

62nd Annual Meeting of the International Whaling Commission

SHIP STRIKES WORKING GROUP FIFTH PROGRESS REPORT TO THE CONSERVATION COMMITTEE



Picture: A. de Lichtervelde

MAY 2010

1. BACKGROUND TO THE FIFTH PROGRESS REPORT

The Ship Strikes Working Group (SSWG) was established at IWC/57 in 2005 by the Conservation Committee to examine the issue of ship strikes with cetaceans. The group is comprised of Argentina, Australia, Belgium, Brazil, Denmark/Greenland, France, Germany, Italy, Republic of Korea, Luxemburg, New Zealand, Portugal, South Africa, Spain, UK, the USA and UNEP/CMS (see Appendix 1 for an updated list). Belgium is chairing the Working Group. The SSWG submitted its First Progress Report to the Conservation Committee at IWC/58 in St. Kitts and Nevis. A work plan was subsequently developed.

At IWC/59, the Conservation Committee reviewed progress with the work as provided in the Second Progress Report (IWC/59/CC3) and the recommendations for further work proposed by the SSWG: co-operation with IMO, development of a global ship strikes database; development of national and regional legislation, rules and action plans to reduce the impact of ship strikes, with priority for high-risk areas; preparations for a multidisciplinary expert workshop on ship strike mitigation; recommendations relevant to the Scientific Committee.

At IWC/60, the Conservation Committee reviewed progress with the work as provided in the Third Progress Report (IWC/60/CC3) and four recommendations for further work proposed by the SSWG which had met on June 16:

- 1) The SSWG endorses the recommendations of the Scientific Committee for future work, including that the Secretariat develop and maintain the ship strikes database and integrate it in the IWC website;
- 2) The Conservation Committee should request contracting governments to use the agreed ship strike template and submit ship strikes data to the IWC Secretariat on a regular basis;
- 3) The Conservation Committee should request contracting governments to communicate ship strikes data and information to relevant maritime sector bodies, including port authorities, shipping federations, coast guards and other relevant bodies;
- 4) The establishment of a Steering Committee for a multidisciplinary workshop on ship strike mitigation, noting that workshop participants should represent experts from within the Commission, the Scientific Committee and appropriate other organizations.

The Committee endorsed these recommendations.

It was noted that progress had been made in all areas except the development and implementation of national legislation.

At IWC/61, the Conservation Committee reviewed work progress as provided in the Fourth Progress Report (IWC/61/CC11) and endorsed the proposal for the joint IWC/ACCOBAMS workshop on ship strikes mitigation.

This report therefore:

1. reports on progress with past recommendations;
2. provides updated and new information on ship strikes on cetaceans collected since IWC/61.

2. PROGRESS MADE WITH RECOMMENDATIONS

2.1 Co-operation with IMO

The General Assembly of the International Maritime Organization (IMO) held from 23 November to 4 December 2009 approved the proposed Agreement of Co-operation between IMO and IWC, which means that the IWC has now definitive IMO observer status. As said in the 2008 progress report, while the impetus for closer co-operation between IWC and IMO has been in relation to ship strikes on cetaceans, there are a number of other issues of potential mutual relevance including habitat degradation (e.g. via noise¹, chemical pollutants, oil spills, etc.). Furthermore, closer co-operation will also be in keeping with the suggestion coming from the process on the future of IWC that co-ordination with other relevant international conventions be improved. The

¹ At its last meeting, the MEPC established a correspondence group to begin to address the issue of minimizing the incidental introduction of noise from commercial shipping into the marine environment to reduce potential adverse impacts on marine life. The IWC Secretariat is a member of this group.

IWC Scientific Committee in 2008 endorsed targets for the reduction of background noise due to. At IWC/61, the Scientific Committee established an intersessional correspondence group on anthropogenic sound to elaborate this item further for its 2010 meeting. The focus is on the impacts of long-term chronic exposure to high levels of anthropogenic sound, primarily from shipping.

Both the IWC Secretariat and the SSWG Chair were present at MEPC 59 in July 2009 where a guidance document for minimizing the risk of ship strikes with cetaceans was adopted (MEPC.1/ Circ.674). No new submission has been made since that meeting.

2.2 Global database on ship strikes

The IWC has continued work to develop a global database of collision incidents to support analyses of factors affecting risk, identification of areas where ship strikes may be of particular conservation concern, and development of the most effective mitigation measures. At IWC61 the Scientific Committee identified a number of tasks. These have involved further development of the web-based data entry system (www.iwcoffice.org) and review procedures for new information, in addition to data entry based on information presented to IWC61. In April 2010, the database contained 958 records with most of the recent records coming from papers presented to the Scientific Committee. To date there have been very few records entered by mariners although it is hoped that reporting will be improved following initiatives to publicise the database, including the multi-lingual leaflet developed by Belgium.

