

Blue Whales Vs Vessels

We need to act now to protect blue whales from vessel collisions and noise pollution in important habitat

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Blue whales are an iconic and ecologically important species that are listed as Endangered by the IUCN Red List. Contrary to popular opinion, blue whales do not reduce krill stocks and actually stimulate lots of primary production in the oceans. Boat traffic is a threat to blue whales through collisions and noise pollution. To protect this species we need to take action by implementing strict regulations on boat traffic in identified nursery and feeding grounds. Reduction of boats on the water, speed limits, and improved tracking of whales from the decks of large vessels are all ways to improve the safety of blue whales.

Main Points

- ◆ Blue whales are endangered under IUCN Red List
- ◆ Northern Chilean Patagonia a key feeding and nursery area for blue whales
- ◆ High vessel traffic endangers whales with collisions and noise pollution
- ◆ Need for speed limits and reduced traffic during summer



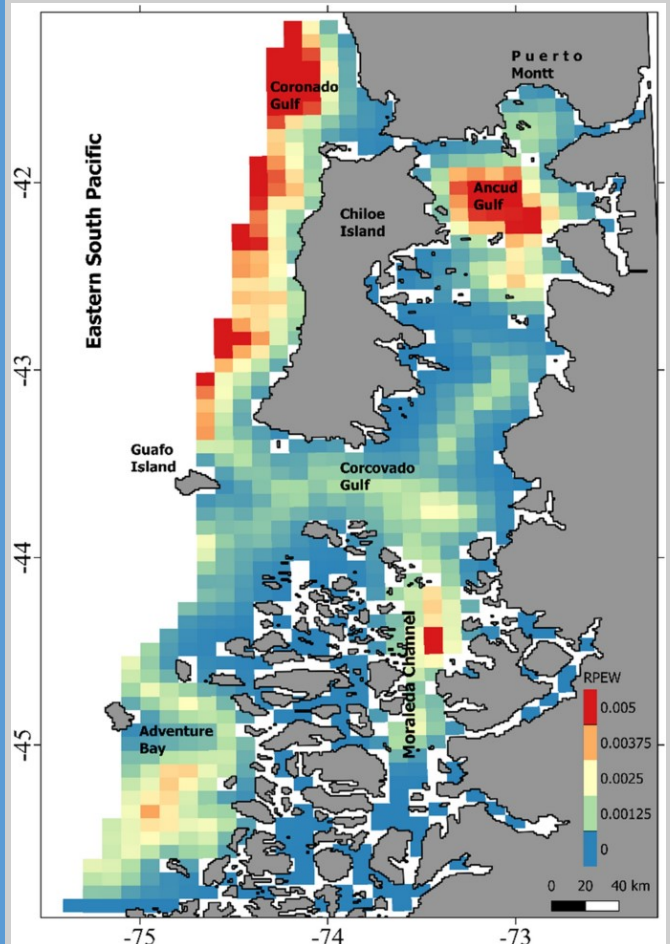
A blue whale. Image copyright of shutterstock / Chase Decker available at: <https://www.worldwildlife.org/species/blue-whale>

Recent knowledge of important feeding and nursery grounds in Chile allows us to visualize how to avoid collisions with blue whales

The image on the right shows areas where there is the highest probability of encountering a blue whale. These locations are in need of increased restrictions on vessel traffic, especially during summer months. These areas are usually highly frequented by boats.

Ideas going forwards:

- ◆ **International agreements on reducing vessel traffic during summer in high risk areas identified in this brief**
- ◆ **Speed limits**
- ◆ **Increased monitoring of whales to avoid collisions and slow activities in their presence to reduce noise interference**



Above: Image of Figure 5 from Bedriñana-Romano et al. 2021 showing the relative probability of encountering a blue whale off the coast of Chile.

“...the most important blue whale feeding and nursing ground known to date in the Southern Hemisphere...” - Hucke-Gaete et al. 2004



References:

Carrere, M. (2021, 03 26). Patagonia’s blue whales besieged by hundreds of boats, study finds. *Mongabay*. <https://news.mongabay.com/2021/03/patagonias-blue-whales-besieged-by-hundreds-of-boats-study-finds/>

Colpaert, W., Briones, R.L., Chiang, G., and Sayigh, L. (2016). Blue whales of the Chiloé-Corcovado region, Chile: Potential for anthropogenic noise impacts. *Acoustical Society of America* 27.

Cooke, J.G. 2018. *Balaenoptera musculus* (errata version published in 2019). The IUCN Red List of Threatened Species 2018: e.T2477A156923585. <https://dx.doi.org/10.2305/IUCN.UK.2018-2.RLTS.T2477A156923585.en>. Downloaded on 12 April 2021.

Bedriñana-Romano, L., Hucke-Gaete, R., Viddi, F.A., Johnson, D., Zerbini, A.N., Morales, J., Mate, B. and Palacios, D.M. (2021). Defining priority areas for blue whale conservation and investigating overlap with vessel traffic in Chilean Patagonia, using a fast-fitting movement model. *Scientific Reports* 11: 2709.

Hucke-Gaete, R., Osman, L.P., Moreno, C.A., Findlay, K.P., and Ljungbald, D.K. (2004). Discovery of a blue whale feeding and nursing ground in southern Chile. *Proceedings of the Royal Society B: Biological Sciences* 271: 4.

Lavery, T.J., Roudnew, B., Seymour, J., Mitchell, J.G., Smetacek, V., and Nicol, S. (2014). Whales sustain fisheries: Blue whales stimulate primary production in the Southern Ocean. *Marine Mammal Science* 30: 3, 888-904.

A blue whale tail. Image By: Robery Baldwin available at: <https://www.nytimes.com/2020/12/23/science/blue-whales-indian-ocean.html>

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