

CNL(04)12

Report of the Third Meeting of the International Atlantic Salmon Research Board

7 June 2004, Radisson SAS Saga Hotel, Reykjavik, Iceland

1. Opening of the meeting

- 1.1 The Chairman, Mr Jacque Robichaud, opened the meeting and welcomed Members of the Board, their scientific advisers and the representative of the accredited NGOs, Mr Chris Poupard, to Reykjavik.
- 1.2 A list of participants is contained in Annex 1.

2. Adoption of the agenda

- 2.1 The Board adopted its agenda, ICR(04)5 (Annex 2).

3. Inventory of Research

- 3.1 At its inaugural meeting the Board had developed an inventory of research related to salmon mortality at sea, CNL(01)21, which had been updated in 2003, ICR(03)3, and again in 2004, ICR(04)3. A summary of the most recently updated inventory had been made available to the ICES Working Group on North Atlantic Salmon for information purposes so as to assist it in identifying data deficiencies and research needs. This inventory had also been made available to the Board's Scientific Advisory Group (SAG) to assist it in identifying gaps in research and research priorities and to develop recommendations for enhanced coordination of existing research (see section 4 below).
- 3.2 The updated inventory includes a total of 43 projects with six projects having been completed since the last update and six new projects included. The new projects included research being undertaken in two EU Member States (France and Denmark) which had not previously provided information to the Board. The representative of the European Union advised the Board that he intended to check at the EU coordination meeting if other Member States (Finland, Germany, Spain, Sweden and Portugal) have relevant research that should also be included in the inventory. The total annual expenditure on the projects included in the inventory amounts to about £4.3 million but no costings were available for 7 of the projects. As requested, the Secretary had asked Members of the Board to provide details of research on salmon at sea being undertaken at universities and other non-governmental institutions for inclusion in the updated inventory. Of the new projects included, one is a collaborative venture between the Canadian government and a non-government organization while the remaining five projects appear to be exclusively government-funded. The SAG had indicated that any major projects in relation to mortality of salmon at sea undertaken by non-government institutions would probably involve collaboration with government scientists, and that Board Members would be aware of these projects.

3.3 The Board recognized that it needed to be able to demonstrate the progress that is being made in relation to advancing understanding of the causes of mortality of salmon at sea. The Board felt that it would be useful if the results of projects that had been completed could be collated so as to provide a status report of current understanding of the causes of mortality of salmon at sea. The Board agreed that completed projects currently annexed to the inventory should be included in the summary table of projects so as to better promote the achievements in research concerning mortality of salmon at sea. Not all of the completed projects presently contained a summary of the main research findings, partly because these may not have been published, but it was agreed that it would be useful if each completed project could contain some outline of the results obtained. A list of publications arising from the study could also be included. Consideration might also be given to developing a brochure about the research that had been undertaken by the Parties and previously included in the inventory and the results obtained. The SAG would be asked to advise the Board on those research projects which it considered have contributed significantly to understanding of the causes of mortality of salmon at sea.

4. Report of the Scientific Advisory Group

4.1 The report of the second meeting of the Board's Scientific Advisory Group (SAG) was presented by its Chairman, Mr David Meerburg (Canada), SAG(04)5, (Annex 3). The Group had reviewed the updated inventory of research and developed recommendations for enhanced coordination of research, reviewed research priorities, considered a progress report on the SALSEA project, considered further the call for research proposals, and made two proposals for workshops.

4.2 The Chairman of the SAG indicated that it would be beneficial to the group's work if each Party could nominate a representative(s) to the SAG. The Board recognized that it was important to have some continuity in the membership of the group and a point of contact for the Chairman. It was agreed that each Member of the Board and the NGO representative should advise the Secretariat of their representative(s). The Board agreed that meetings of the SAG should, wherever possible, be held in conjunction with the Board meetings.

4.2 The SAG had recommended that costing information should be included in Table 2 of the inventory and that a summary table showing costs by research topic area for each Party should be developed. The SAG had also proposed that before the inventory is made available on the Organization's website, the Members of the Board should be given the opportunity to update the information.

4.3 The SAG had previously recommended that the Board could play an important role in enhancing coordination and collaboration among scientists by, for example, facilitating an exchange of scientists or by organizing relevant workshops and symposia. The SAG recommended that a workshop on the development and application of data storage tags and other electronic tags in investigating the distribution and migration of salmon at sea be supported by the Board.

