

61st Annual Meeting of the International Whaling Commission

SHIP STRIKES WORKING GROUP

FOURTH PROGRESS REPORT TO THE CONSERVATION COMMITTEE



Picture: F. Ritter/M.E.E.R. e.V. Atlantic spotted dolphin, Canary Islands

MAY 2009

1. BACKGROUND TO THE FOURTH 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 comprises Argentina, Australia, Belgium, Brazil, Denmark/Greenland, France, Germany, Italy, Republic of Korea, Luxemburg, New Zealand, Portugal, South Africa, Spain, UK and the USA (see Appendix 1 for an updated list)¹. 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, global ship strikes database; adoption 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 last year, 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.

This report therefore:

1. reports on progress with last year's recommendations;
2. reviews the original work plan, and
3. provides updated and new information on ship strikes on cetaceans collected since IWC/60.

2. PROGRESS MADE WITH RECOMMENDATIONS

2.1 Co-operation with IMO

2.1.1 Ship strikes on IMO's agenda

At the 57th meeting of the Marine Environment Protection Committee (MEPC) in March-April 2008, ship strikes have been put on the IMO agenda by a core group of IWC members. Foreseen over three MEPC meetings, the work includes scoping of the issue, preparing of an IMO guidance document and consideration of any gaps in actions that may be taken. At MEPC 58 in October 2008, the US submitted a proposal (MEPC 58/18) for the development of a guidance document for minimizing the risk of ship strikes. The proposal was adopted. Belgium, with Australia, submitted an update on the IWC ship strikes database (MEPC 58/18/1). Spain submitted information on measures taken to reduce collisions (MEPC 58/INF.15). The next MEPC meeting will take place from 13 to 17 July 2009; Italy, Spain, France and Monaco have submitted a document synthesizing the knowledge of ship strikes in the Mediterranean and prioritizing mitigation measures (MEPC 59/18). IFAW has submitted a paper on guidance to reduce the impact of off-shore recreational boating events.

¹ Given the activities of UNEP/CMS and its sister Agreements in relation to ship strikes, the Chair of the SSWG would like to propose that UNEP/CMS be invited to join the SSWG.

2.1.2 IWC co-operation with IMO

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 noise², 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 IWC Scientific Committee in 2008 endorsed targets for the reduction of background noise due to shipping and will discuss this issue further at IWC 61.

Both the IWC Secretariat and the SSWG Chair were present at MEPC 58 in October 2008. A side-event on ship strikes, co-organised by Australia, Belgium and the US in collaboration with IFAW, was attended by over 80 people.

2.2 Global database on ship strikes

The need for a global database to allow further analyses of factors affecting risk, identifying areas where ship strikes may be of particular conservation concern, and to develop the most effective mitigation measures, has been widely recognized. The IWC began work on a global database in 2006 and an initial design was developed by the Scientific Committee. In April 2008, the database had 763 records which were summarized in Van Waerebeek and Leaper (2008). At IWC 60, the Scientific Committee recommended a number of tasks to develop the database further, including transferring the database to a web-based system with a public interface to allow data entry (http://www.iwcoffice.org/sci_com/shipstrikes.htm). Leaper and Donovan (2009) present an update on progress since IWC 60. During this period, around 150 potential new records for the database have been identified from a combination of data presented at IWC 60, historical reviews and new incidents.

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. Countries can personalise the back of the folder with the name of their stranding network coordinator or their ship strikes coordinator. It will be available in six languages in paper and electronic form (see Appendix 2).

2.3 Adoption 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 workshop Steering Committee was established after the annual meeting in Santiago de Chile and a proposal (IWC/61/CC5) submitted to the Scientific and Conservation Committees for their review in Madeira. The document includes a proposal for a joint IWC-ACCOBAMS ship strikes mitigation workshop with a focus on the Mediterranean Sea and the Canary Islands; the proposed timing of the workshop is in fall 2010 in Monaco. Broad stakeholder representation will be pursued, including science, policy, industry and NGOs.

