



21ST ANNUAL MEETING – SEPTEMBER 1999

2J3KL Cod

Canadian Management Measures for 1999

For 1999 Canada has announced a limited inshore fishery with a TAC of 9,000t. This paper has been developed to explain Canada's rationale and to answer any questions that other NAFO Contracting Parties may have regarding this decision.

Canada has had a moratorium in place for 2J3KL cod since July 1992. At the NAFO annual meeting in September 1992, the Commission also adopted a recommendation, to take effect in 1993, prohibiting any directed fishery for this stock for that portion of Division 3L found within the NAFO Regulatory Area. The moratorium has remained in place since that time.

In the early years of the moratorium, the only data available for assessing the stock were from commercial catches and research surveys of the offshore area. These surveys did not extend to the inshore areas as the bulk of the biomass was distributed offshore, making inshore feeding migrations during summer.

In 1995, the Sentinel Fishery Program was initiated in order to augment research survey data with additional information from fishermen regarding the resource in the inshore. (The Sentinel Fishery Program is a partnership between scientists and fishermen where the latter fish under strict scientific protocols, towards providing supplementary information on stock abundance and distribution, on fish condition and food intake in the inshore.)

It has been known for many years that the 2J3KL cod stock is composed of a number of different spawning components. Some of these are located on the various offshore banks, and some are found inshore. It remains unclear as to whether there is complete separation of these components or not.

Most recent assessments clearly indicate that while there are very few cod in the offshore areas, there are cod present and overwintering in a number of the inshore bays. However, there was not adequate data, in the view of the Fisheries Resource Conservation Council (FRCC), to adequately determine the biomass of cod in these inshore areas. (The FRCC is a partnership between government, the scientific community and direct stakeholders in the fishery. It advises the Minister of Fisheries and Oceans on TACs and other conservation measures.)

The FRCC concluded that the data available and methods presented in the SSR were inadequate as a basis for a scientific assessment and setting of a TAC for this stock primarily because there was little information on the coastal components, which currently comprise the majority of the stock biomass. It was noted that fishermen had a wide range of views about the state of this stock in the inshore although there was unanimous

agreement on the status of the shelf (i.e. offshore) components, which are at all time lows. **All surveys and industry reports are consistent with this view.**

In 1998, the Canadian Index Fishery (a fishery that was to provide additional information to supplement sentinel programs and to add confidence, inshore and offshore, in cod population estimates) and the Sentinel Fishery Program caught about 3,500t. With additional catches by the Food Fishery (a "food" or recreational fishery where for a couple of weekends each year Newfoundlanders are permitted to fish for personal consumption) and bycatches in other fisheries (by Canadians and other NAFO members) it was believed that total catches were closer to 6,000t. Of this, over 99% were taken inshore. The offshore index fishery resulted in a catch of less than 1t.

The extent of high inshore catch rates in the fisheries suggested to the FRCC that cod might be more abundant in coastal areas than estimated by mark-recapture experiments and reported in the SSR. That is why the FRCC recommended to the Minister of Fisheries and Oceans that for 1999 a TAC of between 6,000t and 9,000t be set to allow for a limited fishery in the coastal components of 3L and 3K only.

The FRCC also made a number of other very specific recommendations, including continuation of the Sentinel Fishery Program (with catches to come out of the TAC) which should contain a tagging component in 3K and 3L, to improve the scientific database for future assessments. The FRCC was very clear that these additional recommendations were just as important as its TAC recommendation.

The FRCC also pointed out a number of advantages to reopening a limited fishery, which are compelling. For example, the provision of data on distribution, catch rates and age structure can benefit from a limited fishery. A tagging program requires a fishery if one wishes to obtain distribution and abundance information.

On June 23, 1999 the Minister of Fisheries and Oceans announced a limited fishery of 9,000t for the inshore portion of 2J3KL. This means that only inshore vessels (less than 65 feet in length) will be permitted to fish. Other FRCC recommendations were also adopted by the Minister at that time. The inshore sentinel fishery, with a tagging component, had already begun. Catches are being distributed over time with two seasons – one in July and the other from mid-September to the end of October. All fishing is restricted to no more than 12 miles from shore. Limits have been put in place on the amount of gear permitted by each fisherman (6 gillnets of 50 fathoms or 2,000 hooks). Also, gillnet mesh is regulated to have a minimum (5½") and maximum (6½") size to protect both small fish and larger spawning fish. There will be 100% dockside monitoring of all catches.

It is hoped that the data compiled from this limited fishery coupled with data from the various scientific components recommended by the FRCC will provide adequate data to provide more precise estimates of inshore biomass for this stock in future.

The June 1999 Report of the NAFO Scientific Council (Summary Sheet) states that "there are at present very few cod in the offshore compared to any time prior to 1993. There is evidence of denser aggregations in the inshore. Several lines of evidence, including results from genetic and tagging studies, indicate that the cod currently inshore may remain there throughout the year." It went on to state that "however, genetic studies were inconclusive and did not support the hypothesis of separate inshore and offshore stocks."

The Report (Summary) further states that "the biomass index for the offshore from the autumn research survey in Divisions 2J+3KL declined abruptly in the early 1990s. The 1998 estimate is close to the value from the previous year and extremely low compared to the 1980s. The biomass index from the spring research vessel survey in Division 3L in 1998 is half the value from 1997 and extremely low compared to the 1980s. The level of biomass in the inshore remains uncertain."

The Report goes on to state the "the stock as a whole remains at a very low level. In the offshore there are no signs of recovery. The biomass is very small with few mature fish. Year classes recruiting in the 1990s have been extremely weak."

At their recent meeting, the NAFO Scientific Council reached the same conclusion as Canadian scientists - in the offshore there are no signs of recovery.

In summary, what Canada has done, is set a cap of 9,000t for the inshore fishery (i.e. participation is restricted to vessels less than 65 feet in length and the fishery is restricted to the 12 mile limit) and put in place a variety of measures for this fishery that will lead to further beneficial information that can be used by scientists in future assessments. The majority of the inshore vessels in Newfoundland are less than 35 feet in length and fish in the many coves and bays around Newfoundland.

On July 16, 1999, the Executive Secretary sent all Contracting Parties a copy of a letter from Mr. Chamut and the Press Release announcing Canada's decision along with an outline of the management measures put in place for this fishery (GF/99-429).