

ICES WGERAAS REPORT 2013

SCICOM STEERING GROUP ON ECOSYSTEM FUNCTIONS (SSGEF)

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Working Group on the Effectiveness of Recovery Actions for Atlantic Salmon (WGERAAS)

18-22 February 2013

Belfast, UK



ICES

International Council for
the Exploration of the Sea

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Conseil International pour
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Executive Summary

The Working Group on the Effectiveness of Recovery Actions for Atlantic Salmon (WGERAAS) held its first meeting in Belfast (UK, Northern Ireland) from the 18th of February 2013, until the 22nd of February 2013.

The Terms of Reference (TORs) were to develop a classification system for recovery actions for Atlantic salmon, populate this with data on recovery actions, and to develop recommendations for future recovery actions based on the successes and failures of past actions.

The Working Group decided to address the TORs by constructing a database in which the impacts of various threats to populations and various recovery actions could be scored on a river-by-river basis. Once populated with data this database can be analysed in order to determine the impact of various threats to populations and the effects of various recovery actions on a range-wide scale. In addition it was recognized that the database would only provide a rough picture of the level of success of recovery actions, necessitating a more detailed approach to be developed alongside the database. It was agreed to focus this detailed approach on various well documented case studies. These case studies, taken from grey- or peer-reviewed sources in the literature, should provide the working group with sufficient information to determine under which conditions recovery actions are successful, and when not. Analysis and discussion of the above will result in recommendations on appropriate recovery / rebuilding actions for Atlantic salmon given threats to populations, status and life history.

WGERAAS reported on the results of the first meeting in Belfast to the Working Group North Atlantic Salmon (Copenhagen, March 3rd -12th, 2013). WGNAS has some concerns that the time frame to gather all required data would not be sufficient, and therefore suggested a year extension to WGERAAS. WGNAS also has some reservations regarding the database part of WGERAAS's chosen approach, specifically the scientific rigor of the method within and among contributors, potential issues with the quality and completeness of the answers, and how the data might be interpreted beyond the specific work of WGERAAS. WGNAS suggests WGERAAS put more emphasis on developing the case studies on recovery/restoration actions as a method to address the TORs.

WGNAS's recommendations were broadly accepted by WGERAAS. More emphasis will be given to the case studies, but not at the expense of the database, as well as an official request to ICES for a one year extension to the working group in order to give sufficient time to populate the database and gather case studies.

WGERAAS will next meet at ICES headquarters in Copenhagen, February 3rd - 7th, 2014.

1 Administrative Details

Working Group name

Working Group on the Effectiveness of Recovery Actions for Atlantic Salmon

Year of Appointment

2012

Reporting year within current cycle (1, 2 or 3)

1

Chair(s)

Dennis Ensing, UK (Northern Ireland)

Meeting venue

Belfast, UK (Northern Ireland)

Meeting dates

18-22/02/2013

2 Terms of Reference a) – d)

- a) develop a classification system for recovery / re-building programs for Atlantic salmon, including threats to populations, population status, life-history attributes, actions taken to re-build populations, program goals, and metrics for evaluating the success of re-building programs;
- b) populate the system by collecting data on recovery / re-building programs for Atlantic salmon populations from around the North Atlantic;
- c) summarize the resulting dataset to determine the conditions under which various recovery / re-building actions are successful and when they are not;
- d) provide recommendations on appropriate recovery / rebuilding actions for Atlantic salmon given threats to populations, status and life history.

3 Summary of Work Plan

Year 1

Provide a report outlining progress towards meeting the TORs and any significant findings regarding the current strategies for rebuilding salmon stocks – this report to be available to WGNAS in April 2013.

Year 2

Complete a comprehensive review of stock rebuilding practices noting success and failures and provide guidance on best practice for salmon stocks at different levels of conservation limit attainment.

Year 3

See section 6

Priority

NASCO has requested that ICES 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; and that this classification information on best solutions for fish passage and associated mitigation efforts with examples of practices in member countries.

Resource requirements

None other than the usual ICES secretarial support and coordination to produce the report.

Participants

Members of the WGNAS, WGBAST, WGAGFM, WGRECORDS, invited experts.

Secretariat facilities

None.

Financial

No financial implications.

Linkages to ACOM and groups under ACOM

The Study Group will have direct significance to ACOM in supporting the provision of advice, via WGNAS, to NASCO.

Linkages to other committees or groups

WGNAS, WGBAST, WGAGFM, WGRECORDS.

