of Fisheries (both Federally and Provincially) that a revision was made to keep the Exploratory Vessels outside 50 miles. This was half the battle as they continued to fish off the 12,000 ton quota outside 50 miles. No one knows the extent of the mixing between offshore and inshore. Are these the same stock? Is the 12,000 ton quota set too high? This number has been arbitrarily chosen and not reassessed for many years. There are no surveys to support this number. The last industry survey was in 2001. Is it a coincidence that we went from surveying 68,000 metre ton in 2006 down to 28,000 metre ton in 2007?

Concerns with Purse Seine and Mid-Water Trawl Fishing Methods

- 1 Fishing method is non-selective/indiscriminate
 - a. Negative impact on juvenile fish and bycatch species
- 2 Can wipe out entire stock segments
 - a. Potential for a sub population to vanish
- 3 Potential for negative impact on Tuna stock
 - a. Lack of herring on their migratory route

Predators

Seals are a large problem within the herring fishery. The herring are now spawning differently due to the seals chasing them. They are in deeper water and move as soon as they spawn. Herring have changed their spawning patterns.

Existing Best Practices

Industry works very closely with DFO Management and Science to monitor, access and manage this fishery. It is the other gear sectors that are risk factors to the inshore fishery. More thought and science needs to be generated before giving permission for additional effort. Less politics and more science plus much more funding for the science is required.

We work closely with the Tuna Fleet. There is gear interaction but we have worked out compensation agreements. Herring fishermen often supply the tuna fishermen bait and the tuna fleet often notify the herring fleet when they spot a school of herring.

Scientific Information Requirements

Science needs more information. Tagging is very important to determine mixture of stocks. Acoustic accuracy, turnaround time on spawning grounds and how to count the fish on the bottom fathom of a survey – the Dead Zone.

Handling Practices

The fishermen stay with their nets, bring them with them when they return to port. This is a day/24 hour fishery. If the weather is warm they take ice. The herring are pumped from the boat as soon as possible and immediately iced by the plant and put on trucks to transport for processing.

Management/Stewardship Initiatives

The ESFPA has managed the fishery by partnering with both DFO Resource Management and Science. We attend DFO meetings to discuss the fishery and correspond throughout the year on management and science issues. ie conditions, survey protocol

We also meet and correspond with Halifax West Commercial Fisherman's Association and Guysborough County Inshore Fishermen's Association, adjacent organizations whose membership has interest and involvement in this fishery. We come together as an advisory

body to discuss the TAC or allocations yearly. We also attend fishermen meetings to discuss the upcoming season. It is at the fishermen level where Rules/Conditions are set for the fishery. We have a 12 page **Fishery Participation Agreement** (civil contract) that is required to be signed by all fishermen involved in the herring roe fishery that occurs from Sept to Nov. In this agreement are all of the rules and conditions required for an orderly and sustainable fishery. For example - Sanctions are in place for fishermen who do not follow the daily trip limit.

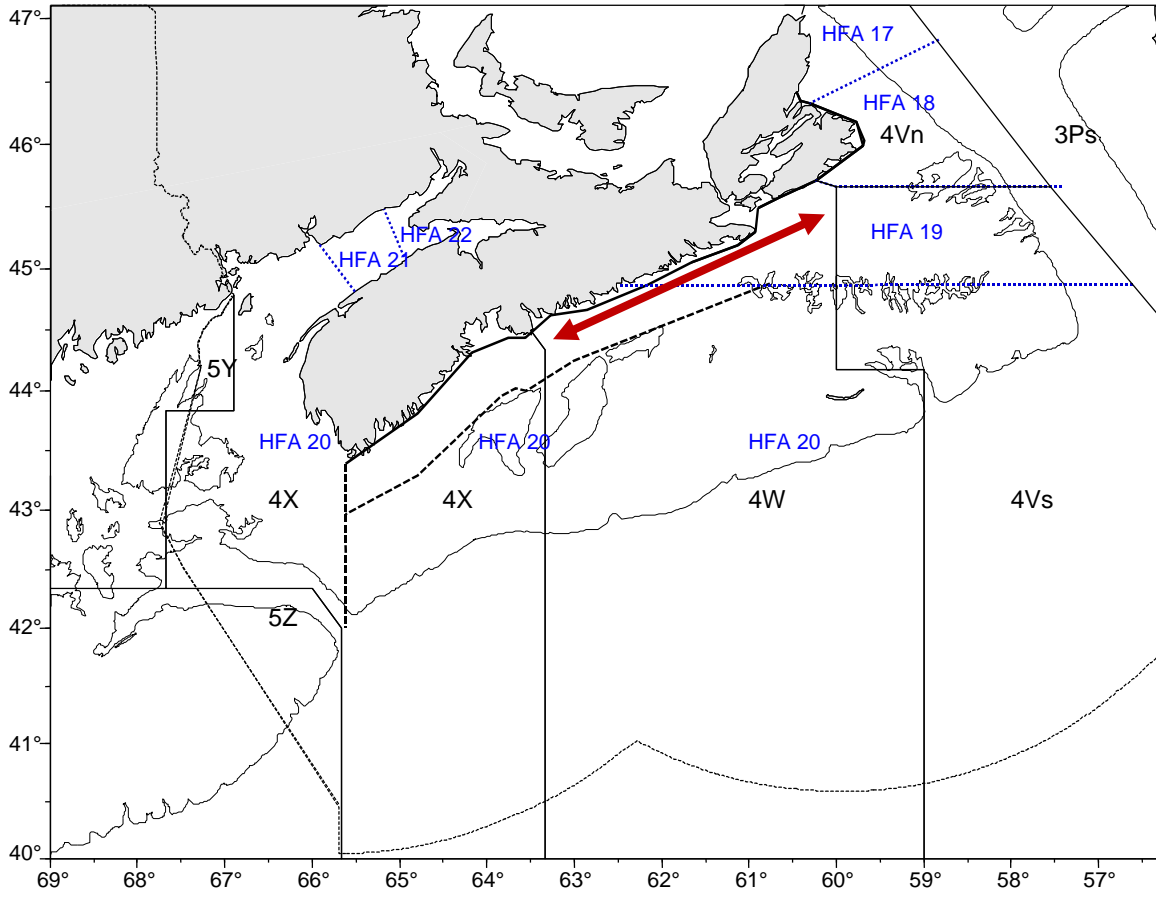
The fishery is managed on a day to day basis and adjustments are made accordingly to the trip limits or if an issue arises. A daily diary is completed to track the process of the fishery and this is sent periodically to both DFO Resource and Science. The diary tracks weather, comments on fishing strength or anything relevant to the fishery, number of boats fishing, quota landed per day and a up to date tally of what is landed overall.

