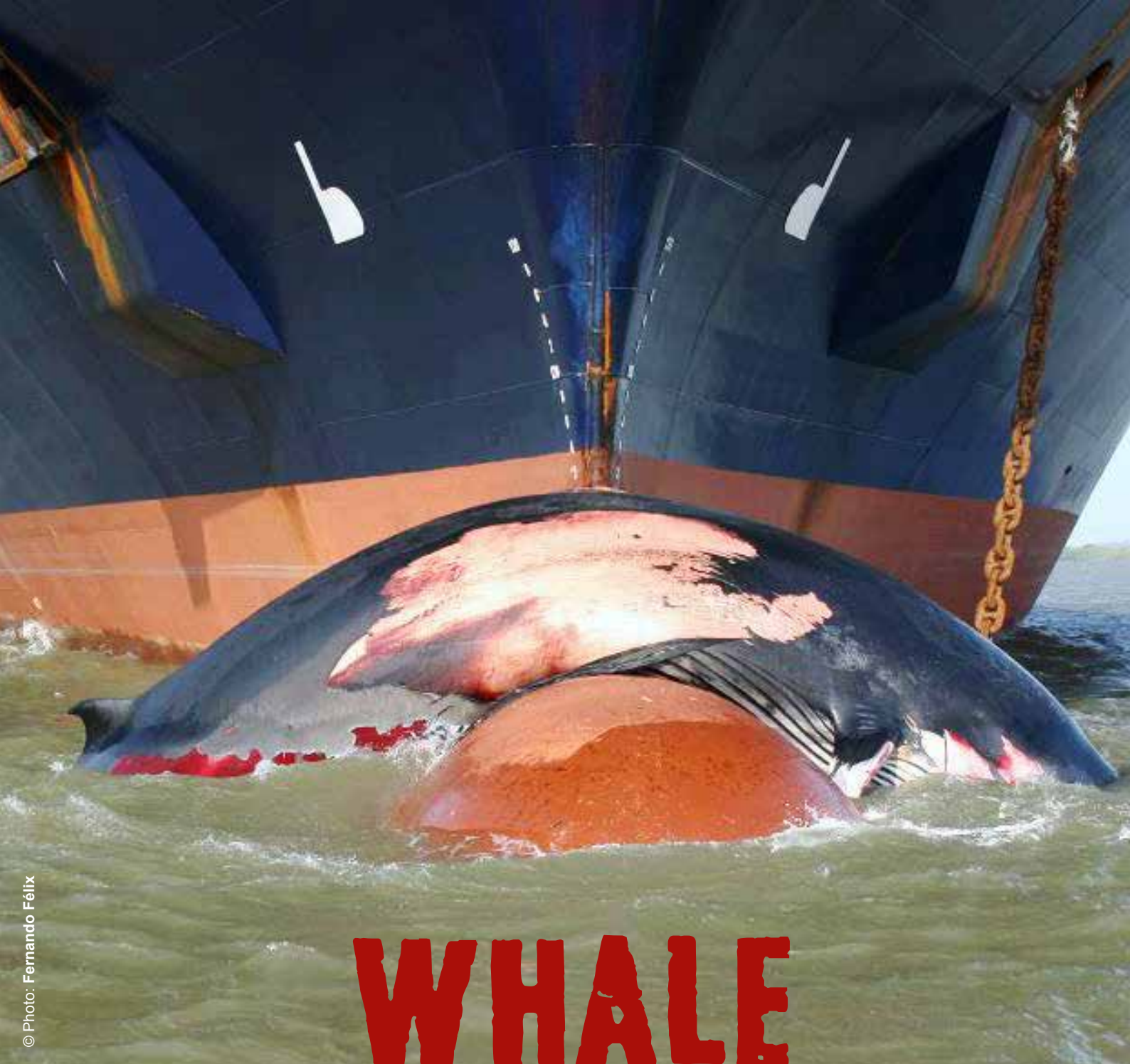


© Photo: Fernando Félix



WHALE SHIP STRIKES

G L O B A L U P D A T E



friendofthesea.org



© Photo: NOAA, Hihwms

CONTENTS

WHALE SHIP STRIKES04

GLOBAL MARITIME TRAFFIC05

HIGH RISK AREAS06

HIGH RISK POPULATIONS07

SOLUTIONS08

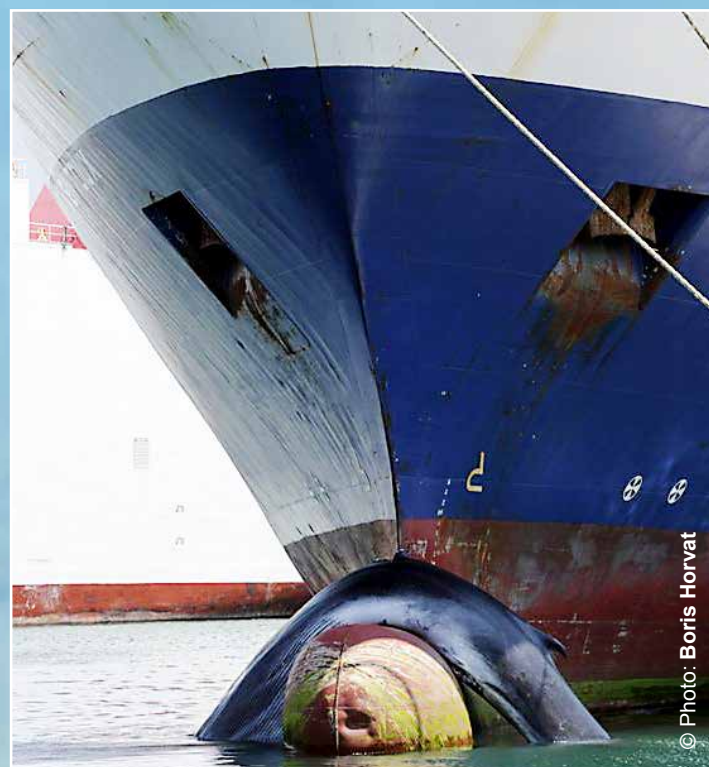
FRIEND OF THE SEA CONSERVATION CAMPAIGN10

ENDNOTES12



WHALE SHIP STRIKES

A SHIP STRIKE IS A COLLISION BETWEEN ANY TYPE OF BOAT AND A MARINE ANIMAL IN THE OCEAN.



© Photo: Boris Horvat

All sizes and types of vessels, from large ships to jet skis, have the potential to collide with nearly any marine species. Strikes that result in death or injury to the animal may go unnoticed by the vessel operator or unreported to researchers that keep track of such incidents. (1)

WHY DO SHIP STRIKES OCCUR?

Collisions may occur anywhere vessels cross paths with marine life.

Whales can be difficult for a vessel operator to see because they are not always clearly visible from the surface. And even if the operator sees the animal clearly, there may be no time for either of them to avoid a collision.

