

Agenda Item 2.4 Ship Strikes

Related Work Plan Activity / AC Action Point: WPA14 (Review new information on ship strikes and their impacts on small cetaceans. Make recommendations to Parties and other relevant authorities for further action.)

Documents: NR.1-10 (National Reports)

Expected Outcomes: Note taken. Recommendations / Action Points suggested.

C. Habitat Change and Degradation (incl. potential physical impacts); Ship Strike

AIM: Understanding the potential risk of ship strike as a cause of injury/death in small cetaceans.

Relevant Resolutions: 8.9, 8.2, 8.1, 6.1, 5.4

Ship strikes are collisions between vessels and cetaceans. Most research so far has focused on large cetaceans as incidences are in many cases obvious.

For small cetaceans ship strike events are not well documented, but there is evidence they might occur more often than previously thought.

They can especially be a threat on small resident cetacean populations.



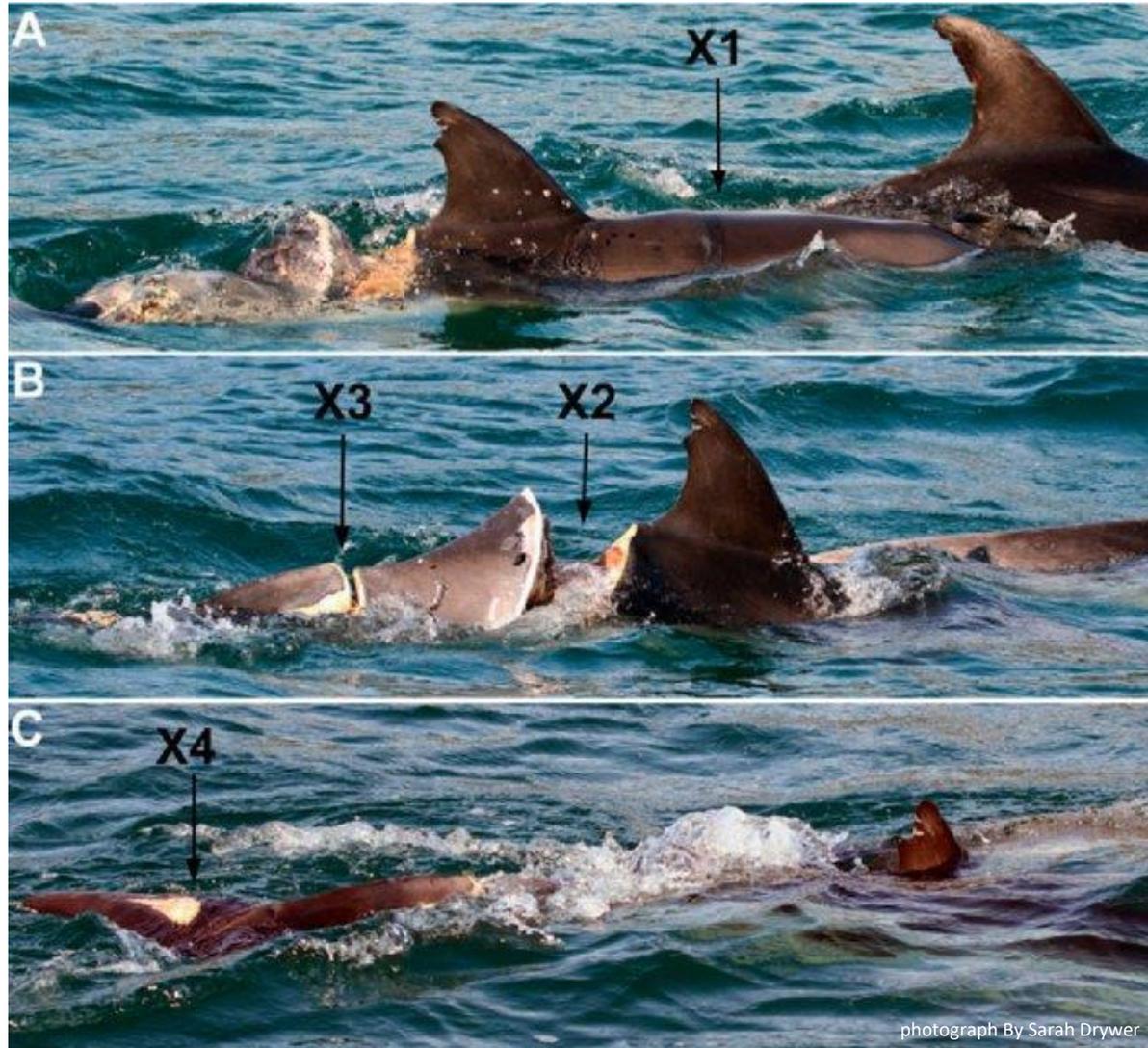
C. Habitat Change and Degradation (incl. potential physical impacts); Ship Strike

Ship strike can cause direct death or injury in cetaceans.