4.4 The SAG noted that to understand the causes of increased marine mortality of salmon at sea, the Board's first research priority should be to investigate the migration and

distribution of salmon at sea in relation to feeding opportunities and predation. Studies on by-catch should also be afforded a high priority. The SAG had received a report on the SALSEA project proposal which outlined a major multi-disciplinary programme of research into the mortality of salmon at sea. The SAG recommended that the Board consider supporting the further development of the SALSEA project so as to involve scientists from North America and more widely in Europe. This work might be achieved through a workshop over a period of 5 days, supported by the Board, the costs of which might be in the region of £15,000 - £20,000 if no more than two representatives from each NASCO Party and one representative from the NGOs were funded.

4.5 The Board discussed the possibility of holding both of the workshops proposed by the SAG in the same year. It was recognized that it was important to ensure that the research tools required such as DSTs were available for use when funds became available. However, further development of the SALSEA project would be of assistance in fund-raising activities and would provide a menu from which individual research projects could be selected as funds become available. The Board agreed that its first priority would be to hold a workshop to further develop the SALSEA project.

4.6 In the light of the recommendations of the SAG, the Board agreed that:

- Members of the Board should be given the opportunity to update the inventory before 30 June and prior to it being made available on the Board's website;
- details of project costs should be included in Table 2 of the inventory and a table showing project costs by topic area and Party should be developed by the Secretariat;
- e-mail addresses of coordinating scientists should be included in the inventory;
- guidance notes on the information sought from the Parties in updating the inventory should be provided by the Secretariat at the time information to update the inventory is requested;
- it would organize and sponsor a workshop to further develop a major proposal for a programme of research on salmon at sea, drawing on the SALSEA project but involving scientists from North America and more widely in Europe. Dr Ken Whelan and Mr David Meerburg were asked to develop a Plan of Action for the workshop and report back to Members of the Board, if possible within a period of 4-6 weeks. The Board recognized that the DST workshop proposed by the SAG was also important. Technology development could take some time and could delay the implementation of a research programme. The Board agreed that it might be appropriate to invite representatives of electronic tag manufacturers to participate in the workshop to further develop the SALSEA project. This workshop should be held within the next 12 months and preferably this autumn if the funds are available.

5. The search for new funds

- 5.1 The Secretary advised the Board that at the end of the 2003 financial year the fund amounted to £30,000 following receipt of a contribution from Norway of £10,000 and a contribution from NASCO of £30,000. Approximately £10,000 had been spent. In 2004 a further contribution by NASCO of £18,000 had been made to the fund, which currently stands at about £48,000. The EU indicated that a contribution from the Commission to the fund of Euros 50,000 (about £35,000) had been approved and would be made in the current financial year. The US indicated that there had been some administrative delay in processing the grant of US\$150,000 (about £90,000) but that the funds had been approved and reserved but not transferred. Contributions to the fund would also be made by Iceland (\$5,000, about £3,000), Canada (Can\$5,000, about £2,500) and the Russian Federation (\$5,000-\$10,000, about £3,000-£6,000). The Chairman noted that in addition to expenditure on the projects in the inventory, some of which had been stimulated as a result of the establishment of the Board, which amount to at least £4.3 million, the Parties had now contributed or pledged an additional £180,000 to the fund. These contributions would assist in seeking funding from private sources. He noted, however, that there are competing demands on available funds and that raising the substantial sums required would be a long-term process.
- 5.2 The Chairman and Secretary reported on the pilot fund-raising project which had been initiated in the autumn of 2003. Following consultations with the Board's PR advisor, a three-stage approach had been adopted. Firstly, in Norway a patron (Georg Rieber-Mohn) had been appointed and, following consultations with the Head of the Norwegian delegation to NASCO and one of the Norwegian NGOs (Norsk Lakseelver), seven companies (including oil, shipping and hydro-electric companies) had been approached. Only one company had replied, indicating that the Board's request for funding did not fit its current corporate strategy. No response had been received from the other six companies although the Norwegian NGO had been advised that these companies would not be able to contribute funds to the Board. The second approach had been to a major international company which had also indicated that the Board's request for funding did not fit its current corporate strategy. Thirdly, four companies had been selected in Canada and while three had indicated that they would not be able to contribute funds, there were signs from one company which were encouraging and follow-up action was planned. The Secretary indicated that he had also approached the actor Robert Redford to see if he would be willing to serve as Patron to the Board but, while he had expressed interest in the work of the Board, his existing commitments meant that he would be unable to accept.
- 5.3 The Board welcomed these initial efforts by the Chairman and Secretary. It was noted that fund-raising is a very specialized activity, and is likely to be a slow process and that there are many competing interests for the funds available. Furthermore, companies are unlikely to change their corporate strategy quickly and many would regard salmon research as a low priority, and the responsibility of governments. A further difficulty is that the work of NASCO in international conservation and management of Atlantic salmon may not be well known to the companies being targeted. The Board agreed that it would be helpful to have some professional assistance in developing a fund-raising strategy and that a sum of £10,000 to £20,000 should be allocated to developing an action plan to guide future fund-raising

