



© Greg Lecoeur/www.greglecoeur.com



A solitary sperm whale surfaces to breath.

# Pelagos Sanctuary

ITALY, MONACO, FRANCE

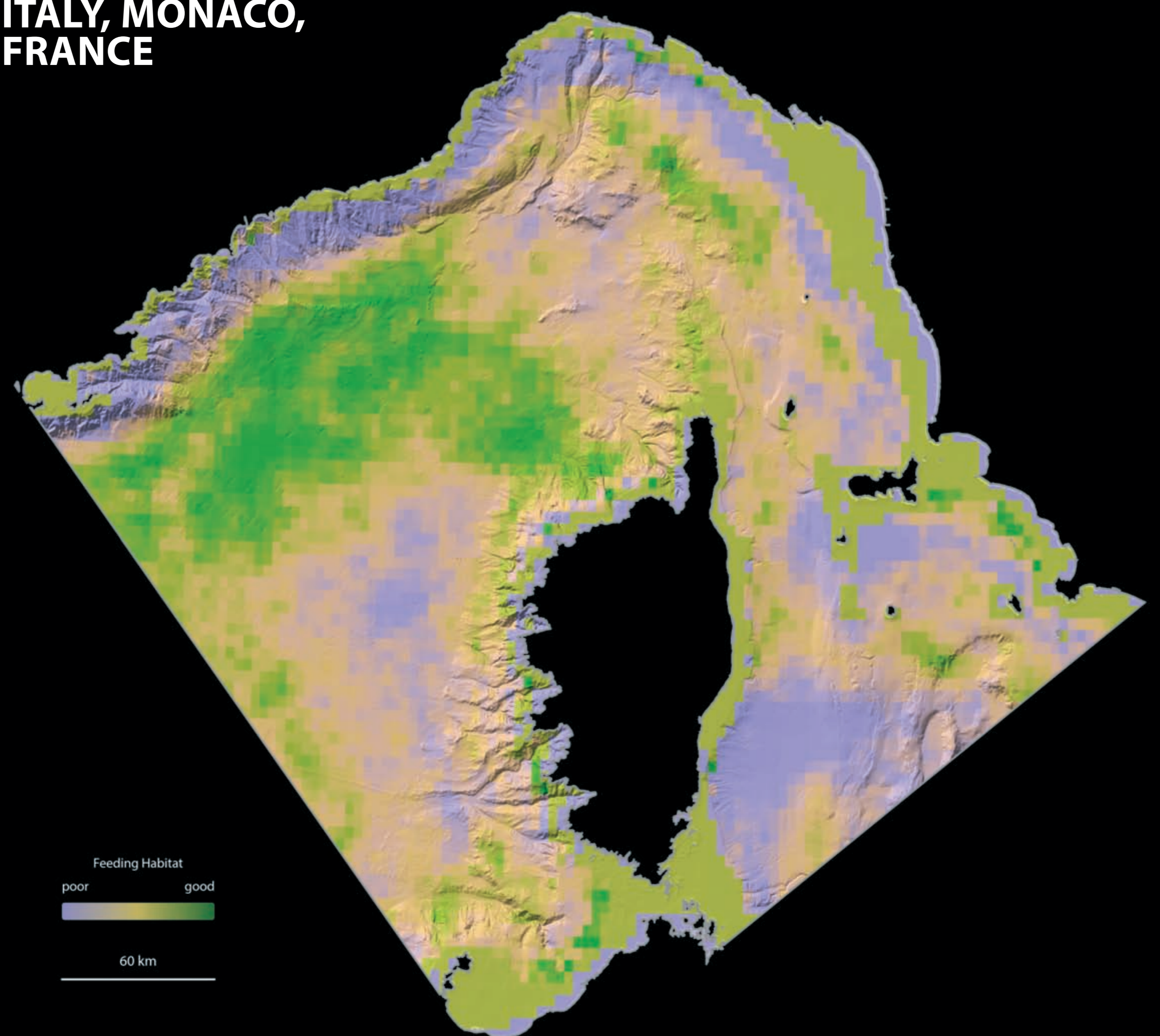
The Mediterranean Sea is home to many species of whales and dolphins, which now have to share their habitat with human activities: maritime transport, military exercises, oil and gas exploration, tourism, boating, recreational activities and commercial fishing.

These activities are potentially harmful to whales and dolphins. For example, over-fishing leads to food scarcity and a high risk of entanglement in fishing gear, while oil and gas exploration induces high levels of underwater noise and pollution. However, the biggest concern comes from the risk of collisions

with ships and boats. Understanding how, when and where whales and dolphins move across the Mediterranean Sea is therefore an important step towards implementing measures to protect these marine mammals.

The ECO-POTENTIAL project is working to combine satellite imagery, in-situ observations and ecological modelling with information from whale-watching operators and shipping. The work is focused on the Pelagos Sanctuary for Mediterranean Marine Mammals™, an international marine protected area between mainland France, Italy and the island of Corsica.

Until a few years ago, monitoring individual animals from satellites was not even conceivable. In collaboration with the British Antarctic Survey, ECO-POTENTIAL is applying very high-resolution satellite imagery to find fin whales from space. This imagery is combined with ecological modelling, shipping traffic data and whale-watching activity zones to build a more complete picture of where whales are located and where the risks (e.g. from shipping) are greatest. This kind of information helps decision makers identify high-priority areas for both marine mammals and human activities.



This image identifies the quality of feeding habitats for fin whales within the Pelagos Sanctuary. It is modelled from trends in ocean productivity based on chlorophyll levels, over the period 2003–2016.

Data source: European Commission, DG Joint Research Centre, Directorate D – Sustainable Resources, Unit D.02 Water and Marine Resources, <https://fishreg.jrc.ec.europa.eu/fish-habitat>.



© Tethys/S. Panigada

A fin whale shows signs of injury around its dorsal fin. These are consistent with a vessel strike.



© Souffleurs d'écume

Dead whale carried onto a ship bow after collision.



© F. Beaudouin/TETHYS

Tourists sighting a whale from a sailboat.



This project is funded by the European Union