2.5 Awareness raising

Alexandre de Lichtervelde, as SSWG Chair, participated to a series of meetings and events. In October 2008, at the fourth World Conservation Congress (IUCN) held in Barcelona, he animated a brainstorming session on ship strikes. The same month, at the 58th Meeting of the IMO Marine Environment Protection Committee, a side-event on ship strikes, was co-organised by Australia, Belgium and the US. In November, in Texel (The Netherlands), in the framework of a three-day marine awareness course developed by the Dutch ProSea Foundation, the Chair held a talk on ship strikes. In December, at the 9th CMS Conference of Parties held in Rome, he made a presentation on 'Ship strikes with Cetaceans: Solutions for a Global Issue'; the side-event was held jointly with Australia and the US. In March this year, the Chair also gave a presentation in Marseille (France) at a two-day training session for crew and maritime authorities; the training was organized by the NGO Souffleurs d'Ecume and its focus this year was on collisions with cetaceans. The global website for cruising sailors - www.noonsite.com, has joined forces with marine environmental group MEER (www.m-e-e-r.org) to launch a worldwide survey of collisions and near-misses between cetaceans and sailing yachts.

² 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.

3. REVIEW OF WORK PLAN

In 2006, a work plan was developed by the SSWG (see IWC/59/CC3). As described in point 1 above, a series of recommendations have been implemented, partially or totally³. For some of them, like the identification of stranding networks and crew training courses, work is being conducted on an ongoing basis, whereas for others, such as the adoption of national or regional legislation, rules and action plans to reduce the impact of ship strikes, little progress has been made (see 2.3 above). However, the envisaged mitigation workshop (point 2.4 above) would address a number of previous recommendations.

Looking to the future and taking into account that online input into the centralised ship strikes database is now provided on the IWC website, it is fundamental that member governments report on collision incidents using the user-friendly forms of the system (http://www.iwcoffice.org/sci_com/shipstrikes.htm). Doing so will greatly help to give further direction to the work on basis of trends identified. It is now clear that the current number of records represents only the tip of the iceberg. It will also be necessary for IWC members that are also attending IMO meetings to coordinate proposals to reduce collision risk, i.a. using the guidance document developed by the US.

4. UPDATED AND NEW INFORMATION RECEIVED ON SHIP STRIKES SINCE IWC/60

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.

Canada

In January, Fisheries and Oceans Canada released its proposed North Atlantic right whale recovery plan (The Recovery Strategy for the North Atlantic Right Whale in Atlantic Canadian Waters). 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.

USA

The rules implementing speed restrictions of 10 knots or less for certain vessels (65 ft or greater) in certain times and areas (e.g., key port entrances) along the U.S. Atlantic seaboard have become effective in December 2008. The NMFS Office of Protected Resources convened a workshop in November 2008 on “Ways to Assess the Effectiveness of the Ship Strike Reduction Rule.” The goal of the workshop was to develop a strategy, involving multiple components, to monitor and assess whether vessel speed regulations are achieving the rule’s intent of reducing the occurrence of ship strikes in right whales. The workshop report indicates that participants agreed that the timeframe for implementing adequate and rigorous metrics is short. Given the variables contributing to ship strikes, detecting meaningful biological effects of the regulations would be difficult. However, basic parameters, strategies, and a number of metrics/indices were developed. The report is available by contacting Greg Silber (greg.silber@noaa.gov) or Shannon Bettridge (shannon.bettridge@noaa.gov).

Two vessel routing proposals to the IMO 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 regarding ship strikes reduction are described in the update provided by the US to the Conservation Committee and include: aircraft surveys and right whale alerts, mariner and boater education and outreach programs and auto-detection buoys in the Boston Traffic Separation Scheme.

³ The Secretariat hopes to have a summary of where progress with each item in the work plan stands available in Madeira.

Intergovernmental organisations, NGOs and Programmes

Convention on Migratory Species (CMS)

In Lomé (Togo), on 3 October 2008, at the second inter-governmental meeting on Western African and Macaronesian aquatic mammals, titled WATCH – “Western African Talks on Cetaceans and their Habitats”, a CMS *Memorandum of Understanding concerning the Conservation of the Manatee and Small Cetaceans of Western Africa and Macaronesia* was signed by 15 of the 29 Range States of the new agreement. Its Action Plan for the Conservation of Small Cetaceans of Western Africa and Macaronesia recognises ship strikes as a threat, albeit one of unknown magnitude in large parts of the agreement area. Accordingly, the Action Plan calls on states, with the support of research institutions and NGOs, to identify potential for significant or localised effects on small cetaceans and develop management and mitigation strategies to reduce identified effects, as well as put appropriate legislation in place to address the issue (Objective 4.7). It also stresses the need to improve understanding of non-quantified but potential threats to small cetaceans, including ship strikes (Objective 5.7) by giving very high priority to action relating to the encouragement of anecdotal and opportunistic recording and documentation of ship strikes.

