

Agenda Item 4.3

Priorities in the Implementation of the
Triennium Work Plan (2010-2012)
Review of New Information on Bycatch

Document 4-07

Report of the Bycatch Working Group

Action Requested

- Take note of the report
- Comment

Submitted by

Bycatch Working Group



NOTE:
IN THE INTERESTS OF ECONOMY, DELEGATES ARE KINDLY REMINDED TO BRING THEIR
OWN COPIES OF DOCUMENTS TO THE MEETING

Report to ASCOBANS AC18 from intersessional bycatch working group

The group had two tasks in the terms of reference.

(i) To develop a guidance framework for co-operative projects that bring together fishers, gear technologists and cetacean scientists for bycatch mitigation.

(ii) To work with the CMS Scientific Councillor for Bycatch to develop briefing notes for anyone representing ASCOBANS at RACs and similar fisheries meetings in order to maintain a consistent and appropriate approach.

However, it had been noted at AC17 that a key element of the (ii) would be providing information on amendments to EU Regulation 812/2004. In the absence of any information on these amendments, the group focussed on (i).

A guidance framework for co-operative projects that bring together fishers, gear technologists and cetacean scientists for bycatch mitigation.

Background

A joint ASCOBANS/ECS workshop had been held in March 2010 in Stralsund, Germany (AC17/Doc.4-07). The workshop had reviewed bycatch mitigation measures at a global level and within the EU Common Fisheries Policy and discussed why not all of these measures had been successful. In particular, it was felt that there was a need to improve communication with fishing communities. Direct pressure and detailed regulations without consultation were not recommended and the workshop noted the value of co-operative projects bringing together fishers, gear technologists and cetacean scientists. The Group reviewed a number of projects in order to try and identify which general aspects had contributed to successful outcomes and which aspects were problematic.

There was a general view from the workshop and within the Group that a bottom-up approach of dealing direct with fishers themselves was most likely to be successful and there are several examples of successful small projects in Europe where this has been the case. One issue may be how to move from the very small scale of direct interactions with a few individual fishers at a personal level in experimental trials, towards more widespread measures (see Campbell and Cornwell, 2008). The experiences with implementing Regulation 812/2004 suggest a need for a midway approach in scale between small trials which had shown a promising technology and implementation at a European wide level.

As an example of a top-down approach, it was also noted that the largest reduction in bycatch had been in numbers of dolphins killed in tuna fisheries in the Eastern Tropical Pacific. Changes in fishing practices had reduced the estimated annual numbers of dolphins killed from several hundreds of thousands in the 1960s and 1970s to around 1000 in 2000 (Wade et al., 2007). Many of the changes that resulted in reduced bycatch had been driven by regulation and direct pressure from consumers, however adaptations to fishing practices nevertheless relied on the knowledge and experience of the fishers. Regulatory measures included annual limits on the number of dolphins that could be killed by the fishery agreed in the 1995 Panama Declaration by all the main fishing nations for tuna in the

Eastern Tropical Pacific (U.S., Belize, Colombia, Costa Rica, Ecuador, France, Honduras, Mexico, Panama and Spain).

The development of Pinger technologies are intended to allow fishermen to continue using gear which would otherwise pose a high risk of bycatch, by enabling cetaceans to avoid contact with the gear. In some situations, including designated Marine Protected Areas, there may be concerns that the area is so important for cetaceans that the risk of habitat exclusion may make the use of acoustic deterrents undesirable. The Group focussed on gear technologies and did not consider co-operative projects that might involve reduced fishing effort or closed areas for certain gear types that might be appropriate in these situations.

