Agenda Item 6.1  Project Funding through ASCOBANS

Progress of Supported Projects

Document 6.1.a  Progress of Projects Supported through ASCOBANS

Action Requested

- Take note
- Comment

Submitted by  Secretariat
Progress of Projects Supported through ASCOBANS

1. In this document, the Secretariat reports on the progress of the projects that were funded through the Agreement. The document contains details of projects concluded since AC19 as well as the status of those underway. Previous reports can be accessed as AC19/Doc.6-01 rev.1 and AC18/Doc.6.01.

Finalized Projects

2. Three projects have been completed since AC19.

A. Understanding harbour porpoise (*Phocoena phocoena*) and fisheries interactions in the north-west Iberian Peninsula

3. The funding agreement (SSFA/2010/04) for the project, signed in February 2010, made available to the University of Aberdeen funds for the following activities under the leadership of Fiona Read:
   - Age determination by counting growth layer groups in the dentine. Age data will be used to construct life tables and thus estimate mortality rates.
   - Stomach content analysis and comparison with fishery catch data to determine the potential for competition between cetaceans and fisheries e.g. catch composition, minimum landing size and geographical overlap.
   - Determination of individual reproductive status and history, which together with age data will be used to construct maturity ogives (to establish age and size at sexual maturity), and determine the pregnancy rate and the annual reproductive cycle.
   - Statistical analysis of trends in life history parameters to detect any strong trends in life history parameters over time, permitting inferences about population status. Comparison with equivalent data for other populations (notably for Scotland) for better interpretation of results.

4. The final project report has been published as AC20/Doc.6.1.b.

B. Preparation of a Draft Paper containing background information and proposed objectives and measures for the porpoise population residing in the “gap area” currently not covered by the Jastarnia Plan

5. Based on the request of AC18 to hire a consultant to undertake this work in support of the Jastarnia Group, and after issuing a call for tender and selecting an applicant in consultation with the Jastarnia Group, SSFA/2011/04 was concluded with the University of Aarhus in September 2011. Agreed activities included the compilation of all relevant scientific publications, national reports from Sweden, Germany and Denmark; based on which a draft paper containing scientific background information on the Belt Sea porpoises and proposed objectives and measures to be implemented or conducted in order to fill the gaps in the current knowledge, and ensure the sustainability of the population was to be developed. In order to assist the finalization of the draft Conservation Plan, Signe Sveegaard representing the group of researchers who prepared the first draft attended the 8th Meeting of the Jastarnia Group, after which a revised draft was prepared for submission to the 19th Meeting of the Advisory Committee. The consultant also attended AC19.
6. The final product of the project was the Draft Conservation Plan for Harbour Porpoises in the Western Baltic, Belt Seas and Kattegat produced for the Advisory Committee’s consideration, which was published as AC19/Doc.4-03.

7. After undergoing further revisions, the Conservation Plan for the Harbour Porpoise Population in the Western Baltic, the Belt Sea and the Kattegat was adopted through Resolution No. 1 of the 7th Meeting of the Parties (October 2012).

C. Distribution and relative abundance of harbour porpoises (*Phocoena phocoena*) over Dogger Bank and surrounding waters, Southern North Sea

8. This project, managed through Marine Conservation Research International under SSFA/2011/05, was selected as a priority for funding by AC18. IFAW and other project partners funded the majority of costs related to the survey, with ASCOBANS providing co-funding in order to offer a training course in planning, set-up, data collection and analysis to nominated participants, coordinate vessel surveys with aerial survey efforts where logistically possible, data analysis and preparation of reports. Outputs included practical, theoretical and boat-based training of personnel, a cruise report upon completion of vessel survey and a final report upon completion of post-process data analysis.