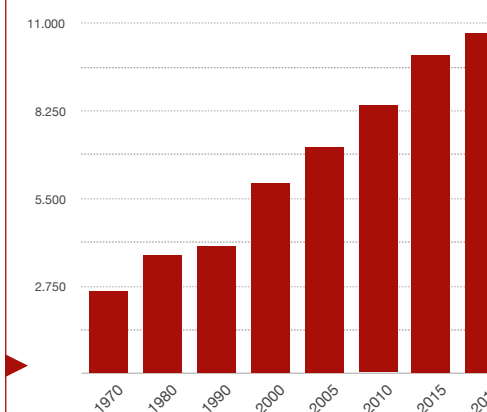
In some cases, evidence of collisions between ships and whales are obvious. Nevertheless, there are many other cases of whales found floating or stranded, whose death or serious injury may be related to collisions. Still, several studies indicate that available records tend to be underestimated, since most ships are unaware of collisions. (1)

© Photo: Alisa Schulman-Janiger



GLOBAL MARITIME TRAFFIC

International seaborne trade development in selected years (Millions of tons loaded). Source: UNCTAD. Review of Marine Transport 2018.



Over the last 50 years, seaborne trade has seen a remarkable development.

Maritime shipping carries between 80 and 90 per cent of global trade. (2) This facility has generated significant traffic around the globe which poses a threat to several populations of large cetaceans worldwide—when collisions between vessels and whales are not avoided.