At the 9th CMS Conference of Parties held in Rome in December, a side-event on ship strikes was co-organised by Belgium, Australia and the US.

At the second Meeting of Signatories to the *Memorandum of Understanding for the Conservation of Cetaceans and Their Habitats in the Pacific Islands Region* to be held on 28-29 July 2009 in Noumea, New Caledonia, the 11 Signatory States will consider the proposal to adopt the Whale and Dolphin Action Plan already endorsed by the members of the Pacific Regional Environment Programme (SPREP) as Action plan for the MoU. This Action Plan acknowledges the lack of information to ascertain the threat ship strikes pose to cetaceans in the region and calls on states to encourage anecdotal and opportunistic recording and documentation of ship strikes incidents to improve knowledge of the potential threat.

ACCOBAMS

In the framework of the implementation of the *Agreement on the Conservation of Cetaceans of the Black Sea Mediterranean Sea and Contiguous Atlantic Area*, the Italian Ministry of Environment pledged a voluntary contribution of €70.000 to finance a project on “Collisions between ships and whales in the Mediterranean Sea: assessment and identification of conservation and mitigation measures”. This project will be managed by Tethys, an NGO partner of ACCOBAMS. In April 2008, the Fifth Scientific Committee welcomed the REPCET project (REal-time Plotting of large CETaceans) aiming to improve the detection of large cetaceans from the shipping units which travel using a computerised network, in order to limit collision risks in the PELAGOS Sanctuary (North Western Mediterranean), and encouraged the extension of the system beyond the PELAGOS area. REPCET is a partnership between the NGO Souffleurs d'Ecume, academic institutions and the maritime sector. The testing of the prototype has begun on board ferries and sailing vessels.

ASCOBANS

The Advisory Committee of the *Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas* considers ship strikes as an important issue. A study has started using ship's Automatic Identification System (AIS) data to match distribution of shipping with distribution of cetacean taxa which may be vulnerable to ship strikes. Results are expected in time for the 17th Advisory Committee Meeting in spring 2010.

UN

The IWC Secretariat provided input to the UN Secretary General's Report on Oceans and Law of the Sea. This included an update of IWC's activities on ship strikes. The SG report will be considered as from October 2009 during the 64th session of the UN General Assembly.

IUCN

On the occasion of the 4th World Conservation Congress (Barcelona, 5-14 October 2008), the SSWG chair animated a brainstorming session on ship strikes.

Country reports and public information

Australia

Australia has submitted a country report on ship strikes to the Conservation Committee (IWC/61/CC3).

New Zealand

New Zealand has submitted a voluntary national cetacean conservation report which includes information on ship strikes (IWC/61/CC6).

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

Communications company Nortel won the US Coast Guard contract to maintain and support the Mandatory Ship Reporting system for right whales. The system takes reports from the National Marine Fisheries Service of the National Oceanic and Atmospheric Administration (NOAA) and automatically feeds them to large commercial ships in the area of right whales.

A European project called SILENV (Ship-oriented Innovative soLutions to Eliminate Noise and Vibrations) will start in fall 2009. The project includes an assessment of underwater noise effects on marine mammals, including collisions. The Demonstration Mission LIDO (Listening to the Deep-Ocean Environment) is developing real-time tools to detect and track acoustic events and marine organisms, especially great whales in European waters, from the Arctic to the Gulf of Cadix, including the Mediterranean Sea.

Recently published papers and information on ship strikes

Kemper, C., D. Coughran, R. Warneke, R. Pirzl, M. Watson, R. Gales and S. Gibbs. 2008. Southern right whale (*Eubalaena australis*) mortalities and human interactions in Australia, 1950-2006. *Journal of Cetacean Research and Management* 10(1):1-8.

Leaper, R. and Donovan, G. 2009. Update on the IWC ship strikes database. 61st Annual Meeting of the International Whaling Commission, Scientific Committee document SC/61/BC.

Mellinger, D.K., K.M. Stafford, S.E. Moore, R.P. Dziak and H. Matsumoto. 2007. An overview of fixed passive acoustic observation methods for cetaceans. *Oceanography* 20(4): 36-45 Special Issue.