The science vessel captains work closely with the other fishermen so that a complete and full acoustic survey(s) is completed. This is done on a regular basis during the short herring roe season – between 2-3 months. We conduct at least 3 acoustic surveys per season up to 6 with the two acoustic recorders. The science captains work very closely with science to enable the best survey results as possible. We have been complimented many times by science on the great work done by the survey vessels.

Role of Herring in the Ecosystem

Herring is a food fish for many species including Tuna. It is also used by fishermen for bait. It is very important that we not only fish in a sustainable manner but that we do not disrupt the complex ecosystem. We have a viable and sustainable lobster and snowcrab fishery along coastal NS and it is imperative that we do not disturb the balance between what is landed versus what is required for the other species to prosper. We believe there are enough controls and monitoring in place to do this. It would not be in our fisherman's best interest to do otherwise.

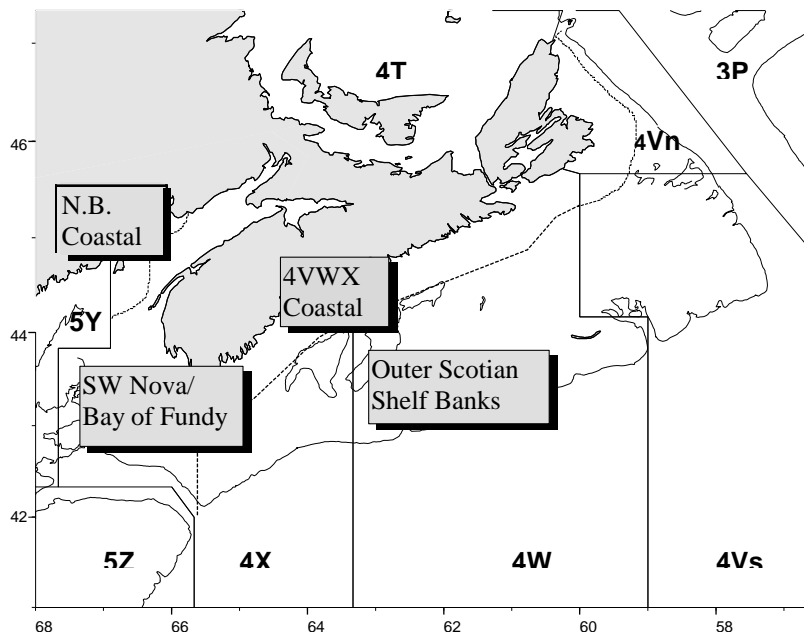
ESFPA Herring Fishing Area (HFA) 20 – Coastal 4W



Location of the Fishery

The map below provides a visual depiction of where herring are commercially fished in Scotia-Fundy. For the purposes of evaluation and management, the 4VWX herring fisheries are divided into four components:

1. Southwest Nova Scotia/Bay of Fundy (4WX) spawning component
2. Offshore Scotian Shelf Banks spawning component
3. Coastal (South Shore, Eastern Shore and Cape Breton 4Vn) Nova Scotia spawning component;
and
4. Southwest New Brunswick migrant juveniles.



Each component has several spawning areas, and there is mixing of fish among spawning components. Industry and management have explored means of managing the complexity within each component (such as distributing fishing effort among spawning areas according to their relative size) and of taking appropriate account of interaction among components (such as fishing restrictions on some areas of mixing).