Case studies

European Inshore fisheries

A well documented deficiency of Regulation 812/2004 is that it only applies to larger vessels whereas for many ASCOBANS parties vessels less than 12m in length make up around 75% of the fleet (ICES, 2010). The ASCOBANS/ECS workshop recommended that 'Parties should try to influence the revision of EC Regulation 812/2004 so that it covers significantly and adequately the fleets and fisheries having a high risk of by-catch in European waters. This requires consideration of the impact of fishing from vessels of 15 m length or less.' The fishers using smaller vessels tend to have less organised representation than the larger vessels, for example at the Regional Advisory Councils. They are also spread across larger numbers of ports and more diverse communities. Independent of amendments to 812/2004 there is still a need for greater dialogue with these communities. The experimental projects that have been successful have been small scale. For example, Hardy and Tregenza (2010) describe a recent project to investigate the practicalities of Pinger usage on smaller vessels in Cornwall. This study involved just four vessels and is an example of a small type experimental study involving a few especially interested fishers. There are rather few successful case studies in Europe of the next scale up where measures are implemented more widely across an inshore fleet. Although small projects have the potential to grow and influence the rest of the fleet, this has not usually been the case since most small pilot projects have also been limited in duration.

Achieving successful mitigation at a larger scale across inshore fleets will require some form of interaction with formal or informal fisheries groups. These vary greatly between countries. In Spain, Cofradías are formal public organisations which are assigned a particular coastal area and include individual fishermen from most types of vessel based within the Cofradía's stretch of coast except for distant water fleets. All commercial fishermen have to be members of only one Cofradía and they rely on local and regional government for enforcement. Cofradías oversee a wide range of activities for from stock surveys and local management plans through to marketing catch. In Ireland, inshore management structures consist of Local Advisory Committees (LACs) and Species Advisory Groups (SAGs). A recent review (Scottish Government, 2010) suggested that Inshore Groups in Ireland appear to have lost their way through lack of co-ordination and funding. In the UK recently established groups (Inshore Fisheries and Conservation Authorities in England and Wales and Inshore Fisheries Groups in Scotland) may provide an appropriate forum for reaching a wider number of fishers. An advantage of these groups is that they are committed to holding regular meetings (several a year) and have a nominated contact person.

Where no structure for meeting inshore fishers already exists, there will be a need for local workshops to gain common understanding and trust, to obtain bycatch information, and to discuss mitigation measures (such as alternative fishing gears or practices) and their implementation. To be successful in reaching and engaging the relevant people (e.g. commercial, part-time and recreational set-netters), the workshops should be in the local language and in the coastal fisheries communities. Funding could be sought from interest groups such as the Marine Stewardship Council, ASCOBANS or conservation NGOs, but further acceptance would be gained if these workshops were seen as more of a local initiative with funding from fisheries and environment ministries or local authorities. Whatever format the workshops take, there will be a need for regular follow up and an ongoing dialogue with fishers.

ASCOBANS could use its national contacts to initiate the process by contacting the relevant authorities and fishing organisations. Furthermore, ASCOBANS could provide expertise and briefing materials or help to locate available experts (gear technologists and cetacean scientists).

Take Reduction Teams in the United States

In the US, the Marine Mammal Protection Act requires the establishment of Take Reduction Teams to implement Take Reduction Plans. Members of the Teams have expertise on either the conservation and biology or fishing practices. Members shall include representatives of Federal agencies, each coastal State, appropriate Regional Fishery Management Councils, interstate fisheries commissions, academic and scientific organizations, environmental groups, all commercial and recreational fisheries groups. The TRT approach therefore aims to bring all interested groups together in regular meetings. The size of such meetings generally involves the use of professional facilitators.

The harbour porpoise TRT (HPTRT) is probably of most relevance to ASCOBANS. The HPTRP includes time and area closures, and closures to commercial bottom-set gillnet fishing unless pingers are used. In addition, NMFS has set consequence closure areas. These are areas of where high levels of harbour porpoise bycatch have occurred in the past, that will be closed on a seasonal basis if bycatch rates over two consecutive management seasons exceed a specified rate. NMFS has produced summary leaflets (e.g. http://www.nero.noaa.gov/prot_res/porptrp/doc/HPTRPNewEnglandGuide.pdf) and held several workshops for fishers to explain the regulations and demonstrate the use of pingers. There are also nominated gear liaison officers who provide courses on Pinger usage. All fishers must undertake a pinger training course before they can fish.

