



Agenda item 6.2
For information

Council

CNL(16)15

Programme for the Theme-based Special Session

***Addressing impacts of salmon farming on wild Atlantic salmon:
challenges to, and developments supporting, achievement of NASCO's
international goals***

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Addressing impacts of salmon farming on wild Atlantic salmon: challenges to, and developments supporting, achievement of NASCO's international goals

A Theme-based Special Session of the Council of NASCO
Wednesday 8 June 2016

Background

The objective of Theme-based Special Sessions is to allow for greater exchange of information on a topic related to NASCO's agreements and guidelines. The first one-day session was held in 2014 on the topic of '*Management of single and mixed stock fisheries, with particular focus on fisheries on stocks below their conservation limit*'. Last year, a half-day session was held on the topic of '*Maintaining and improving river connectivity with particular focus on impacts of hydropower*'. The Council decided to hold a one day Theme-based Special Session during the Thirty-Third (2016) Annual Meeting on the theme of developments in relation to minimising the impacts of farmed salmon on wild salmon stocks. A Steering Committee was appointed (Willie Cowan (European Union), Kim Damon-Randall, Chair, (USA), Paddy Gargan (European Union), Heidi Hansen (Norway) and Paul Knight (NGOs)) to work with the Secretary in developing a Programme and Objectives for the session. The Steering Committee will also prepare a report of the session following the 2016 Annual Meeting.

The NASCO Convention requires that the Organization takes into account the best scientific evidence available to it. In relation to the topic of the Theme-based Special Session, NASCO has sought advice from ICES, held various working group meetings and co-convened major international symposia with ICES to review the scientific evidence of impacts of salmon farming on the wild stocks and their implications for management, most recently in 2005. In the light of the information presented in the advice and at the workshops/symposia, NASCO has adopted agreements and guidelines designed to minimise impacts on the wild salmon stocks. These include the *Resolution by the Parties to the Convention for the Conservation of Salmon in the North Atlantic Ocean to Minimise Impacts from Aquaculture, Introductions and Transfers, and Transgenics on the Wild Salmon Stocks*, CNL(06)48, the 'Williamsburg Resolution' adopted in 2003 and amended in 2004 and 2006, and *Guidance on Best Management Practices to Address Impacts of Sea lice and Escaped Farmed Salmon on Wild Salmon Stocks*, SLG(09)5. This guidance was developed and agreed through the NASCO/ISFA Liaison Group and adopted in 2009. Under this guidance, the international goals are:

- 100% of farms to have effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild salmonids attributable to the farms;
- 100% farmed fish to be retained in all production facilities.

In the light of this guidance, the Steering Committee has decided that the title for the 2016 Theme-based Special Session will be '*Addressing impacts of salmon farming on wild Atlantic salmon: challenges to, and developments supporting, achievement of NASCO's international goals*'.

In 2013, NASCO adopted an ‘Action Plan for taking forward the recommendations of the External Performance Review and the review of the ‘Next Steps’ for NASCO’, CNL(13)38. This states that aquaculture remains a focus area for NASCO in terms of concerns over impacts on wild Atlantic salmon and it notes that, in general, NASCO has established the goal to minimise adverse impacts to wild stocks from aquaculture activities. However, the Action Plan recognises that it is for the Parties and jurisdictions to identify and implement appropriate measures to meet this goal, with progress being tracked through Implementation Plans and Annual Progress Reports. The 2013 – 2018 Implementation Plan template, agreed by the Council, seeks the following information relating to salmon farming:

- What is the current extent of freshwater and marine salmonid aquaculture?
- What is the approach for determining the location of aquaculture facilities in (a) freshwater and (b) marine environments to minimise the risks to wild salmon stocks?
- What progress can be demonstrated towards the achievement of the international goals for effective sea lice management such that there is no increase in sea lice loads or lice-induced mortality of wild stocks attributable to sea lice?
- What progress can be demonstrated towards the achievement of the international goals for ensuring 100% containment in (a) freshwater and (b) marine aquaculture facilities?
- What is the policy/strategy on use of transgenic salmon?

In its reports to the Council, the Implementation Plan/Annual Progress Report Review Group noted that for some Parties/jurisdictions, providing quantitative data to demonstrate progress towards the international goals for sea lice and containment is challenging. The Review Group concluded that the Implementation Plans and Annual Progress Reports for all Parties and jurisdictions with salmon farming should present quantitative data in a transparent manner to demonstrate progress towards the international goals for sea lice and containment rather than describing only the management measures in place.

