

Southern Gulf of St. Lawrence Herring Fishery Management

Presentation to FRCC panel

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Montréal

Historical Overview

- Atlantic herring has been fished commercially in the Southern Gulf of St. Lawrence since the late 1800's.
- Until the late 1950's, the fishery was exploited on the spawning grounds almost exclusively by gillnetters, with average yearly landings of 32,000 metric tonnes.
- The 1960's saw major changes in the herring fishery and the processing industry. Reduction to fish meal and fish oil became important, and large volumes of herring were required. New purse seine vessels were built, and in 1966-1967, 16 large seine vessels were moved from BC to Atlantic Canada. By 1970, 65 seiners were active, with landings of 270,000 t.

Historical overview

- 1973, quotas were implemented for the first time, following biological assessments and estimates of potential yield.
- During 1970's, there were many confrontations between the inshore gillnet fleet and the seiner fleet. 80% of landings were made by the seine fleet.
- In 1976, in order to increase the value of the fishery, DFO prohibited fishing herring for meal and oil. This drastically changed the viability of seiners.
- In 1980, the TAC division between seiners and inshore fleet was modified, with 80% of TAC going to the inshore fleet, and 20% going to the purse seine fleet.

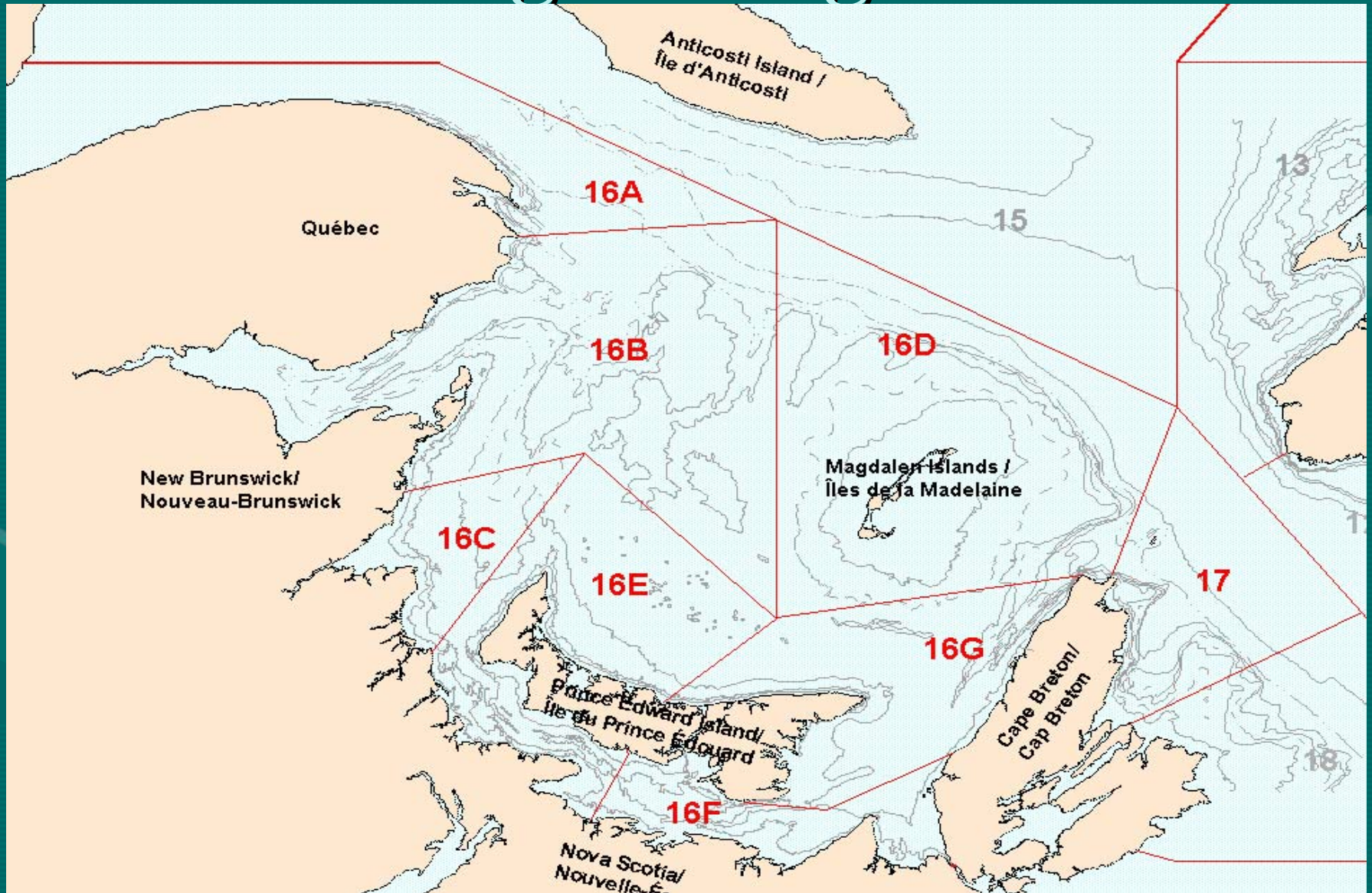
Historical overview (seiners)