SafeSea Project in Portugal

The SafeSea project (www.safeseaproject.org) is the first national initiative in Portugal on bycatch and involves the use of mitigation measures in cooperation with fisheries sector working from ports along the central and northern Portuguese coast. The project is a voluntary partnership with the fisheries sector, which has allowed part of the Portuguese fishing fleet to be equipped with Pingers. The project has held two seminars. In 2010, the first seminar was held in Viana do Castelo with the title 'Cetacean bycatch. Present scenario and mitigation measures'. The seminar also included a practical session there will also be a practical session in the harbour demonstrating and discussing mitigation measures with fishers. A second seminar was held in April 2011 in Figueira da Foz, with

the title 'Sustainability of local fishing arts and the promotion of a safer sea for cetaceans'. The project has been funded the European Economic Area Financial Mechanism through EEA Grants.

Facilitating advances in Pinger technology

James Turner (Fumunda) described projects in Australia to develop Pinger technology with funding from the State Government Department of Primary Industries in collaboration with academic institutions. For example, the F3 (3 kHz 135db SPL) Whale Pinger, recently developed by Fumunda was co funded by the Queensland and New South Wales DPI. The Pinger was trialled in the respective state government shark net control program, where migrating humpback whales become entangled in the nets. Following successful first year trials (August – Nov 2010), the Natal sharks board in South Africa have purchased these Pingers. This example of small scale funding to develop new mitigation tools in collaboration with manufacturers may also be applicable in the ASCOBANS area.

Other new designs of Pingers claim some advantages. The Fishtek Banana Pinger BP15 (<http://fishtekmarine.com/pdf/BP%20154.pdf>) aims to be tough and low cost, with replaceable batteries and an indicator of performance status. The manufacturer suggests the banana shape allows for easy handling and the light weight (20g) for less risk to crew.

It has been suggested that a Pinger Manufacturers Association could be established. This could allow manufacturers to collaborate where there was joint benefit, avoiding unnecessary duplication of effort.

References

Campbell, L.M. and Cornwell, M.L. 2008. Human dimensions of bycatch reduction technology: current assumptions and directions for future research. *Endangered Species Research* 5: 325–334

Hardy, T. and Tregenza, N. 2010. Can acoustic deterrent devices reduce by-catch in the Cornish inshore gillnet fishery? Final Report to the Marine and Fisheries Agency, August 2010. <http://marinemanagement.org.uk/fisheries/funding/documents/fcf-pinger-trial.pdf>

ICES. 2010. EC request on Cetacean bycatch regulation 812/2004. In Report of the ICES Advisory Committee, 2010. Book 1. Introduction, Overviews and Special Requests.

Scottish Government. INSHORE FISHERIES GROUPS IN SCOTLAND: EARLY REVIEW AND POLICY APPRAISAL. September 2010. <http://www.scotland.gov.uk/Topics/marine/Sea-Fisheries/InshoreFisheries/IFGsMap/policyappraisal>

Wade, P. R., Watters, G. M., Gerrodette, T., and Reilly, S. B. (2007). Depletion of spotted and spinner dolphins in the eastern tropical Pacific: modeling hypotheses for their lack of recovery. *Marine Ecology Progress Series* 343, 1-14.

Members of the group

Barry Baker	barry.baker@latitude42.com.au
Christian Pusch	Christian.Pusch@bfv-vilm.de
Eunice Pinn	Eunice.Pinn@incc.gov.uk
James Turner	james@fumunda.com
Jan Haelters	jan.haelters@mumm.ac.be
Jari Raitaniemi	jari.raitanemi@rktl.fi
Justyna Szumlicz	justyna.szumlicz@inrol.gov.pl
Karl-Hermann Koch	karl-hermann.kock@vti.bund.de
Laetitia Nunny	Laetitia.nunny@mac.com
Marije Siemensma	mliemensma@yahoo.fr
Monika Römerscheid	614@bmelv.bund.de
Oliver Schall	oliver.schall@bmu.bund.de
Peter Evans	peter.evans@bangor.ac.uk
Petra Deimer	pdeimer@gsm-ev.de
Russell Leaper (Convenor)	r.c.leaper@abdn.ac.uk
Stefan Braeger	Stefan.Braeger@Meeresmuseum.de
Stefanie Werner	stefanie.werner@uba.de
Sven Koschinski	sk@meereszoologie.de
Yanis Souami	contact@sinay.fr