activities. The Board agreed that the action plan should be developed by the end of October and distributed by e-mail to all Members of the Board for their approval. Following approval of the action plan, the fund-raising activities described in the plan should commence without delay.

- 5.4 The representative of the NGOs indicated that NASCO's accredited NGOs may be able to assist in identifying potential target companies and in fund-raising since they have considerable experience in this area. For example, £2 million had been raised recently in order to buy out net-fishing licences in England.

6. Finance and administrative issues

- 6.1 The Secretary reported that the Board's financial statements for the year to 31 December 2003 had been sent to all Members of the Board. These had not been audited because there had been very few transactions in the year (approximately 20) and the price quoted by the auditors had been very high. The Board recognized that it would be important to have an external audit in future and the representative of the NGOs indicated that the NGOs might be able to assist by arranging an honorary auditor to the Board. The Secretary indicated that in addition to the cost of developing a fund-raising strategy (£10,000 - £20,000) and the workshop to further develop the SALSEA project (£15,000 - £20,000) there could be other expenditure in 2004 in further developing the website and on travel and subsistence in relation to fund-raising activities.

7. Other business

- 7.1 There was no other business.

8. Report of the meeting

- 8.1 The Board agreed the report of its meeting.

9. Date and place of next meeting

- 9.1 The Board will agree the date and place of its next meeting by correspondence.
- 9.2 The Chairman thanked participants for their contributions and closed the meeting.

List of Participants

Canada

Mr Guy Beaupré
Mr David Meerburg
Mr Jacque Robichaud (Chairman)

Denmark (in respect of the Faroe Islands and Greenland)

Dr Jan Arge Jacobsen
Ms Ulla Wang

European Union

Mr Ted Potter
Dr Ken Whelan

Iceland

Mr Arni Isaksson

Norway

Mr Raoul Bierach
Mr Arne Eggereide
Dr Lars Petter Hansen

Russian Federation

Dr Svetlana Krylova
Dr Boris Prischepa
Ms Elena Samoylova

USA

Mr Pasquale Scida
Dr Timothy Sheehan

Non-Government Observers

Mr Chris Poupard (Chairman of NGOs)

Secretariat

Dr Malcolm Windsor
Dr Peter Hutchinson

ICR(04)5

Third Meeting of the International Atlantic Salmon Research Board

*at 10.00am on Monday 7 June, 2004
Radisson SAS Saga Hotel, Reykjavik, Iceland*

Agenda

1. Opening of the meeting
2. Adoption of the agenda
3. Inventory of Research
4. Report of the Scientific Advisory Group
5. The search for new funds
6. Finance and administrative issues
7. Other business
8. Report of the meeting
9. Date and place of next meeting

SAG(04)5***Report of the Second Meeting of the Scientific Advisory Group of the
International Atlantic Salmon Research Board******6 June 2004, Radisson SAS Saga Hotel, Reykjavik, Iceland*****1. Opening of the Meeting**

- 1.1 The Chairman of the Scientific Advisory Group (SAG), Mr David Meerburg (Canada), opened the meeting and welcomed members of the group to Reykjavik. He indicated that the NGO representative to the group, Dr Dick Shelton, had been invited to participate in the meeting but was unable to attend. Dr Shelton had, however, indicated to the Chairman that he fully supported the research priorities identified by the group and he had made some suggestions for research on migration and distribution of salmon at sea which the Chairman conveyed to the group
- 1.2 Dr Malcolm Windsor, Secretary of NASCO, referred to the importance of the work of the SAG in developing recommendations for improved coordination of research so that existing resources are used as effectively as possible. He indicated that it would be very helpful to the Chairman of the Board and the Secretary in their fund-raising activities if the SAG could develop some costed research proposals so that potential sponsors could see how their contributions might be spent.
- 1.3 A list of participants is contained in Annex 1.