Even collisions that are non-fatal might leave individuals with a reduction in their survival chances.

To determine the occurrence of ship-strikes different sources are used:

- direct observations
- necropsies of stranded animals
- photographs of animals



Dwyer SL, Kozmian-Ledward L, Stockin KA (2014) Short-term survival of severe propeller strike injuries and observations on wound progression in a bottlenose dolphin. *New Zealand Journal of Marine and Freshwater Research* 48: 1–9.

National reporting on Ship Strikes

| BE | DK | FI | FR | DE | LT | NL | PO | SE | UK |
|--|----|----|----|----|----|----|----|----|----|
| Are there reports available in your country of ship strikes with small cetaceans from visual observations? | | | | | | | | | |
| no | no | no | no | no | | no | no | | no |

→ Direct visual observations of ship strikes of small cetaceans in the ASCOBANS area are not reported.

→ **This is likely not a good source of information for the occurrence of ship strike.**

National reporting on Ship Strikes

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| Are there reports available in your country of ship strikes with small cetaceans from visual observations? | | | | | | | | | |
| no | no | no | no | no | | no | no | | no |
| Are there reports in your country of vessel strikes from necropsies of stranded animals for 2016- 2018? | | | | | | | | | |
| no | no | no | yes | no | | yes | no | | yes |

- Ship strikes can be found in animals stranded that are pathologically investigated.
- Incidents of ship strikes were reported in three countries and for three species: harbour porpoise (FR, NL, UK), common dolphin (FR, UK), white-beaked dolphin (FR)

National reporting on Ship Strikes

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|--|----|----|-----|-----|----|-----|----|----|-----|
| Are there reports available in your country of ship strikes with small cetaceans from visual observations? | | | | | | | | | |
| no | no | no | no | no | | no | no | | no |
| Are there reports in your country of vessel strikes from necropsies of stranded animals for 2016- 2018? | | | | | | | | | |
| no | no | no | yes | no | | yes | no | | yes |
| Does your country have a protocol in use to determine that a cause of death in post mortem examination is due to a vessel strike? | | | | | | | | | |
| yes | ? | no | yes | yes | ? | yes | no | ? | yes |

→ All countries that conducted pathological examinations did follow the standard protocol, which includes guidelines to determine ship strike.

National reporting on Ship Strikes

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| no | | no | no | no | | no | no | | no |
| Are there reports in your country of vessel strikes from necropsies of stranded animals for 2016- 2018? | | | | | | | | | |
| no | no | no | yes | no | | yes | no | | yes |
| Does your country have a protocol in use to determine that a cause of death in post mortem examination is due to a vessel strike? | | | | | | | | | |
| yes | ? | no | yes | yes | ? | yes | no | ? | yes |
| Is there evidence in your country from existing photo-identification catalogues of small cetaceans of any non-lethal ship strike for the 2016-2018? | | | | | | | | | |
| no | no | no | no | no | | yes | no | | yes |

| BE | DK | FI | FR | DE | LT | NL | PO | SE | UK |
|---|----|----|----|----|----|-----|----|----|-----|
| Is there evidence in your country from existing photo-identification catalogues of small cetaceans of any non-lethal ship strike for the 2016-2018? | | | | | | | | | |
| no | | no | no | no | | yes | no | | yes |

→ In the UK a photo-identification catalogue exists for bottlenose dolphins in the Irish Sea consisting of 308 animals. Of those 4 show ship-strike scars.

→ In the Netherlands a small population of harbour porpoises has been photo-identified consisting of 48 identified animals. One of these is showing scars that were possibly caused by a ship-strike.



Source: Feingold & Evans (2014)