2.3 Development of national and regional legislation, rules and action plans to reduce the impact of ship strikes, with priority for high-risk areas

As reported above, progress on this matter is very slow. Two parallel courses of action need to be followed if progress is to be made: adoption of legislation by the relevant countries and regulation through international organizations like the IMO. An assessment of the different aspects of ship strikes to be addressed by these two courses of action will be necessary.

2.4 Multidisciplinary expert workshop on ship strike mitigation

The joint IWC-ACCOBAMS ship strikes mitigation workshop with a focus on the Mediterranean Sea and the Canary Islands will be held from 21 to 24 September 2010 in Monaco. A planning meeting with members of the workshop Steering Committee took place in Brussels on 19 January 2010 and the invitations for the workshop were sent out in early March. Broad stakeholder representation has been pursued, including science, policy, industry and NGOs. Thirteen papers are in preparation, among which shipping and whale data overlay, regional case studies, technological developments, national measures and measures taken through the IMO. The agenda includes the following items: data requirements, risk assessment, mitigation measures, recommendations and the development of a two-year work plan for IWC/ACCOBAMS collaboration.

2.5 Awareness raising

This part is certainly where most progress has been made. An indication of it is the rising number of papers on the subject (see section 3).

Alexandre de Lichtervelde, as SSWG Chair, participated to a seminar organised by the New Zealand Department of Conservation and the University of Auckland on Bryde's whales and collisions. He was again invited to the training session organised by the navigation school of Marseille, France, where he gave a presentation on ship strikes.

Belgium has developed an awareness folder on ship strikes. It contains advice to help mariners avoid collisions and a link to the IWC ship strikes database hosted by the Secretariat, to facilitate reporting. The folder is now available in six languages (English, Arabic, Chinese, French, Russian and Spanish) in paper and electronic form and has been posted on IWC's website. In the period between February and May it was sent to all IMO MEPC delegates and globally through web distribution lists. The emailing provided good response. It has been sent to the cruise company Wallenius Wilhelmsen Logistics, who will be training their captains in how to use the material. Whale stranding networks constitute an important source of information and a request has been made in an IWC circular to incorporate e-mail addresses in their contact details so as to be able to inform them about the ship strikes database through the folder.

3. UPDATED AND NEW INFORMATION RECEIVED ON SHIP STRIKES SINCE IWC/61

Nations with binding and non-binding action in territorial or EEZ waters

Argentina

Legislation to reduce ship strikes with southern right whales has been developed and implemented by the Argentine Coast Guard at the nursery ground of Peninsula Valdes, Patagonia Argentina.

Chile

In Chile, as law N° 20293 prescribes it, contingency plans are to be developed for each fishing vessel confronted with a collision; the presence of blue whales in the waters near Corcovado has been a key factor behind this initiative.

Canada

In June 2009, Fisheries and Oceans Canada published the Recovery Strategy for the North Atlantic Right Whale, *Eubalaena glacialis*, in Atlantic Canadian Waters (Brown et al. 2009). Its overall goal is to achieve an increasing trend in population abundance over three generations. The first of the seven objectives of the strategy is to reduce mortality and injury as a result of vessel strikes.

New Zealand

In New Zealand, the Auckland Regional Council, Ports of Auckland Ltd, Auckland University and the Department of Conservation are involved in an inter-agency initiative to mitigate the problem of vessel collisions with Bryde's whales in the Hauraki Gulf.

Spain

In Spain, a European LIFE+ Project focusing on the "Inventory and designation of marine Natura 2000 areas in the Spanish sea" is being developed to contribute to the protection and sustainable use of the biodiversity in the Spanish seas. This project contains a specific action to identify, assess and mitigate the impacts of maritime traffic activities on marine biodiversity with a special look onto cetacean's populations and marine protected areas.

The project actions will be carried out from May 1st, 2009 to December 31st, 2013. Among the expected results the following can be highlighted:

- To develop maritime traffic volumes studies in the areas of study in relation to the presence of protected species and habitats
- To analyse the role of the Spanish Merchant Marine Agency on the management of MPAs
- To promote the management of the marine acoustic pollution through the competent authorities
- To identify emergent issues for coordination among the marine conservation and the maritime traffic management policies
- To promote the awareness of the maritime sector towards the values of marine biodiversity.
- To produce communication materials (websites, articles, newsletter, posters, etc.).

Further information on the progress of the project is available by contacting Ana Tejedor Arceredillo (ana_arceredillo@yahoo.es).