9. The final report has been published as AC20/Doc.6.1.c.

Current Projects

10. Four projects are currently being implemented.

D. Enhanced detection of harbour porpoises prior to ramming, seismic blast and ammunition clearance: design and construction of a PAL-porpoise detector (PPD)

11. This project was chosen by AC19 for funding if the conditions set for supporting another project (Static Acoustic Monitoring of Harbour Porpoises in Kaliningrad) were not met (which they were not). Accordingly, a contract was concluded with Forschung. Fakten. Fantasie. in 2012. The project aims at real-time detection of harbour porpoises prior to hazardous operations such as ammunition clearance (blasting), seismic exploration or pile ramming (as in offshore wind parks) and other hazardous activities. The following activities are being carried out under this contract:

- Design and building of a programmable, easy to use click-and click-train generator combined with a detector for these signals enable the user to modify frequency, ramp-up, click-train duration and pause intervals of the stimulating signal and to achieve rapid optimization
- Design of a detector that will automatically filter animal signals from the surrounding acoustic environment what is important in areas with intensive marine traffic, such as offshore wind park construction etc.
- Development of a software-based analysis tool to graphically display click activity over time

12. Outputs of the activities will be in form of a novel self-contained active porpoise detector. The investigations proposed will be the basis for further research aimed at real time detection of porpoise signals and transmission to the system operator and deploying the new PPD at an offshore wind park construction site.

13. The final report is due in December 2013.
E. Pollutant exposure in coastal top predators: assessing current levels of exposure and toxic effects

14. This project selected for funding by AC17 is covered by SSFA/2010/03, which was concluded with the Zoological Society of London in January 2011. Activities to be carried out under the lead of Paul Jepson include:

- Determine and analyse existing pollutant exposure data for PCBs and organochlorine pesticide levels within the ASCOBANS range.
- Compare the levels of PCBs in bottlenose dolphins and killer whales with levels of PCBs in healthy and diseased harbour porpoises in UK waters and to a proposed threshold of toxicity for total PCBs of 17mg/kg lipid weight. PCB levels will also be compared with those associated with reproductive impairment in bottlenose dolphin studies in the US.
- Using data from UK harbour porpoise strandings, generate the first dose-response curve for risk assessments of lethal effects of PCBs (i.e. infectious disease mortality) in exposed populations using empirical cetacean data.
- Undertake a risk assessment for the toxic effects of PCB exposure in bottlenose dolphins and killer whales in European waters within the ASCOBANS range.

15. The output expected from this project is a final report to be submitted to the ASCOBANS Advisory Committee assessing the levels of exposure in UK/European bottlenose dolphins and killer whales and their likely toxicological impacts.

16. Thanks to additional funding provided by Defra (United Kingdom), ZSL was able to substantially increase the sample size and geographic range of samples analysed. In order to accommodate this opportunity, an extension of the time period for this project was agreed.

17. The final project report is due in December 2013.

F. Examine habitat exclusion and long term effect of pingers

18. This project was prioritized for funding by AC19, and arrangements (SSFA/2012/1) were subsequently made with Aarhus University (Denmark) to carry out the following activities:

- Deployment of three Loggerhead DSG noise loggers together with three C-PODs already installed in order to quantify pinger noise exposure simultaneously (co-funding from AgriFish Agency and Aarhus University, as part of a larger study on pinger effects on harbour porpoise presence)
- Recording of pinger sounds and analysing the noise logger files which measure both porpoise presence and pinger exposure
- Comparison and analysis of the measurements made with both C-PODs and noise loggers

19. The project will thus aim to evaluate two hypotheses: a) that porpoises are displaced by pinger sounds by comparing the two measurements; and b) that porpoises habituate to pingers over time by analysing changes over time.

20. The final project report is due in June 2014.
G. Approaches to an Impact Indicator in the Light of Descriptor 11 (MSFD)

21. Thanks to funding from the German Environment Ministry, a funding agreement for the project (SSFA/2011/02) was concluded with the Whale and Dolphin Conservation Society (WDCS Germany) in August 2011. Agreed activities include researching all available methods to analyse the impact of noise on marine biota and drafting a technical paper with a group of experts which can be used as a guideline in order to develop a concept for a biological indicator for Good Environmental Status under the EU Marine Strategy Framework Directive.

22. Based on further discussions and the progress made so far by the Descriptor 11 Task Group, an extension of the project duration has been agreed with WDC. The final project report is therefore now due in December 2014.