

**44th ANNUAL MEETING OF NAFO - SEPTEMBER 2022****Measure to Conserve Greenland Sharks*****Explanatory memorandum***

Reflecting the foundational commitment of NAFO to the ecosystem-based approach to fisheries management, the United States proposes a measure for the conservation of the Greenland shark (*Somniosus microcephalus*).

In 2017, the Scientific Council reported that Greenland sharks warrant precautionary consideration due to their unknown stock status in the NAFO Regulatory Area (NRA) and their long lifespan, extremely delayed maturity, and low fecundity which make them more susceptible to overfishing. The Scientific Council noted that Greenland sharks were assessed by the IUCN as “Near Threatened” on the Red List based primarily on their biological vulnerability. The level of threat has since been elevated through the 2019 reassessment as “Vulnerable” (considered “threatened” under IUCN criteria).

In NAFO regulatory waters, there are no directed fisheries on Greenland sharks but they are caught incidentally. The Scientific Council contended that “a prohibition on retention and directed fishing for Greenland sharks is advised, along with the implementation of bycatch reduction measures.” In 2018, NAFO agreed to prohibit directed fishing on Greenland sharks, as well as requiring vessels to take all reasonable efforts to minimize their incidental catch and mortality. In conjunction with this, Contracting Parties committed to “*report to WG-BDS on their efforts to minimize incidental catches and mortalities of Greenland sharks in the NAFO Convention Area, including amounts of Greenland sharks released and retained 2019-2021.*”

The Scientific Council was further requested to “*identify areas and times where bycatch and discards of Greenland sharks have a higher rate of occurrence.*” The Scientific Council provided this analysis in its 2021 report, which also cautioned that limited at-sea data could affect the ability to develop spatial or temporal fishing closures. Considering this significant limitation, the Scientific Council suggests that alternative measures could include a) live release and care in handling; b) gear modifications; c) shark bycatch limits; and/or d) reductions in fishing effort. Again, however, we are limited with at-sea observations to inform these options.

It is very difficult to identify whether a Greenland shark caught as bycatch is alive, dead or dying. These sharks can appear dead when caught but are actually alive. Further, the report of the SC meeting from June 2018 (NAFO SCS Doc. 18-19) provided insight on Greenland shark bycatch mortality, and to illustrate, Greenland shark bycatch from a 10 – 11-hour trawl tow had a 15% survival rate.

Given the immediate threat to this species, and with the limited information available to inform the development of these alternative management options, Canada and the United States are proposing a full ban on the retention and landings of Greenland shark, in line with the Scientific Council’s 2018



advice, until such time that effective management measures to address the bycatch of this species are adopted. Recognizing the difficulty of identifying whether the bycaught Greenland shark is alive or dead, and given that bycaught sharks can and do survive, the underlying assumption should be, barring clear evidence that the shark is dead (eg significant physical trauma), that the Greenland shark is still alive. We understand that some Contracting Parties have domestic landing obligation regulations for dead or dying stocks and this proposal includes provisions for those vessels. In addition, and in support of these actions, the Scientific Council has made several recommendations to increase and improve data collection of Greenland sharks that STACTIC is working towards adopting through the NAFO observer program.

Proposal

Reaffirming NAFO's commitment to ecosystem and science-based management;

Concerned that the IUCN Red List status of Greenland sharks is "Vulnerable" and therefore "threatened" and that the stock status of Greenland sharks in the NRA is unknown;

Recognizing the Scientific Council's advice on Greenland sharks, including that "*management actions should keep fishing mortality as close to zero as possible to ensure that there will be a very low probability that biomass will decline within the foreseeable future*" and specifically recommending a prohibition on retention;

Noting the SC's reiterated advice for reporting of all shark bycatch by species from all fisheries, including shark numbers, sex, total and fork length measurements (when feasible without causing undue harm), and bycatch discard disposition (*i.e.*, dead or alive) in all fisheries, and the recommendation that management measures be applied consistently across the NAFO Convention Area owing to the species' broad distribution;

Further noting that Greenland sharks can and do survive being caught as bycatch in conjunction with the extreme difficulty in determining if a Greenland shark is alive, dying or dead;

Additionally recalling that Article 12 calls upon Contracting Parties to encourage vessels to release sharks alive, especially juveniles that are not intended for use as food or subsistence, and further requires the release of living Greenland sharks in a manner that causes the least amount of harm;

Recognizing the reply from STACTIC to the request from the Commission with regard what control elements would be necessary should NAFO decide to adopt a landing obligation policy in order to encompass ongoing discussions in various NAFO bodies dealing with measures on discards.

Also recognizing the need for further work in NAFO bodies with regard to the consideration of introducing a landing obligation policy, noting in particular that one of the most important aspects of a landing obligation policy are measures to avoid or otherwise prevent unwanted catches, such as bycatches and undersized fish.

Committed to continue working towards the consideration of the feasibility of landing obligation policy, in particular with regard to measures to avoid or otherwise prevent unwanted catches, as well as monitoring, control and surveillance elements to ensure compliance.

Thereby recommends that Article 12 (1) of NAFO's Conservation and Enforcement Measures be amended to include the following:

(d) prohibit fishing vessels flying its flag from conducting a directed fishery for, retaining, transshipping, or landing part or whole of a Greenland shark (*Somniosus microcephalus*) in the Regulatory Area

- d. Bis) Notwithstanding the provisions in paragraph (d) above, Contracting Parties with applicable domestic law that requires a general discard ban or that dead fish be landed may, in accordance with their national law and provided that the fish is dead, retain on board and land incidental bycatch of Greenland sharks. Fishermen are prohibited from drawing any commercial value from such fish.

To facilitate the identification of areas and times where bycatch and discards of Greenland sharks have a higher rate of occurrence, Contracting Parties are reminded of their commitment to report on their efforts to minimize incidental catches and mortalities of Greenland sharks, including amounts released and retained. Contracting Parties with domestic laws reflected in paragraph 12(d.bis) are further encouraged to submit photo of any landed shark, in addition to the total length measurements, weight, fork length, and sex should to the Executive Secretary, who should subsequently share with the Scientific Council.

Further recommends that the Scientific Council advise the Commission, at its 2024 Annual Meeting (if possible given capacity limitations), on other appropriate management options for the bycatch of Greenland sharks in the NRA, to inform the Commission's consideration of additional measures for their conservation.