

P D A T G L O B A L



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



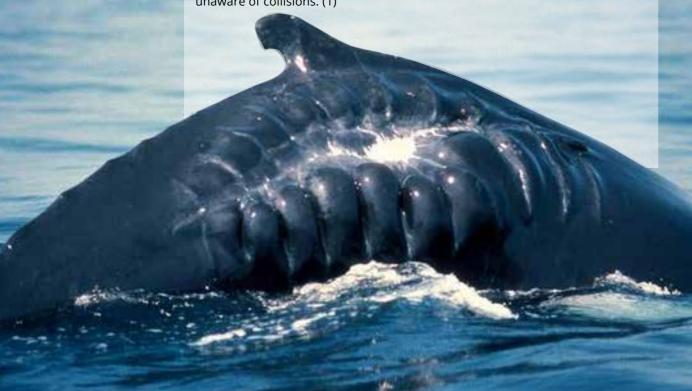
All sizes and types of vessels, from large ships to jet skis, have the potential to collide with nearly any marine species. Strikes that result in death or injury to the animal may go unnoticed by the vessel operator or unreported to researchers that keep track of such incidents. (1)

### 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)

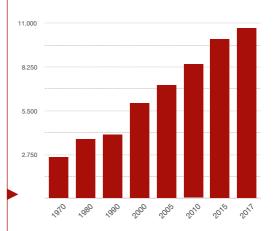




## **GLOBAL MARITIME TRAFFIC**

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

The increasing size and speed of commercial ships, driven by economic interests, result in rising numbers of ship collisions with marine species, especially cetaceans (e.g. dolphins and whales). It is a recognised problem, with records indicating that the phenomenon occurs worldwide.



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)





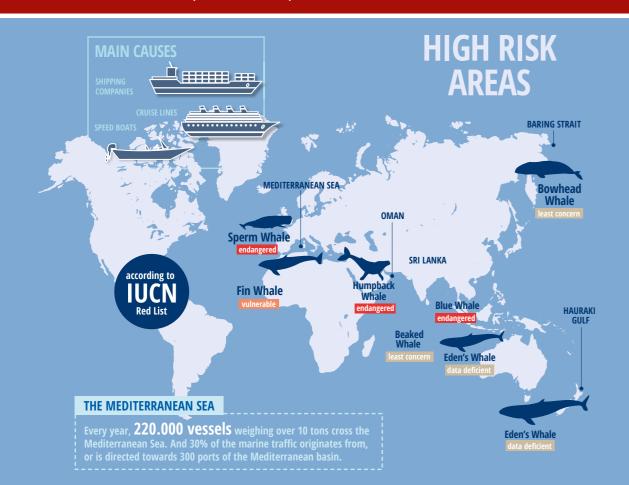
BREEDING AREAS, THE LIKELIHOOD OF **COLLISIONS IS EVEN HIGHER.** 

HIGH RISK AREAS 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 roturn in numbers whales aggregate, they are known to return in numbers IN CERTAIN REGIONS, WHERE SHIPPING on a regular basis, or critical population habitats), and zones with a high concentration of vessels (designated LANES CROSS WHALES FEEDING AND shipping lanes, historic shipping routes and port approaches) proaches).

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

- Sri Lanka Blue Whales (6)
   Hauraki Gulf, New Zealand Bryde's Whales (7)
   Canary Island Sperm Whales (8)
   Panama Humpback whales (9)
   Eastern North Pacific (ENP) Blue Whales

- 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)
  NE coast of Sakhalin Island Western Gray Whale (13)
- **Arabian Sea** Humpback whale (14)
- 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



HUMAN-INDUCED MORTALITY CAUSED BY SHIP STRIKES CAN BE AN IMPEDIMENT TO WHALE'S DODILL ATION COOMTH **POPULATION GROWTH.** for which human deaths or injuries.