Linkages to other organizations

NASCO.

4 List of Outcomes and Achievements of the WG in this Delivery Period

(In bullet form, and as specific as possible – e.g. publications, advisory products, datasets, modelling outputs, methodological developments, etc. – these will be used by ICES structures to demonstrate delivery. Typically 1-2 pages)

- The WG developed a database to list stressors and (impact of) recovery actions for Atlantic salmon based on the NASCO Rivers Database and HELCOM SALAR Databank
- The WG developed a guide to assist regional experts populating the database
- The WG met for the first time in Belfast from February 18th to 22nd 2013
- The WG reported on the outcomes of the first meeting to the Working Group on North Atlantic Salmon (WGNAS) that met March 3rd-12th 2013 in Copenhagen
- WGNAS reported on the progress of WGERAAS to NASCO at the 2013 Annual Meeting in Drogheda, Ireland

5 Progress Report on ToRs and Workplan

At the first meeting in Belfast the WG agreed upon a general approach to address the WG's TORs. The need for a range-wide study on recovery actions for Atlantic salmon was apparent from the start. In order to get as much detail on as many rivers as possible a database based approach was adopted, where the impacts of a list of stressors or threats to populations could be scored for each individual river. A list of recovery actions will also be considered, scoring the impact of each action for each individual river. Once populated with data this database can be analysed in order to determine the impact of various stressors and the effects of various recovery actions on a large scale. In addition it was recognized that the database would only provide a rough picture of the success of recovery actions, necessitating a more detailed approach to be developed alongside the database. It was agreed to focus this detailed approach on various well documented case studies. These data rich studies, taken from grey- or peer-reviewed sources in the literature, should provide the WG with sufficient information to determine under which conditions recovery actions are successful, and when not.

The WG decided to address TOR 'a' by developing the database listing threats to populations (stressors) and undertaken recovery actions for all Atlantic salmon rivers in the North Atlantic and Baltic areas. Regional experts will be approached to populate the database for rivers in their specific area. The experts will be asked to provide their expert opinion on the impacts of a list of stressors and the effects of a list of recovery actions on a river-by-river basis. This will provide a broad overview of stressors/threats to populations and the effects of recovery actions throughout the range of Atlantic salmon; addressing TOR 'b'.

The WG is of the opinion that few recovery actions for Atlantic salmon are monitored and assessed properly, resulting in few data rich studies to assess. However, some well documented studies on recovery actions for Atlantic salmon exist and the WG sees these as good candidates for more in-depth case studies. These case studies should ideally cover the entire range of stressors and recovery actions listed in the database, and will be analysed and discussed in detail in order to assess the success of recovery actions under certain stressors to populations.

The broad overview provided by the database and the detail of the case studies should provide data to address TOR 'c', and ultimately TOR 'd'.

The outcomes of the WGERAAS meeting held in Belfast from February 18th -22nd 2013 were reported and discussed at the Working Group North Atlantic Salmon (Copenhagen, March 3rd-12th 2013). WGNAS welcomed the progress made by WGERAAS at its first meeting and noted that work to address the ToRs was at an early stage. WGNAS had some concerns that the time frame for WGERAAS to submit a final report might not be sufficient to gather all the data required to address the ToRs successfully. WGNAS suggests WGERAAS might want to consider an extra year to gather data and produce a final report. WGNAS also has some reservations regarding the database part of WGERAAS's chosen approach, specifically the scientific rigor of the method within and among contributors, potential issues with the quality and completeness of the answers, and how the data might be interpreted beyond the specific work of WGERAAS. WGNAS suggests WGERAAS put more emphasis on developing the case studies on recovery/restoration actions as a method to address the ToRs and in this regard offered to encourage the identification of case studies on re-

covery and restoration actions which may have occurred or are ongoing in their respective locations.

WGERAAS welcomed the suggestions and comments made by WGNAS. The WG proposed to focus more on developing the case studies, without abandoning the construction and population of the database. Also the suggestion of an extra year to complete the work was accepted by the WG as a necessary amendment to the work plan in order to successfully address the TORs.

6 Revisions to the Work Plan and Justification

Year 3

Complete a comprehensive review of stock rebuilding practices noting success and failures and provide guidance on best practice for salmon stocks at different levels of conservation limit attainment.

7 Next Meeting

Copenhagen, February 3rd - 7th 2014.

Annex 1: List of Participants

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