# SUBMISSION TO THE NUNAVUT WILDLIFE MANAGEMENT BOARD

## **FOR**

Information: X Decision:

**Issue:** Information regarding plans for consultation and decision-making regarding the possible addition of the Lumpfish to the List of Wildlife Species at Risk on the *Species at Risk Act* (SARA).

## **Background:**

As per 3.5 of the Harmonized Listing Process, the Department of Fisheries & Oceans (DFO) is informing the Nunavut Wildlife Management Board (NWMB) of the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) assessment results and a DFO intent to consult on the Lumpfish (*Cyclopterus lumpus*) (Figure 1).

## Lumpfish

This marine fish species is broadly distributed across the Northwest Atlantic, but rarely occurs in the Arctic. Only 37 captures have been recorded in Nunavut waters. Directed commercial fishery landings in eastern Canada have declined sharply since 2005, in spite of high market demand for Lumpfish roe. There have been declines in abundance of about 58% indicated in bottom trawl surveys over 19-20 years, conducted in the core part of its Canadian range (off southern Newfoundland). However, abundance appears to have remained stable across other parts of the Canadian range such as the northern Gulf of St. Lawrence, making recolonization possible.

The Lumpfish was considered by COSEWIC in November 2017 and designated as Threatened.



Figure 1: Photo of the Lumpfish (*Cyclopterus lumpus*) (from COSEWIC 2018).

## **Significance**

Beginning in 1969, a fishery for roe was developed off Newfoundland when depletions in sturgeon (Acipenseridae) stocks coupled with an increase in world consumption of caviar created a market for a sturgeon caviar substitute. Canada was the leading exporter of Lumpfish roe during the 1980s and 1990s. Lumpfish (wild-sourced and hatchery reared) are being used to control sea lice at some Newfoundland and Labrador salmon aquaculture sites.

### **Distribution**

Lumpfish are distributed demersally and pelagically in the North Atlantic Ocean. In the western Atlantic, they are occasionally caught up to 65°N in Davis Strait but are more common further south with the highest estimates of abundance in waters surrounding the island of Newfoundland (Figure 2).

Based on bottom surveys, Lumpfish are only occasionally found in offshore waters of the Davis Strait as far north as 65° N. Of 27 survey sets conducted during 2005-2014 from 58° N to 66° 15' N, only 0.8% contained Lumpfish, mainly single captures. Two specimens were captured in each of Ungava Bay and Hudson Strait. In Hudson Bay, three juveniles and five juvenile specimens were reported.

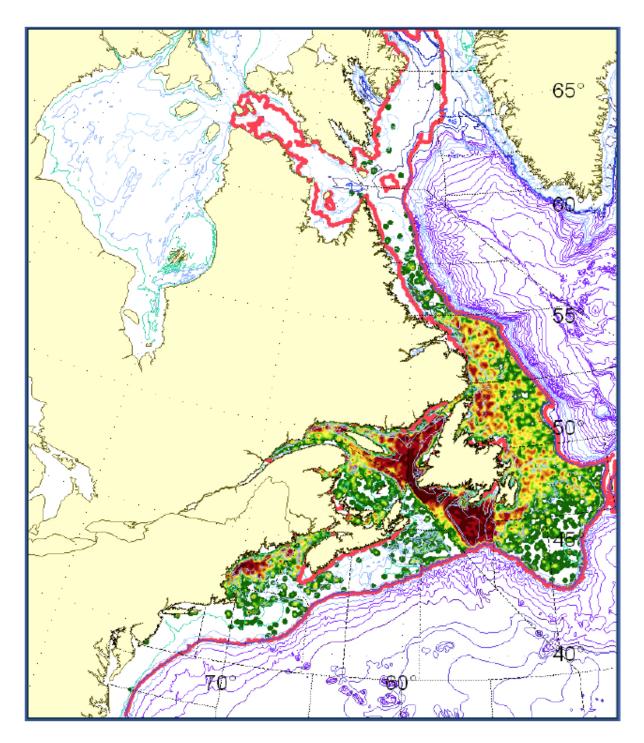
Lumpfish are associated with diverse habitats, being found on the bottom and in the water column during different life stages and seasons. Females lay eggs in inshore nests established by males around rocky areas and in crevices, and the males guard the eggs. Young of the year inhabit near-surface waters often attached to or under floating seaweed. Adult Lumpfish are semi-pelagic, spending a greater portion of their time near the bottom. At all stages, Lumpfish are often observed adhering to stones, lobster pots, seaweed or other objects by means of the pelvic adhesive disk, thereby making use of complex benthic structure to prevent drift in the currents.

Key factors that may constitute threats to Lumpfish include fishing, change in habitat and seismic exploration. Young Lumpfish are a prey item for Thorny Skate, and sharks. Sperm Whales and seals prey upon adult Lumpfish although the effects of predation are unknown.

#### Requirements for Consultation and Approval

Article 5.2.34 (f) of the Nunavut Land Claims Agreement states that the NWMB shall, at its discretion, approve the designation of rare, threatened or endangered species. As well, Section 27 (2) (c) of the SARA requires that before making a recommendation as to whether or not to add a species at risk to Schedule 1, the Minister must consult the Board for species found in an area in respect of which the Board is authorized by a land claims agreement to perform its functions.

Due to their scarcity in Nunavut, as well as their jelly like flesh, Lumpfish have probably never been harvested nor eaten by Inuit. However, because there is a possibility they have, DFO will be conducting pre-consultations and possible consultations with communities to hear the views regarding the possible addition of Lumpfish to the List of Wildlife Species at risk.



**Figure 2:** Proportion of sets in a given area containing Lumpfish in Canadian and USA survey sets from 1970 to 2014. Red line represents extent of the surveys. Dark brown areas represent where sets containing Lumpfish were most dense, green least dense, blank areas inside the red line indicate where no Lumpfish were captured.

## **Consultation and Approval:**

DFO will be issuing a Response Statement for the Lumpfish within 90 days after the final assessment report is provided to the Minister by COSEWIC. The Response Statements will outline how the Minister intends to respond to COSEWIC's assessment and, to the extent possible, provide timelines for action.

Due to their rare appearance in Nunavut waters, DFO is planning to ask the following Hunters and Trappers Organizations (HTOs) if they wish to be consulted on Lumpfish prior to doing any actual consultation;

Sanikiluaq HTA, Arviat HTO, Whale Cove HTO, Rankin Inlet HTO, Chesterfield Inlet HTO, Coral Harbour HTO, Cape Dorset HTO, Kimmirut HTO, Iqaluit HTA, Pangnirtung HTA, and Qikiqtarjuaq HTA

If there is no interest, we will not be consulting with any communities. If there is interest, consultations will take place next year (2021) to ensure that any listing decision is made in full consideration of the views of Inuit. Comments received will be used by the Minister to decide whether to recommend legal listing of the Lumpfish. A consultation summary will be provided to the NWMB in or about September 2021.

## **Approval**

After public consultations have been completed, DFO will provide the Board with a summary of the community consultations for the Lumpfish. At a later date we will inform the Board what the Minister plans to recommend to the Governor-in-Council with regards to listing. At that time DFO will ask the Board whether or not it wishes to express an opinion on listing.

## Prepared by:

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#### Date:

October 12, 2020