“TOTAL TREND IN SEABORNE TRADE SINCE 1970 IS QUADRUPLED”



The World Shipping Council (WSC) is the primary industry trade group representing the international liner shipping industry. Council members, which include the world's ten largest container shipping companies, operate approximately 90 percent of the global liner ship capacity. They provide approximately 400 regularly scheduled services linking the continents of the world. These services connect countries, markets, businesses and people, allowing them to buy and sell goods on a scale not previously possible. (3)

Any size or type of vessel has the potential to collide with a marine mammal, not only commercial ships. The types of vessels documented in vessel strikes include large boats, such as cargo ships, whale-watching boats, ferries, and military vessels, and all manner of private watercraft used for commercial and recreational purposes. (4)



WHALE SHIP STRIKES

HIGH RISK AREAS

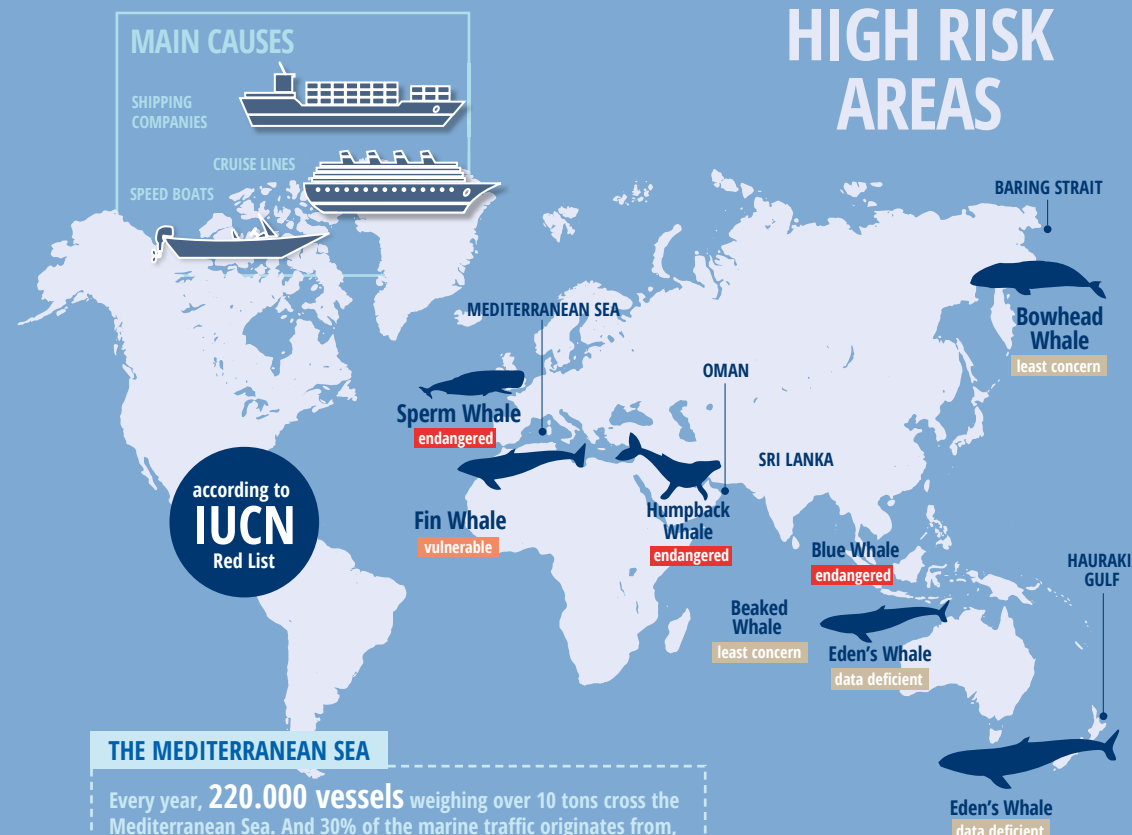
IN CERTAIN REGIONS, WHERE SHIPPING LANES CROSS WHALES FEEDING AND BREEDING AREAS, THE LIKELIHOOD OF COLLISIONS IS EVEN HIGHER.