Ritter F., Collisions of sailing vessels with cetaceans worldwide: first insights into a seemingly growing problem. 2009, 61st Annual Meeting of the International Whaling Commission, Scientific Committee document SC/61/BC1.

Van Waerebeek, K. and Leaper, R. 2008. Second report of the IWC Vessel Strike Data Standardisation Working Group. 8pp. Paper SC/60/BC5 presented to the IWC Scientific Committee, Santiago de Chile.

Vanderlaan, A.S.M., J.J. Corbett, S.L. Green, J.A. Callahan, C. Wang, R.D. Kenney, C.T. Taggart and J. Firestone. 2009. Probability and mitigation of vessel encounters with North Atlantic right whales. *Endangered Species Research* 6(3): 273-285.

4. VOLUNTARY CONTRIBUTIONS

Belgium has pledged to support the IWC ship strikes work with a contribution of €20.000. France has pledged €7.500 for the further development of the IWC ship strikes database.

Appendix 1:
Membership of the Ship Strikes Working Group as per June 2009

<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> Andrew McNee Lesley Gidding	<u>Germany</u> Thomas Schmidt	<u>Portugal</u> Marina Sequeira	
<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	
<u>Denmark/Greenland</u> Maj F. Munk Michael C.S. Kingsley	<u>Luxemburg</u> Pierre Gallego	<u>UK</u> Jennifer Lonsdale	

WHALES: avoiding collisions prevents damage to ships, and injuries to passengers, crew and whales.



The International Maritime Organization (IMO) is developing detailed guidance for minimising the risk of collisions between ships and whales, based on proposals put forward by the United States in 2008.

This leaflet gives a brief summary of some things to consider.

1 Passage planning

Minimising the risk of collisions with whales can become a regular part of planning a passage. The best way to reduce risk is to avoid areas with the most whales. Planning well in advance may allow an area to be avoided with minimal additional passage time. If it is not possible to avoid known areas of high whale density, then try to plan to slow down in these areas. There is good evidence that the risk to whales is substantially less from ships travelling at 10 knots compared to 15 knots or more.

In some areas coast guards may be able to provide information on locations of recent whale sightings and likely high density areas.

2 Keeping watch

Large ships have little ability to avoid whales which surface directly ahead of them. However, watch officers should be aware of what action they should take if whales are seen. Large whales can often be seen at distances of several miles and seeing one whale is often a strong indication that there are likely to be others in the area. Modest course alterations away from sightings can reduce collision risk with other individuals in the same aggregation. Having a dedicated observer scanning ahead with binoculars will help to detect whales at greater distances. Keep as far from whales as possible and do not approach closer than a quarter of a mile unless unavoidable.

Smaller ships, including sailing vessels, are more likely to be damaged by collisions with whales and should be prepared for direct avoidance manoeuvres. Watch officers should be on high alert if any whales are sighted. Consider reducing speed in poor sightings conditions as well as in response to seeing whales.

3 Reporting incidents

More information helps understand the problem and the factors that affect collision risk. All reports of collisions are valuable and will help avoid these incidents in the future. Please report any whale struck, stuck on the bow, carcasses observed at sea, significant or abnormal sightings such as whales in unusually large numbers, to the appropriate coast guard or maritime authority. Use the International Whaling Commission (IWC) template to report on any collision incident at http://www.iwcoffice.org/sci_com/shipstrikes.htm or email shipstrikes@iwcoffice.org