2. Adoption of the Agenda

- 2.1 The SAG adopted its agenda, SAG(04)4 (Annex 2).

3. Review of the updated inventory of research and recommendations for enhanced coordination of research

- 3.1 The SAG reviewed the inventory of research relating to salmon mortality in the sea, ICR(04)3. Each member of the SAG provided a brief overview of the projects included in the inventory for their Party. At its first meeting the SAG had welcomed the development of the inventory and had noted the many on-going projects on topics related to research on mortality of salmon at sea. However, the SAG had been advised that there may be research at universities and other non-government institutions that was not included in the inventory. Members of the Board had, therefore, been requested to seek details of any such research projects for inclusion in the updated inventory. The SAG noted that of the six new projects included in the inventory since last year, one was a collaborative project between the Canadian government and a non-government organization but the other five projects were entirely government-funded. Members of the Board and their scientific advisors would be aware of any major research initiatives being undertaken by non-

governmental institutions so it was felt unlikely that many significant projects had been omitted. Also, seeking further information from universities and other institutions this year would be a major undertaking and much of the focus of their research would, in any case, be in freshwater. However, the attention of the group was drawn to one project undertaken by the Sir Alister Hardy Foundation which was relevant to the inventory and which should have been included.

- 3.2 The SAG agreed that it would be useful if costing information was included in Table 2 of the inventory and if a summary table showing costs by research topic area for each Party was developed. The SAG noted that for a number of projects no summary of progress or costings had been provided, that a number of projects had not been updated since last year and that a number of changes of an editorial nature were required. The SAG therefore recommends that before the inventory is made available on the Board's website, the Members of the Board be given the opportunity to update the information which should be provided to the Secretariat no later than 30 June. After that date the inventory should be made available on the web. The SAG also recommends that e-mail addresses of the coordinating scientists be included for each project.
- 3.3 The SAG recommends that, when the Members of the Board are requested to update the inventory in 2005, the Secretariat provide some guidance notes making it clear that the information sought is details of any changes to on-going projects, a brief summary of progress for each of these projects, details of any projects completed since the last notification and details of any new projects for which funding has been confirmed. For all projects full economic costs (including staff costs, equipment costs and overheads) are sought.
- 3.4 The SAG had previously recommended to the Board that it could play an important role in enhancing coordination and collaboration among scientists by, for example, facilitating an exchange of scientists or by organizing relevant workshops and symposia. The SAG discussed the role of the Board in improving coordination of research and agreed that there is a need for enhanced coordination so as to ensure that new research on a particular topic is undertaken at the most appropriate facilities and drawing on the best available scientific expertise. It was noted that data storage tags (DSTs) are very expensive and that the recovery rate is generally low so the objective should be to select a facility with the highest chance of recovering the tags. For example, in the Pacific, DSTs are being applied principally to Japanese chum salmon since there is a higher chance of recovering the tags and the valuable information they contain because all fish returning to homewaters are either caught in fisheries or used in hatchery programmes. The SAG reiterated that the Board could stimulate enhanced coordination through organizing workshops which should be small and clearly focused. One possibility would be for the Board to facilitate relevant workshops by hosting them and offering travel and subsistence costs to participants. It was noted that there are no projects in the inventory concerned with electronic tag technology and the development of such technology and its application would benefit from international cooperation. The SAG recommends that a workshop, focused on development and application of DSTs and other electronic tags in investigating the distribution and migration of salmon at sea, be supported by the Board. Such a workshop should be held at or close to a laboratory where there are on-going studies utilising these tag technologies. Consideration might be given to inviting one or two

scientists from the Pacific area to participate in the workshop. The SAG anticipated that the cost of a five-day workshop might be in the region of £15,000 - £20,000 if no more than two representatives from each NASCO Party and one representative of the NGOs were funded. This would not preclude additional representation at national expense.

4. Development of research priorities

- 4.1 To understand the causes of increased mortality of salmon at sea, the Board's first research priority should be to investigate the migration and distribution of salmon at sea in relation to feeding opportunities and predation. The Board has also agreed that studies on by-catch of salmon in pelagic fisheries should also be afforded a high priority. The SAG confirmed that it continued to endorse these research priorities identified by the Board.