Objectives of the Theme-based Special Session

The Steering Committee has agreed that the overarching objective for the 2016 Theme-based Special Session is to facilitate an exchange of information relating to protecting wild Atlantic salmon stocks from impacts of salmon farming and to promote sustainable salmon farming practices by:

- reviewing the latest scientific information on the impacts of salmon farming on the wild salmon stocks, with particular focus on the impacts of sea lice and escaped farmed salmon;
- reviewing progress and sharing best practice on approaches, including regulatory frameworks, to implement effective sea lice management at salmon farms;
- reviewing progress and sharing best practice on approaches, including regulatory frameworks, to ensure that 100% of farmed fish are retained in both freshwater and marine production facilities; and
- reviewing new developments that could facilitate achievement of NASCO’s international goals for sea lice and containment including technology development (e.g. cage design and closed containment), rearing strategies, access to a broad suite of therapeutants, biological controls, monitoring regimes, training and recapture efforts.

Programme

A full day (0900 - 1745) has been allocated to the Theme-based Special Session on Wednesday 8 June. The intention is that written papers for each presentation will be made available to, and distributed by, the Secretariat prior to the Annual Meeting. These papers will not be subject to evaluation but, following the Annual Meeting, the Steering Committee will prepare a report of the Special Session, synthesising the management implications.

Presentations

Presentations have been allocated either 20 or 30 minutes to include 5 minutes for discussion. There will also be periods for general discussion. The Steering Committee has requested that in the presentations by the Parties/jurisdictions in the session on '*Progress and challenges in achieving NASCO's international goals*' general background information be kept to a minimum and that specific information is provided to address the objectives of the session. In particular, the Steering Committee requests that each presentation by Parties/jurisdictions:

- provide quantitative information to demonstrate whether or not there has been progress towards NASCO's international goals for sea lice and escaped farmed salmon;
- identify particular challenges in achieving NASCO's international goals for sea lice and escaped farmed salmon;
- describe the approach to verifying compliance with regulations and codes of practice in relation to sea lice and escaped farmed salmon; and
- describe methods used to support innovation to develop alternative production techniques to promote sustainable salmon farming.



Addressing impacts of salmon farming on wild Atlantic salmon: challenges to, and developments supporting, achievement of NASCO's international goals

Programme

| | Title | Contributor |
|---|---|---|
| 0900 - 0910 | Introduction | President |
| <i>Scientific background</i> | | |
| 0910 - 0940 | Possible effects of salmonid aquaculture on wild Atlantic salmon populations: the effects of sea lice, genetic interactions and the impacts on wild salmon production | Eskild Kirkegaard, Chair of the ICES Advisory Committee (ACOM), Denmark |
| 0940 - 1010 | Advances in understanding the impacts of sea lice on wild Atlantic salmon | Bengt Finstad, Norwegian Institute for Nature Research (NINA), Norway |
| 1010 - 1040 | Advances in understanding the impacts of escaped farmed salmon on the genetic integrity of wild Atlantic salmon | Kjetil Hindar, Norwegian Institute for Nature Research (NINA), Norway |
| 1040 - 1100 | Tea/coffee break | |
| <i>Progress and challenges in achieving NASCO's international goals</i> | | |
| 1100 - 1120 | Norway | Yngve Torgersen, Ministry of Trade, Industry and Fisheries, Norway |
| 1120 - 1140 | UK (Scotland) | Alastair Mitchell, Marine Scotland, UK |
| 1140 - 1200 | Canada | Éric Gilbert, Fisheries and Oceans Canada, Canada |
| 1200 - 1220 | Faroe Islands | Roar Heini Olsen, Faroese Food and Veterinary Authority, Faroe Islands |
| 1220 - 1350 | Lunch | |
| 1350 - 1410 | Ireland | Cathal Gallagher, Inland Fisheries Ireland, Ireland |
| 1410 - 1430 | United States | Rory Saunders, NOAA National Marine Fisheries Service, USA |
| 1430 - 1500 | General Discussion | |
| 1500 - 1520 | Tea/Coffee Break | |
| <i>New developments that could affect achievement of NASCO's international goals</i> | | |
| 1520 - 1550 | Drug resistance in sea lice, integrated lice management strategies and emerging salmon disease problems | Armin Sturm, Institute of Aquaculture, UK |
| 1550 - 1610 | Development of lice dispersal models and their utility in predicting impacts on wild Atlantic salmon | Ørjan Karlsen, Institute of Marine Research, Norway |
| 1610 - 1630 | Closed containment: recent developments, costs and benefits | Ivar Warrer-Hansen, Inter Aqua Advance, Denmark |
| 1630 - 1645 | The NGO perspective | Niall Greene, Salmon Watch Ireland, Ireland |
| 1645 - 1730 | General Discussion | |
| 1730 - 1745 | Concluding remarks & Close of Theme-based Special Session | Steering Committee Chair |