4 Measures available through the IMO and national legislation

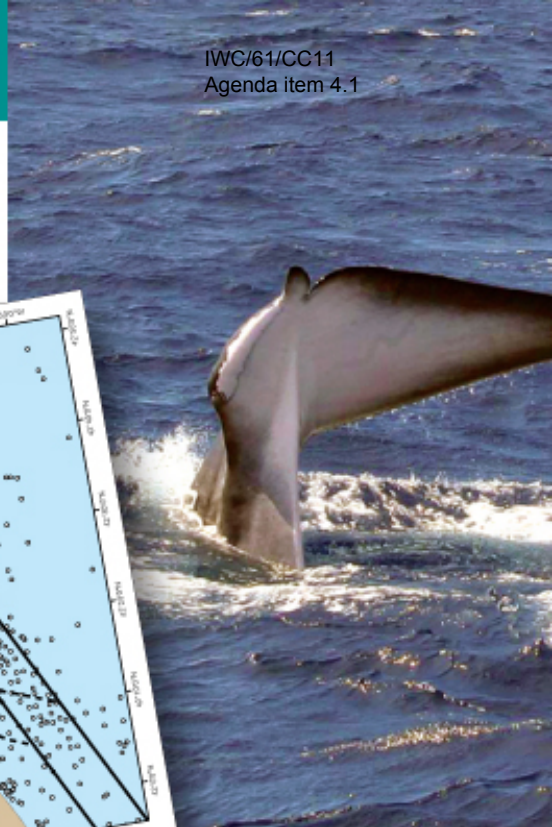
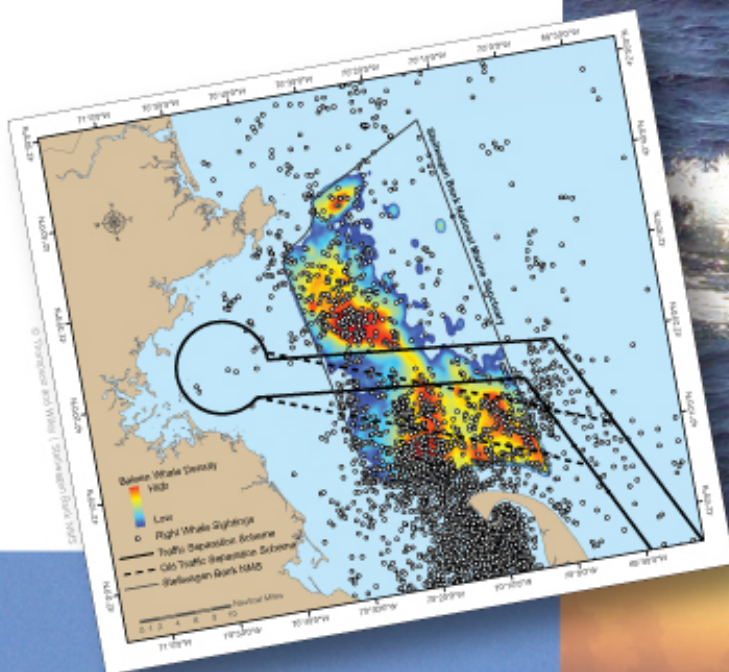
In some waters, measures have been taken to minimize the risk of collision with whales. These measures include the re-alignment of Traffic Separations Schemes, the creation of Areas To Be Avoided, Mandatory Ship Reporting Systems, Advisories to Mariners and speed restrictions.

5 Scientific research

There is no simple solution to the problem of ship strikes. Scientists are looking at ways of modelling distribution patterns of whales and ships to identify high risk areas, developing autonomous off-shore buoys that listen for whales, and systems for relaying information from observations of whales to mariners.

Photos © IFAW

The approaches to Boston harbour cross an important area for right and other whales. Risk has been reduced by moving shipping lanes slightly to avoid high density areas.



From the office of the Belgian IWC Commissioner Chair, Ship Strikes Working Group

There is a growing awareness of the worldwide problem of collisions between ships and whales. In some incidents there has been serious damage to the ship. Severe or even fatal injuries to passengers have occurred involving hydrofoil ferries, whale-watching vessels and recreational craft. In most collisions, a whale struck by a ship is killed or left severely injured. Although many collisions go unnoticed, information gathered from the incidents that are witnessed is critical to solving the problem.

Since 2005, ship strikes with whales, dolphins and porpoises have been a priority issue for the work of the International Whaling Commission (IWC). Belgium is leading the process in order to (1) increase awareness (2) identify measures to reduce the number of ship strikes, and (3) obtain acceptance of these measures by the maritime sector. A key tool to use is the ship strikes database accessible through the IWC website. It is critical that the maritime industry assists and provides the data needed to inform decision-making that will reduce risks in the future.

This is why the Government of Belgium has commissioned this leaflet.

Alexandre de Lichtervelde
IWC Commissioner and Chair Ship Strikes Working Group



Please report any collisions with whales to the IWC

www.iwcoffice.org/sci_com/shipstrikes.htm
e-mail: shipstrikes@iwcoffice.org

or contact your local ship strikes co-ordinator or
whale stranding network.