These spots can be defined as “high risk areas” which include both zones with higher number of whales (where whales aggregate, they are known to return in numbers on a regular basis, or critical population habitats), and zones with a high concentration of vessels (designated shipping lanes, historic shipping routes and port approaches).

The following areas have been identified as “High Risk Areas” where ship strikes are common (5):

1. **Sri Lanka** - Blue Whales (6)
2. **Hauraki Gulf, New Zealand** - Bryde's Whales (7)
3. **Canary Island** - Sperm Whales (8)
4. **Panama** - Humpback whales (9)
5. **Eastern North Pacific (ENP)** - Blue Whales
6. **Mediterranean Sea**
 - 6.1 Strait of Gibraltar - Fin and Sperm Whales (10)
 - 6.2 Balearic Islands - Fin and Sperm Whales
 - 6.3 Eastern Alboran Sea - Fin and Sperm Whales
 - 6.4 Pelagos Sanctuary - Fin Whales (11)
 - 6.5 Island of Crete - Sperm Whales
 - 6.6 Hellenic Trench, Greece - Sperm Whales (12)
7. **NE coast of Sakhalin Island** - Western Gray Whale (13)
8. **Arabian Sea** - Humpback whale (14)
9. **Chile – Peru** (Southern Pacific) - Right Whale (15)
10. **Eastern Bering Sea** - North Pacific Right Whale
11. **Western Arctic (USA and Russian)** - Potential threats to Western Bowhead Whales

HIGH RISK AREAS



SAVE THE WHALES FROM SHIP STRIKES

© Photo: Shutterstock / Chase Dekke

HIGH RISK POPULATIONS

HUMAN-INDUCED MORTALITY CAUSED BY SHIP STRIKES CAN BE AN IMPEDIMENT TO WHALE'S POPULATION GROWTH.

Populations in the low hundreds of individuals are at risk of continuing declines even if only a small number of ship strikes occur per year. Therefore, it is important to identify populations that are small, in decline, or for which human activities result in whale deaths or injuries.



© Photo: Tui De Roy / Minden Pictures

The following species have been identified as “High Risk Populations” (5):

1. Western North Atlantic Right Whale
2. Eastern North Pacific Right Whale
3. Chile-Peru Right Whale
4. Arabian Sea Humpback Whale
5. Western Gray Whale
6. Blue Whale - Sri Lanka and Arabian Sea
7. Blue Whale - Chile
8. Sperm Whale - Mediterranean Sea
9. Fin Whale - Mediterranean Sea
10. Bryde's Whale - Gulf of Mexico
11. Omura's Whale - North Western Madagascar
12. Sperm Whale - Canary Islands



© Photo: GaelinRosenwaks



SOLUTIONS

AWARE OF THIS ISSUE, THE INTERNATIONAL WHALING COMMISSION (IWC) IS WORKING IN CONJUNCTION WITH OTHER ORGANISATIONS SUCH AS THE INTERNATIONAL MARITIME ORGANIZATION (IMO).



2.

They have produced an information leaflet with further advice to reduce the risk of collision between ships and whales. These guidelines contemplate topics related to passage planning, sightings, reporting of incidents, preventive measures and scientific research. (5)

Nonetheless, the number of collisions as well as their impacts on populations of large cetaceans remain difficult to evaluate with precision. Technological, operational and educational measures have been implemented around the world. (15)



3.

WAYS TO REDUCE WHALE SHIP STRIKES -

1. One way to address this issue is to **separate ships and whales**. In some places it's possible to actually move shipping lanes away from areas of known whale concentrations, which can help reduce the risk of these strikes happening.
2. The next best option is **slowing down**. Studies have shown that when ships slow down it reduces the probability of a strike happening by potentially giving the whale a bit more time to respond. And we've also found that slower speeds can reduce the lethality of the strikes. (16)

Effective results in critical areas are urgent. For this, mitigation actions need to be conducted collaboratively. Monitoring and understanding the effects of shipping on our oceans is essential to focus efforts on mitigating the externalities generated by the activity, and to direct shipping companies towards more sustainable transport.



4.

5.

1.