USA

Two vessel routing proposals to the IMO on behalf of right whales became effective on June 1, 2009. One measure is the establishment of a recommended, seasonal area to be avoided (ATBA) in the Great South Channel off Massachusetts. The other measure is a modification of the north-south leg of the IMO-adopted traffic separation scheme (TSS) "In the approach to Boston, Massachusetts".

Ongoing activities include activities in Glacier Bay National Park to reduce ship strikes of humpback whales; and vessel speed requirements imposed by the National Marine Fisheries Service on LNG tankers in New England waters on behalf of right whales.

Intergovernmental organisations, NGOs and Programmes

Convention on Migratory Species (CMS)

At the second Meeting of Signatories to the *Memorandum of Understanding for the Conservation of Cetaceans and Their Habitats in the Pacific Islands Region* (28-29 July 2009, Auckland, New Zealand), the Signatory States have adopted a Whale and Dolphin Action Plan for the MoU (available online at http://www.cms.int/species/pacific_cet/actionplan_2009_2012.pdf). Ship strikes are considered largely unknown but low threats to whales and dolphins in the region, but it is recognized that they may be a potential concern in areas with fast vessels and high concentrations of whales and dolphins. Therefore, the Action Plan calls on states, to improve understanding of unknown but potential threats to whales and dolphins, including ship strikes (Objective 2.8) by encouraging anecdotal and opportunistic recording and documentation of ship strikes to be able to respond in a timely manner if it becomes a significant threat at local, national or regional level.

The 9th Meeting of the Conference of Parties (December 2008) also adopted a Revised Secretariat Programme to Implement CMS Resolution 8.22 on Adverse Human-Induced Impacts on Cetaceans. The work to finalize the *Programme of Work for Cetaceans* continues in collaboration with a partner organization. Significant progress has been made on the substantive areas of the report including:

1. A summary of regions and listed impacts;
2. A review of the extent to which CMS and CMS cetacean-related Agreements are addressing listed impacts, including ship strikes, through their threat abatement activities; and
3. A review of the extent to which IMO, IWC SC and CC, OSPAR, UNICPOLOS and the UNEP Regional Seas Programme are addressing listed impacts, including ship strikes, through their threat abatement activities.

The final stage of the review and the draft *Programme of Work for Cetaceans* will be completed in the second half of 2010, including an analysis of listed impacts and threat abatement that will be sent to IMO, IWC SC and CC, OSPAR, UNICPOLOS and UNEP for their individual input and comment. The review and draft *Programme of Work for Cetaceans* will then go to the CMS Standing Committee for consideration.

ACCOBAMS

No update was received.

ASCOBANS

Funded by the *Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas* a study on ship strikes is underway. It uses ship's Automatic Identification System (AIS) data to match distribution of shipping with distribution of cetacean taxa which may be vulnerable to ship strikes. First results have been published online as an interim progress report (AC17/Doc.6-06, available at http://www.service-board.de/ascobans_neu/files/ac17/AC17_6-06_ProjectReport_InterimShipStrikes.pdf). The analysis is still ongoing and final results are expected in time for the re-scheduled 17th Advisory Committee Meeting in autumn 2010.

Country reports and public information

Australia

Australia has submitted a country report on ship strikes to the Conservation Committee.

France

The French Ministry of Environment, through the PELAGOS Sanctuary, has financed a study lead by the GIS3M under the responsibility of Souffleurs d'Ecume and EcoOcean Institut. It includes the synthesis about our knowledge on the impact of maritime traffic on cetaceans in the PELAGOS Sanctuary and a proposition of mitigation solutions to prevent collisions between large cetaceans and commercial ships, through the mapping of the intensity of traffic in this area now and in the future, as well as high-risk areas of collision.

USA

The United States submitted to the Conservation Committee an update on their actions to reduce the threat of ship collisions with large whales.

The first international conference on marine mammal protected areas was held from March 30 to April 3, 2009 in Maui, Hawaii, USA. Ship strike issues were addressed during a panel called "How can MPAs and networks of MPAs ensure threat mitigation to cetaceans?"

In Hawaii, the Superferry has ceased its operations following a decision by the State Supreme Court that the ferry has no legal authority to continue its operations in the State.

Shipping and other industries

Diverse technological experiments are being conducted to detect whales. The Cornell Alert System uses listening buoys near Boston and near New York City to help reduce collision risk with North Atlantic right whales. On board the German research vessel Polarstern, a 360 degrees camera uses infrared thermography to detect whale blows; this information is used to stop seismic surveys in presence of whales. A forward-looking sonar has been installed on board a UK-operated tanker on a trial basis to register the presence of objects in the tanker's path, including whales.