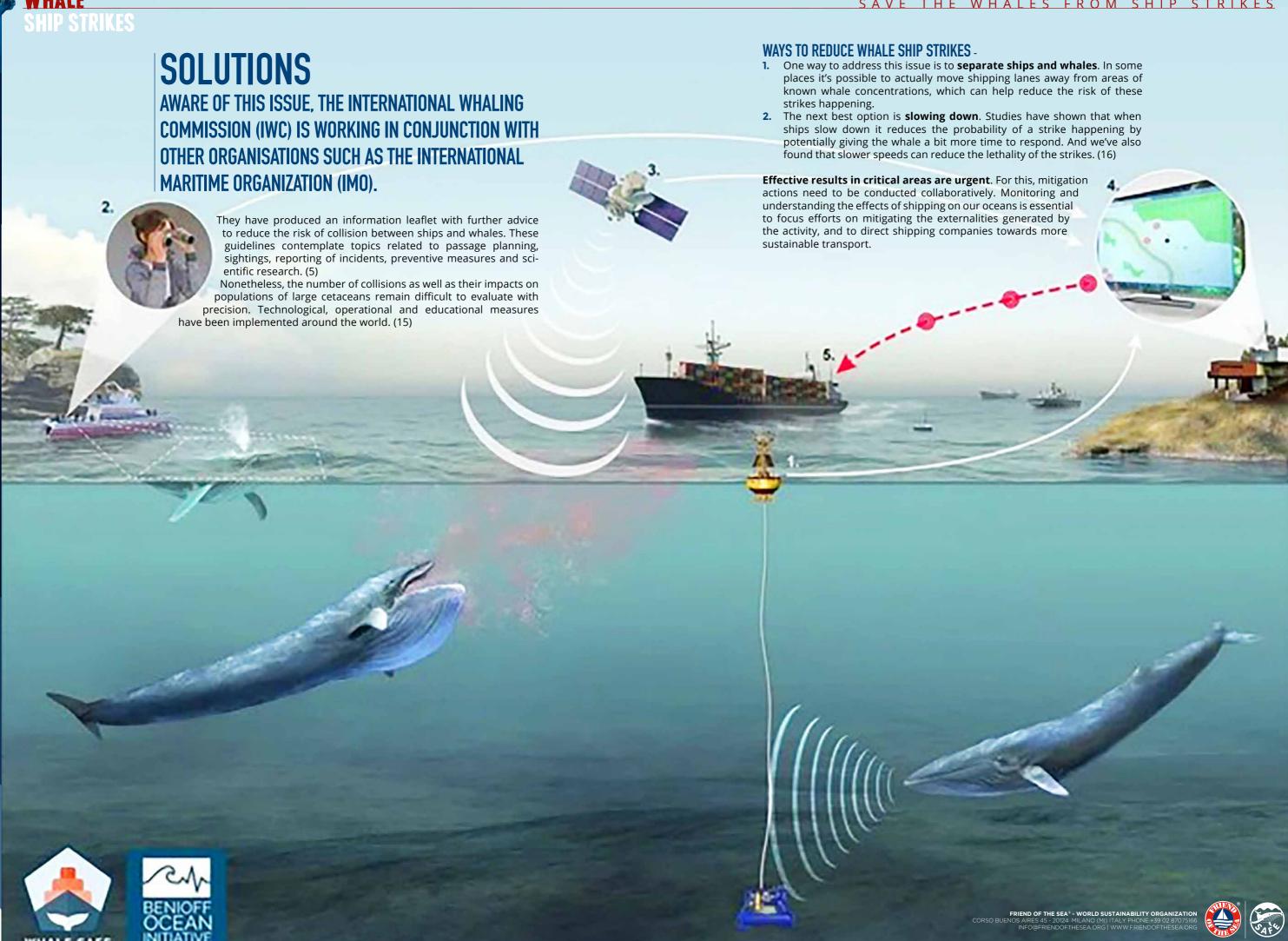


The following species have been identified as "High Risk Populations" (5):

- Western North Atlantic Right Whale Eastern North Pacific Right Whale
- Chile-Peru Right Whale
- Arabian Sea Humpback Whale
- Western Gray Whale
- Blue Whale Sri Lanka and Arabian Sea
- Blue Whale Chile
- Sperm Whale Mediterranean Sea
- Fin Whale Mediterranean Sea
- Bryde's Whale Gulf of Mexico
- Omura's Whale North Western Madagascar







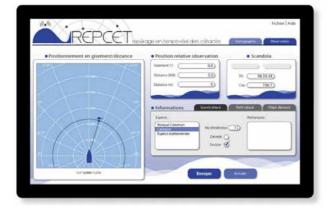


## FRIEND OF THE SEA **CONSERVATION CAMPAIGN**

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 purpos-
- 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:

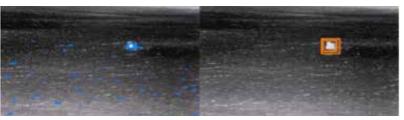
- onboard infrared cameras
- marine mammal presence alert software
- a network reporting platform

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





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