FRIEND OF THE SEA CONSERVATION CAMPAIGN

**FRIEND OF THE SEA INVITES
SHIPPING COMPANIES TO INTENSIFY
THEIR INVOLVEMENT IN THE EFFORTS
MADE SO FAR TO SAVE THE WHALES.**

Investing in the search for information to reduce the threat of ship collisions will facilitate the implementation of measures that reconcile environmental and economic aspects whenever necessary and in a timely manner. All shipping companies that are aware of the problem and seek effective measures to combine economic gain with the preservation of endangered species can support this important conservation campaign. (17)



Friend of the Sea calls the international shipping industry for immediate action to prevent ship strikes. The proposed solution is simple and effective.

Shipping companies need to engage unilaterally, by signing a Friend of the Sea - Save the Whales policy, to:

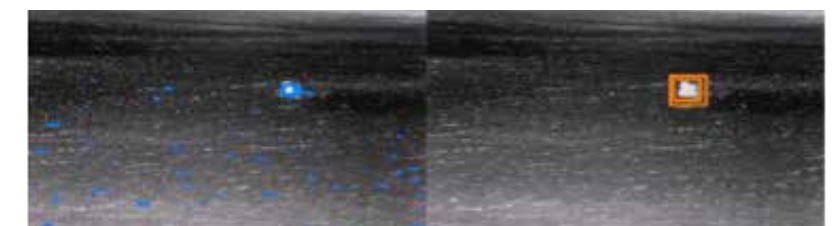
- have in place an onboard full-time marine mammal observation program, on all vessels. This system must constantly cover the area in front of the vessels (120° minimum), including at night.
- use an online platform onboard to be informed on spotted marine mammals near the ship lanes and planned path.
- share whales' observations in real time with an online platform to make this information available to all ships in the area and for statistical purposes.
- allow Friend of the Sea to access real time data on company vessels and nearby marine mammals on online platform.
- have a procedure in place to react and avoid nearby marine mammals.

Evidence of compliance with the policy can be achieved by means of already implemented systems or **Friend of the Sea selected systems**, such as:

- onboard infrared cameras
- marine mammal presence alert software
- a network reporting platform

Friend of the Sea will promote Whales Safe approved shipping companies and cruise lines to consumers and companies worldwide, recommending use of their services.

Promotion will be carried out by means of International Press Releases, direct communication with companies, events, trade shows and Social Media.





ENDNOTES

1. NOAA Fisheries, Understanding Vessel Strikes. (<https://www.fisheries.noaa.gov/insight/understanding-vessel-strikes>)
2. UNCTAD, United Nations Conference on Trade and Development, 50 Years of Review of Marine Transport, 1968-2018: Reflecting on the past, exploring the future. (https://unctad.org/system/files/official-document/dtl2018d1_en.pdf)
3. World Shipping Council, Partner In Trade. A Coordinated Voice for the Liner Shipping Industry. (<https://www.worldshipping.org/>)
4. Laist et al., 2001; Jensen and Silber, 2004; Panigada et al., 2006; Van Waerebeek et al. 2007; Ritter 2012
5. Internationale Whaling Commission. Ship Strikes: collision between whales and vessels. (<https://iwc.int/ship-strikes>)
6. Priyadarshana et al., 2016; Redfern et al., 2016; de Vos et al., 2016
7. Van Waerebeek et al., 2007; Baker et al., 2010; Constantine et al., 2015
8. Carrillo and Ritter, 2010; Ritter, 2010; Fais et al. 2016
9. Guzman et al., 2013
10. De Stephanis and Urquiola, 2006
11. Panigada et al., 2006
12. Frantzis et al., 2014
13. Weller et al., 2002
14. Pomilla et al. 2014
15. Vanderlaan and Taggart, 2007
16. Tara Lohan, Cargo Vessels Are Killing More Whales. A New Effort Aims to Save Them. (<https://www.ecowatch.com/whales-california-cargo-ships-2648206820.html?rebelltitem=7#rebelltitem7>)
17. WSO, Friend of the Sea Conservation Project, Save the Whales Campaign 2020. (<https://friendofthesea.org/marine-conservation-projects-and-awareness/save-the-whales-2/>)

WHALE SHIP STRIKES



friendofthesea.org