The World Ocean Council held a Sustainable Ocean Summit in Dublin, 15 - 17 June where a ship strikes session was on the agenda

Recently published papers and information on ship strikes

Bamy et al. 2010. Species occurrence of cetaceans in Guinea, including humpback whales with southern hemisphere seasonality. *Marine Biodiversity Records* 3:1-10. SC/62/ForInfo 23. (contains collision record).

Berman-Kowalewski, M.*, F. M. D. Gulland, S. Wilkin, J. Calambokidis, B. Mate, J. Cordaro, D. Rotstein, J. St. Leger, P. Collins, K. Fahy, and S. Dover. 2010. Association between blue whale (*Balaenoptera musculus*) mortality and ship strikes along the California coast. *Aquatic Mammals* 36(1): 59-66

Brown, M.W., D. Fenton, K. Smedbol, C. Merriman, K. Robichaud-LeBlanc and J. Conway. 2009. Recovery Strategy for the North Atlantic Right Whale (*Eubalaena glacialis*) in Atlantic Canadian Waters. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada. vi + 66p.

Firestone, J. 2009. Polica considerations and measures to reduce the likelihood of vessel collisions with great whales. *Environmental Affairs* Vol. 36:389.

Leaper, R. and Donovan, G. 2010. Update on the IWC ship strikes database. 62d Annual Meeting of the International Whaling Commission, Scientific Committee document SC/62/BC4.

MEPC 59/18. 2009. Measures for minimizing the risks of collisions with cetaceans. Document submitted by Italy, Spain, France and Monaco at the 59th meeting of the Marine Environment Protection Committee.

Pingaro et al. Records of collisions between large vessels and southern right whales (*Eubalaena australis*) in Uruguayan waters, 2003-2007. SC/62/BC2.

Ritter, F. (2010): Short description of a near miss event involving a large vessel and humpback whales (*Megaptera novaeangliae*) off Antarctica. Poster presented at the Annual Conference of the ECS, Stralsund, Germany, March 2010.

Remonato, E., Panigada, S., Leaper, R. & Donovan, G. 2010. Ship strikes with cetaceans in the Mediterranean Sea: assessment, public awareness and mitigation measures. Poster presented at the Annual Conference of the ECS, Stralsund, Germany, March 2010.

Silber, G.K., S. Bettridge, and D. Cottingham. 2009. Report of a workshop to identify and assess technologies to reduce ship strikes of large whales, 8-10 July, 2008, Providence, Rhode Island. U.S. Dep. Comm., NOAA Tech. Memo. NMFS-OPR-42.5.

Tejedor, A., Gauffier, P., De Stephanis, R., Cañadas, A. and Panigada, S. 2010. Progress report on the test to use the Strait of Gibraltar and Cabo de Gata TSS case studies as models for mitigation measures for ship strikes and other traffic related impacts on cetacean populations. Document presented at the 5th meeting of the SC of ACCOBAMS, Casablanca, 11-13 January 2010.

Vanderlaan, A.S.M. and Taggart, C.T. Efficacy of a voluntary area to be avoided to reduce risk of lethal vessel strikes to endangered whales. *Conservation Biology* 23(6): 1467-1474, 2009.

Williams, R. & O'Hara, Patrick 2010. Modelling ship strike risk to fin, humpback and killer whales in British Columbia, Canada. *Jour. Res. Man.* 11 (1):1-8

4. VOLUNTARY CONTRIBUTIONS

France made a voluntary financial contribution of 7.500 € to the benefit of ship strikes work. Belgium made a voluntary contribution of 20.000 € towards funding the Monaco ship strikes reduction workshop.

Appendix 1 Membership of the Ship Strikes Working Group as per May 2010

<u>Argentina</u> Miguel Iñiguez	<u>France</u> Vincent Ridoux	<u>New Zealand</u> Mike Donoghue	<u>USA</u> Greg Silber Shannon Bettridge
<u>Australia</u> Lesley Gidding Peter Komidar	<u>Germany</u> Thomas Schmidt	<u>Portugal</u> Marina Sequeira	<u>CMS/ASCOBANS</u> Heidrun Frisch
<u>Belgium</u> Alexandre de Lichtervelde Fabian Ritter	<u>Italy</u> Caterina Fortuna	<u>South Africa</u> Herman Oosthuizen	
<u>Brazil</u> Onildo Joao Marini Filho	<u>Korea</u> Zang Geun Kim	<u>Spain</u> Santiago Lens Ana Tejedor	
<u>Denmark/Greenland</u> Nette Leverman Maj Munk	<u>Luxemburg</u> Pierre Gallego	<u>UK</u> Jennifer Lonsdale	