

SAG(12)3

Terms of Reference for the Sub-Group on the Future Direction of Research on Marine Survival of Salmon

Background

The International Atlantic Salmon Research Board (IASRB) was established by the Council of NASCO, to promote collaboration and cooperation on research into the causes of marine mortality of Atlantic salmon and the opportunities to counteract this mortality (ICR(06)05). The IASRB established a Scientific Advisory Group (SAG) to assist in identifying research gaps and priorities and to develop recommendations for enhanced coordination of existing research, calls for proposals, recommendations for research and other activities that may be supported by the Board.

The first task the IASRB undertook was to develop an inventory of existing research on marine mortality of Atlantic salmon so as to facilitate improved coordination, to identify gaps and to develop priorities; this inventory has been updated annually. The IASRB also commissioned the development of an international programme of cooperative research on salmon at sea, the SALSEA programme. This programme contains a mix of freshwater, estuarine, coastal and offshore elements, ensuring a comprehensive overview of factors which may affect the marine mortality of Atlantic salmon. However, the IASRB agreed that their initial priority should be to support the implementation of the marine survey aspect of SALSEA, because this was where there was greatest need for international collaboration and funding.

With the completion of the SALSEA-Merge, SALSEA North America and SALSEA West Greenland field programmes, it is appropriate for the IASRB and SAG to review and evaluate their roles in supporting NASCO's objective to conserve, restore, enhance and rationally manage Atlantic salmon through international cooperation taking account of the best available scientific information. A Sub-Group will therefore be established to evaluate recent scientific progress and provide guidance for how the SAG can remain an effective and productive body into the future. The recommendations provided by the Sub-Group may also provide a basis for discussions on the future of the IASRB.

Terms of Reference:

- Review the outcome of recent scientific investigations and summarise the findings which have significant management implications.
- Review the Inventory of Marine Research and identify opportunities for collaboration within the suite of ongoing projects to facilitate progress with identifying the major causes of salmon mortality at sea.
- Based on the inventory and the results of recent scientific studies published in the literature, identify gaps in research efforts and knowledge which may be important for advising on salmon management actions.**
- Review the larger SALSEA project and advise on a "road map" to complete other elements of the research previously identified.
- Arising from these reviews, advise on possible future role of the SAG

** The Sub-Group should focus its gap analysis and subsequent recommendations on applied research requirements for management. If gaps are identified, recommendations to rectify the gap should be provided and evaluated in terms of the feasibility of carrying out the specific research. Additionally, the Sub-Group should evaluate if the gap can be filled from existing programmes, from a new programme based on current technology or if new tools and advances are needed.

The Sub-Group is expected to focus on applied science related topics, but participation of managers is needed to ensure that critical management issues are addressed. Highest priority should be given to issues requiring or benefitting from international collaboration. Where management issues are identified and science needs/solutions are suggested, the Sub-Group should consider how the results are most likely to be integrated into advice and those areas that are likely to have the most immediate effects on management actions. While the Sub-Group should focus on salmon, recent changes in marine ecology, particularly in the pelagic ecosystems, caused by global climate change, should also be considered as information from other scientific disciplines can inform Atlantic salmon science and management.

The Sub-Group will require a 2-3 day working meeting to be facilitated by the NASCO Secretariat (location to be determined). Participation should be between 6-8 people, including scientists, managers and a representative from the NGO community. Representation from both North America and Europe is critical. A significant amount of preparation can be undertaken prior to this working meeting to ensure that the time spent at the meeting is productive. The Sub Group should take account, *inter alia*, of the following documents:

- Original SALSEA research programme
- EU SALSEA Merge proposal and final report
- Salmon Summit proceedings (ICES JMS)
- Salmon Summit Convener's report
- Current status of SALSEA projects
- Inventory of Marine Research
- National initiatives
- Current management priorities indicated by Parties
- Original IASRB and SAG Rules of Procedure and ToRs
- 2012 Reports of IASRB and SAG Meetings