- In 1981, landings were the lowest since the 1950's, at 23,000 t.
- In 1983, due to low prices and very low TAC, a 10-year fleet restructuring program was introduced for the purse seine fleet. Gulf fleets could now only fish the Gulf of St. Lawrence stocks, and Scotia-Fundy fleets could only fish the Scotian Shelf stocks. There were 16 licences in Gulf (NB and NL).
- Purse seine licence holders have access to the entire Gulf (4RST) in addition to 4Vn (historical access for a portion of the year due to overwintering site of 4T herring).

Historical overview (inshore)

- Prior to 1984, 4T herring was managed as one stock.
- In 1984, differentiation of TACs for the spring and fall spawning components.
- 1987 saw the creation of 7 distinct fishing areas, to spread the effort on major fall spawning grounds, and the sharing of the fall inshore quota between these areas.
- Starting in 1998, spring inshore quota was shared between areas.

Herring Fishing Areas

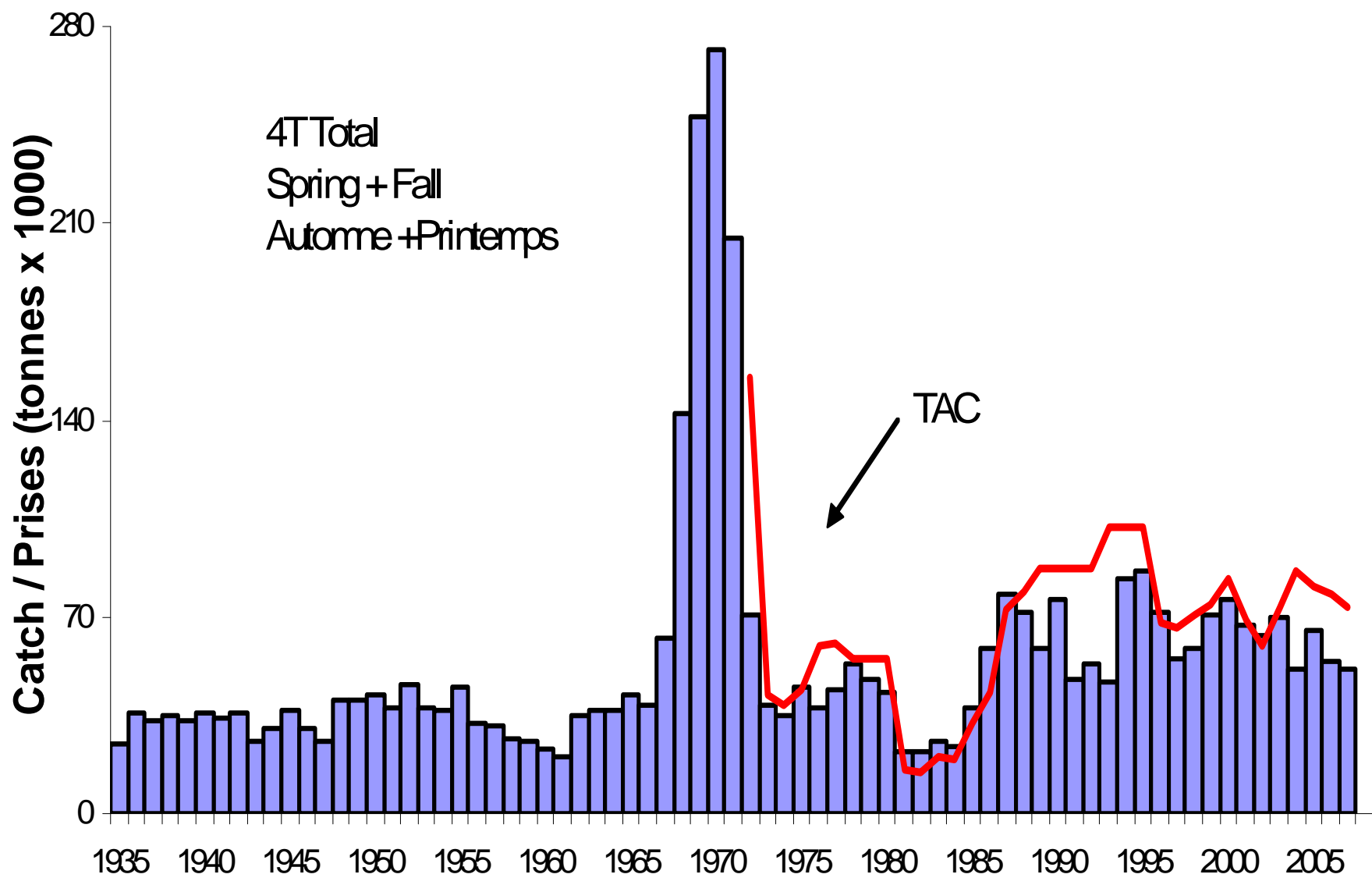


Present situation

- In 1996, the sharing between the purse seine fleet and the inshore fleet was established at 76.83 % for the inshore fleet, and 23.17 % for the purse seine fleet, to reflect the fact that landings in 4Vn (4,200 t TAC) were considered 4T herring. These shares were stabilized in 2005 for a 5-year period.
- There are approximately 3,300 inshore licences in the Gulf, and between 600 and 800 are active in a given year. These include 9 purse seine licences on vessels <19.8 m in HFAs 16B, 16C and 16D.
- Through licence transfers and quotas, the number of purse seine licences for vessels >19.8 m was reduced to 6 in NB and 5 in NL.

Management

- TACs are set for both components separately, based on scientific information.
- TAC for spring component has been decreasing in past few years. In 2007, the TAC was set at 5000 t, but with a 3000 t reserve, in case local abundance increased.
