



CNL(15)11

***Request for Scientific Advice from ICES***

**1. With respect to Atlantic salmon in the North Atlantic area:**

- 1.1 provide an overview of salmon catches and landings by country, including unreported catches and catch and release, and production of farmed and ranched Atlantic salmon in 2015<sup>1</sup>;
- 1.2 report on significant new or emerging threats to, or opportunities for, salmon conservation and management<sup>2</sup>;
- 1.3 provide a review of examples of successes and failures in wild salmon restoration and rehabilitation and develop a classification of activities which could be recommended under various conditions or threats to the persistence of populations<sup>3</sup>;
- 1.4 advise on possible effects of salmonid aquaculture on wild Atlantic salmon populations focusing on the effects of sea lice, genetic interactions and the impact on wild salmon production<sup>4</sup>;
- 1.5 provide a time series of numbers of river stocks with established CLs and trends in numbers of stocks meeting their CLs by jurisdiction;
- 1.6 provide a compilation of tag releases by country in 2015; and
- 1.7 identify relevant data deficiencies, monitoring needs and research requirements.

**2. With respect to Atlantic salmon in the North-East Atlantic Commission area:**

- 2.1 describe the key events of the 2015 fisheries<sup>5</sup>;
- 2.2 review and report on the development of age-specific stock conservation limits;
- 2.3 describe the status of the stocks;
- 2.4 advise on the source of uncertainties and possible biases in the assessment of catch options for the Faroes fishery resulting from the use of samples and data collected in the fishery in the 1980s and 90s. Should it be considered that biases are likely to compromise the catch advice, advise on any new sampling which would be required to improve these assessments;

*In the event that NASCO informs ICES that the Framework of Indicators (FWI) indicates that reassessment is required:\**

- 2.5 provide catch options or alternative management advice for 2016/17-2018/19 fishing seasons, with an assessment of risks relative to the objective of exceeding stock conservation limits, or pre-defined NASCO Management Objectives, and advise on the implications of these options for stock rebuilding<sup>6</sup>; and

2.6 update the Framework of Indicators used to identify any significant change in the previously provided multi-annual management advice.

**3. With respect to Atlantic salmon in the North American Commission area:**

3.1 describe the key events of the 2015 fisheries (including the fishery at St Pierre and Miquelon)<sup>5</sup>;

3.2 update age-specific stock conservation limits based on new information as available;

3.3 describe the status of the stocks;

*In the event that NASCO informs ICES that the Framework of Indicators (FWI) indicates that reassessment is required:\**

3.4 provide catch options or alternative management advice for 2016-2019 with an assessment of risks relative to the objective of exceeding stock conservation limits, or pre-defined NASCO Management Objectives, and advise on the implications of these options for stock rebuilding<sup>6</sup>; and

3.5 update the Framework of Indicators used to identify any significant change in the previously provided multi-annual management advice.

**4. With respect to Atlantic salmon in the West Greenland Commission area:**

4.1 describe the key events of the 2015 fisheries<sup>5</sup>;

4.2 describe the status of the stocks<sup>7</sup>;

4.3 compare contemporary indices of abundance of salmon in the West Greenland fishery to historical estimates and suggest options for improving future estimates;

4.4 estimate the effects of modifying the timing of the West Greenland salmon fishery, including altering the start date, with regard to harvest and exploitation of contributing stocks;

4.5 advise on changes to temporal and/or spatial fishery patterns that may provide increased protection for weaker stocks;

*In the event that NASCO informs ICES that the Framework of Indicators (FWI) indicates that reassessment is required:\**

4.6 provide catch options or alternative management advice for 2016 - 2019 with an assessment of risk relative to the objective of exceeding stock conservation limits, or pre-defined NASCO Management Objectives, and advise on the implications of these options for stock rebuilding<sup>6</sup>; and

4.7 update the Framework of Indicators used to identify any significant change in the previously provided multi-annual management advice.

**Notes:**

1. *With regard to question 1.1, for the estimates of unreported catch the information provided should, where possible, indicate the location of the unreported catch in the following categories: in-river; estuarine; and coastal. Numbers of salmon caught and released in recreational fisheries should be provided.*

2. *With regard to question 1.2, ICES is requested to include reports on any significant advances in understanding of the biology of Atlantic salmon that is pertinent to NASCO, including information on any new research into the migration and distribution of salmon at sea and the potential implications of climate change for salmon management.*

3. *With regards to question 1.3, NASCO is particularly interested in case studies highlighting successes and failures of various restoration efforts employed across the North Atlantic by all Parties/jurisdictions and the metrics used for evaluating success or failure.*
4. *In response to question 1.4, ICES is requested to review and update the findings of the ICES/NASCO symposium on the impacts of aquaculture and the request for advice from OSPAR in June 2010.*
5. *In the responses to questions 2.1, 3.1 and 4.1, ICES is asked to provide details of catch, gear, effort, composition and origin of the catch and rates of exploitation. For homewater fisheries, the information provided should indicate the location of the catch in the following categories: in-river; estuarine; and coastal. Information on any other sources of fishing mortality for salmon is also requested. For 4.1 ICES should review the results of the recent phone surveys and advise on the appropriateness for incorporating resulting estimates of unreported catch into the assessment process.*
6. *In response to questions 2.5, 3.4 and 4.6, provide a detailed explanation and critical examination of any changes to the models used to provide catch advice and report on any developments in relation to incorporating environmental variables in these models.*
7. *In response to question 4.2, ICES is requested to provide a brief summary of the status of North American and North-East Atlantic salmon stocks. The detailed information on the status of these stocks should be provided in response to questions 2.3 and 3.3.*

**\* The aim should be for NASCO to inform ICES by 31 January of the outcome of utilising the FWI**

**Attendees:**

Konstantin Drevetnyak, (NEAC, manager representative)

Peder Fiske (NEAC, scientist representative)

Tony Blanchard (NAC, manager representative)

Tim Sheehan, (NAC, scientist representative)

Katrine Kaergaard (WGC, manager representative)

Ted Potter (WGC, scientist representative)

Ian Russell (ICES representative, Observer)

Patrick Gargan Coordinator

**New questions, originator:**

- 1.4, Norway
- 1.5, EU
- 2.4, EU
- 4.3, WGC
- 4.4, NGOs