

CNL(10)10

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, including unreported catches by country and catch and release, and production of farmed and ranched Atlantic salmon in 2010¹;
- 1.2 report on significant new or emerging threats to, or opportunities for, salmon conservation and management²;
- 1.3 report on significant advances in our understanding of associations between changes in biological characteristics of all life stages of Atlantic salmon and ecosystem changes with a view to better understanding the dynamics of salmon populations³;
- 1.4 further develop approaches to forecast pre-fishery abundance for North American and European stocks with measures of uncertainty;
- 1.5 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;⁴
- 1.6 provide a compilation of tag releases by country in 2010 and advise on the utility of maintaining this compilation;
- 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 2010 fisheries⁵;
- 2.2 review and report on the development of age-specific stock conservation limits;
- 2.3 describe the status of the stocks and provide annual catch options or alternative management advice for 2012-2014, with an assessment of risks relative to the objective of exceeding stock conservation limits and advise on the implications of these options for stock rebuilding⁶;
- 2.4 further investigate opportunities to develop a framework of indicators or alternative methods that could be used to identify any significant change in 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 2010 fisheries (including the fishery at St Pierre and Miquelon)⁵;
- 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 annual catch options or alternative management advice for 2011-2014 with an assessment of risks relative to the objective of exceeding stock conservation limits and advise on the implications of these options for stock rebuilding⁶.

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

- 4.1 describe the key events of the 2010 fisheries⁵;
- 4.2 describe the status of the stocks⁷;

In the event that NASCO informs ICES that the framework of indicators (FWI) indicates that reassessment is required:*

- 4.3 provide annual catch options or alternative management advice for 2010-2012 with an assessment of risk relative to the objective of exceeding stock conservation limits and advise on the implications of these options for stock rebuilding⁶.

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.*
2. *With regard to question 1.2, ICES is requested to include information on any new research into the migration and distribution of salmon at sea and on the potential impacts of the development of alternative/renewable energy on Atlantic salmon.*
3. *With regard to question 1.3, there is particular interest in determining if declines in salmon abundance coincide with changes in the biological characteristics of juveniles in fresh water or are modifying characteristics of adult fish (size at age, age at maturity, condition, sex ratio, growth rates, etc.) and with environmental changes including climate change.*
4. *With regard to question 1.5, ICES is requested to include information on best solutions for fish passage and associated mitigation efforts with examples of practices in member countries.*
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. Any new information on non-catch fishing mortality, of the salmon gear used, and on the by-catch of other species in salmon gear, and on the by-catch of salmon in any existing and new fisheries for other species is also requested.*
6. *In response to questions 2.3, 3.4 and 4.3, provide a detailed explanation and critical examination of any changes to the models used to provide catch advice.*
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**