National reporting on Ship Strikes

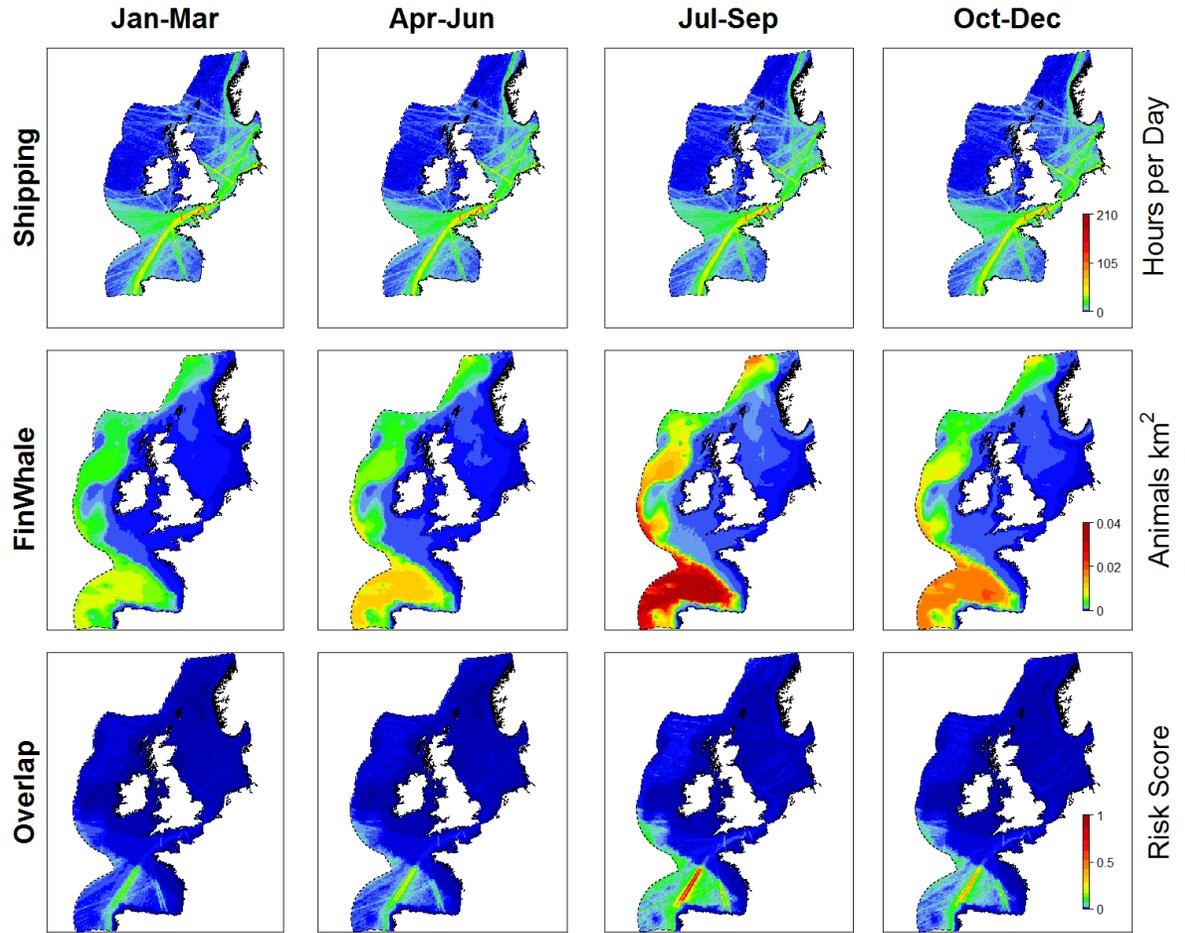
| BE | DK | FI | FR | DE | LT | NL | PO | SE | UK |
|--|----|----|-----|-----|----|-----|----|----|-----|
| Are there reports available in your country of ship strikes with small cetaceans from visual observations? | | | | | | | | | |
| no | no | no | no | no | | no | no | | no |
| Are there reports in your country of vessel strikes from necropsies of stranded animals for 2016- 2018? | | | | | | | | | |
| no | | no | yes | no | | yes | no | | yes |
| Does your country have a protocol in use to determine that a cause of death in post mortem examination is due to a vessel strike? | | | | | | | | | |
| yes | ? | no | yes | yes | ? | yes | no | ? | yes |
| Is there evidence in your country from existing photo-identification catalogues of small cetaceans of any non-lethal ship strike for the 2016-2018? | | | | | | | | | |
| no | no | no | no | no | | yes | no | | yes |
| Do you have any other photographs or evidence of ship strikes outside of photo-identification catalogue? | | | | | | | | | |
| no | no | no | no | no | | no | no | | yes |

| BE | DK | FI | FR | DE | LT | NL | PO | SE | UK |
|--|----|----|----|----|----|----|----|----|-----|
| List initiatives/projects (including PhD, MSc) involving studies of ship strike and its possible effects on small cetaceans for 2016-18 in your country | | | | | | | | | |
| no | | no | no | no | | no | no | | yes |

**MERP (Marine Ecosystem Research Programme)
Example of Risk Mapping:
Fin Whales & Shipping**



Identifying main risk areas and times



| BE | DK | FI | FR | DE | LT | NL | PO | SE | UK |
|---|----|----|-------|-----|----|----|----|----|----|
| List any management / policy actions related to mitigating ship strike for small cetaceans (rerouting, tracking animals, ship speed limits) in your country | | | | | | | | | |
| no | | no | (yes) | yes | | no | no | | no |

→FR: within the Iroise Marine Natural Park

→DE: Rules that regulate the speed of motor boats inside National Parks at the coast of the North Sea and Baltic Sea. The regulations aim primarily on seals and migratory birds, but all marine species benefit from it.