5. Progress report on the SALSEA project

- 5.1 A report on the SALSEA project proposal was made available to the group, SAG(04)2. This project proposal, which had been a direct result of the Board's initiatives to improve coordination of research, had been developed at a workshop held in Bergen, Norway in October 2003 and outlined a major multi-disciplinary programme of research into the mortality of salmon at sea. It includes three major work packages dealing with the theoretical and technical framework for a survey of salmon at sea, investigating the distribution and migration of salmon at sea (including overlap with commercial fisheries) and dissemination of information from the project. This project was the first attempt to develop a highly coordinated international research proposal in relation to mortality of salmon at sea in the North-East Atlantic. The project had been presented to the Directors of Fisheries Research Institutes in Europe by the EU Board Member, Dr Ken Whelan, and it had been positively received. The project has not so far been formally presented for funding but it was anticipated that funds might be sought from the EU or alternatively from the Board if its pilot fund-raising initiative is successful.
- 5.2 The SAG welcomed the development of the SALSEA project which provided a comprehensive proposal for research which, if undertaken, should greatly improve understanding of the migration and distribution of salmon at sea. The proposal should also be useful in describing to potential sponsors the nature of the research the Board wishes to fund. The SAG noted that there had been no North American scientists involved in the development of the SALSEA project. Furthermore, some European countries had not contributed to its development. The SAG therefore recommended that the Board consider supporting the further development of a major proposal for a programme of research on salmon at sea drawing on the SALSEA project but involving scientists from North America and more widely in Europe. This work might best be achieved through a workshop supported by the Board, with anticipated costs similar to those identified for the tagging workshop.

6. Further development of a Call for Research Proposals

- 6.1 The SAG had previously developed a call for proposals which sought applications for practical studies of the distribution and migration of salmon in the sea and studies of

biological processes relating to the marine phase of the life-cycle. This call for proposals had been developed for use in competitive bids for research funds from the Board but the SAG felt that such an approach might not foster collaboration between researchers. An alternative approach would be to expand on the SALSEA project so that it covers the entire North Atlantic and involves all Parties. The SAG recommends that the Board considers which approach it wishes to use in the future. If further development of the SALSEA project is considered desirable by the Board then it may wish to proceed with the workshop envisaged in paragraph 5.2 above.

7. Proposals for Workshops/Symposia

- 7.1 As indicated in paragraphs 4 and 5 above, the SAG recommends that the Board considers supporting two workshops if its resources permit. The need for a workshop in relation to further development of the SALSEA proposal would, of course, depend on the Board's decision in relation to its future direction.

8. Other business

- 8.1 The representative of the EU referred to a meeting between Keith Stoodley of Lotek Wireless Inc. and the NASCO Secretary in which he had also participated. CEFAS and Lotek have been cooperating on the development (CEFAS) and marketing (Lotek) of tags and it would be useful to Lotek and other tag manufacturers in planning their product development if there could be a coordinated view from scientists working on Atlantic salmon with regard to their requirements for the future development of electronic tags. The SAG felt that it would be useful to involve representatives of tag manufacturers (such as Lotek, Starr-Oddi, and Vemco) in the workshop referred to in paragraphs 4 and 7 above although such participation would be at the companies' expense.

9. Report of the meeting

- 9.1 The SAG agreed a report of its meeting.

10. Date and place of next meeting

- 10.1 The SAG decided not to set a date and place for its next meeting. The Chairman would liaise with members of the SAG on the arrangements for the next meeting in the light of any decisions of the Board concerning the work of the group.

SAG(04)4

**Meeting of the Scientific Advisory Group of the
International Atlantic Salmon Research Board**

**Radisson SAS Saga Hotel, Reykjavik, Iceland
09.30 hrs Sunday, 6 June, 2004**

Agenda

1. Opening of the meeting
2. Adoption of the agenda
3. Review of the updated inventory of research and recommendations for enhanced coordination of research
4. Development of research priorities
5. Progress report on the SALSEA project
6. Further development of a Call for Research Proposals
7. Proposals for Workshops/Symposia
8. Other business
9. Report of the meeting
10. Date and place of next meeting

List of Participants

Canada

Mr David Meerburg (Chairman)

Denmark (in respect of the Faroe Islands and Greenland)

Dr Jan Arge Jacobsen

European Union

Mr Ted Potter

Iceland

Mr Gudni Gudbergsson

Norway

Dr Lars Petter Hansen

USA

Mr Tim Sheehan

Secretariat

Dr Malcolm Windsor

Dr Peter Hutchinson