- TAC for fall component has been stable for the past few years at approximately 70,000 t.



Management

Objective	Strategies	Management measures
Conservation	<ul style="list-style-type: none">• Yearly stock assessment• TAC set lower than $F_{0.1}$• Prudent approach	<ul style="list-style-type: none">• Quota shares by area, based on TAC• Small fish protocol for seiners• Limit on seiner catches in the Baie des Chaleurs• Differentiation of spawning components
Sustainability	<ul style="list-style-type: none">• Limited entry fishery• Limited movement of licences	<ul style="list-style-type: none">• Yearly setting of opening dates• Minimum mesh sizes in gillnets• Limit number of nets per fisher• Weekend closures

Markets

	Spring	Fall
Inshore (gillnets)	Mainly bait market (whole fresh or frozen) Some smoking	Mainly Japanese roe market Smokehouses Some bait and fresh animal feed (mink ranches).
Seiners	Fillets	Fillets Sardines

Economics

- Herring accounts for approximately 35% of landings in the Gulf, but only 3-5% of landed value.
- Biggest markets are herring roe (\$0.08/lb) and fresh/frozen bait (varies between \$0.20 and \$0.80/lb). These are prices paid to the fisher.
- Seine licences are held by processors, so price per pound is unknown.

Challenges

- Main challenge in Gulf is conflict between fleets (inshore vs. seiners). (*Surette report*)
- Indications are that the spring spawning component is currently in a critical situation. There are catches of spring spawners in the fall fishery.
- Currently a long-term vision exercise ongoing to attempt to increase value of herring landings. (*Desjardins, Johnston, Healey reports*)
- Unreported mortality – dropoffs from gillnets, personal bait, released seine sets, not 100% DMP in spring.

Known issues

- Lack of information for stock assessment makes setting TAC a difficult enterprise.
- No logbook data required for the inshore fleet.
- Roe markets are diminishing.