“And for the only permanent inhabitant of German water, the harbour porpoise, speed limitations were created in the Wadden Sea to avoid any ship strike risk in an area, where this otherwise might have been possible.”

A quick look at the International Whaling Commission

International Whaling Commission National Progress Report*

| member | BE | DK | FI | FR | DE | NL | LT | PL | SW | UK | IE | LV | NO | PT | RU | ES |
|-------------------------------------|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|
| ASCOBANS | Y | Y | Y | Y | Y | Y | Y | Y | Y | Y | | | | | | |
| ASCOBANS non-Party range | | | | | | | | | | | Y | Y | Y | Y | Y | Y |
| IWC | y | y | y | y | y | y | y | y | y | y | y | n | y | y | y | y |

All ASCOBANS members are also members of the IWC. All range members except Latvia are members.

*annual report of Parties.

BE: Belgium, DK: Denmark, FI: Finland, FR: France, DE: Germany, NL: Netherlands, LT: Lithuania, PL: Poland, SW: Sweden, UK: United Kingdom, IE: Ireland, LV: Latvia, NO: Norway, PT: Portugal, RU: Russia, ES: Spain

- IWC national progress report allows entry for small cetaceans
- Asks for any incidence of ship strike in these forms:

Add Vessel Strikes of Small Cetaceans data

Large Area

Choose a large area...

Species

Choose a species...

Year

Choose a year...

Local Area

Do you have specific local area name? (optional).

Local Taxonomy

Is this species known by another name locally? (optional)

Local Area (Long/Lat)

Please click and drag the pointer in the map below or enter a decimal "lat,long" format e.g. 52.244170, 0.110522 (optional)



Individuals: Dead

0

Individuals: Seriously Injured

0

Individuals: Injured

0

Individuals: Unknown

0

RMP Small Area

[view map](#)

Unknown or N/A

Submitted to IWC or National Ship Strike Database

If data has not been submitted, please submit data to the IWC ship strike database (found on the left hand menu of this site).

Unknown

Contacts

[Add a contact](#)

Select Some Options

References

[Add a reference](#)

Select Some Options

Comments

Please enter any further information you feel would be useful.

Close

Add record+

International Whaling Commission

Global ship strike database

- Aimed at large whale species to quantify mortality
- Focusses on records of observations of ship strikes at sea, in particular:
 - Species
 - Location
 - Vessel
 - Circumstances (e.g. speed)
- Underlying motivation is mitigation (e.g. shipping lanes, IMO regulations)

Action points/recommendations to discuss at AC

- **Meet with the IWC secretariat in 2020** to discuss how to avoid duplication of work, in particular:
 - Working together with IWC scientific committee on streamlining national progress report formats
 - Discuss process if small cetacean data is relevant for the global database, and if yes, if it is not based on observations how would it find its way into the global database
 - Highlight any issues specific to small cetaceans as this is a “new” entry form for IWC progress reports
- **Provide feedback to the ASCOBANS secretariat / national reporting format group** regarding changes to format in the national report

Should any of these points result in follow-up actions /recommendations from the AC?

Germany:

“Ship strikes seem not an issue of concern in ... the German marine waters. **However, observations show that porpoises manage to reach the estuaries and fresh water parts of German rivers. There in the past ship strikes occurred and these were protocolled. Since a few years the presence of harbor porpoises in German estuaries and rivers are monitored and the situation of ship strikes assessed.**”

Netherlands:

“There was an increase in blunt trauma as a cause of death from necropsies of harbour porpoises in recent years. It is not clear if this represents an actual increase in ship strike occurrence as the sample of stranded porpoises that are analyzed is comparatively small (ca 50 annually) and might not be comparable between years. **Nevertheless, it is cause for concern as this is the first time such numbers of possible ship strike events have been documented.**”

Regarding if the potential threat due to ship strike is increasing, decreasing, the same or unknown:

All countries that reported ship-strikes noted that the potential threat to ship strike is unknown.

UK: “Investigations and research on ship-strike does not primarily target smaller cetacean species, the evidence in therefore minimal and the extent of the threat unknown.”