

## **OPEN LETTER regarding Iberian orcas and their interactions with boats**

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The undersigned are experts in the biology and behaviour of cetaceans, with several specialising in orcas (also known as killer whales).

There has been intense public interest in the interactions between orcas (referred to hereafter as the Iberian orcas) and marine vessels along the coast of the Iberian Peninsula (Spain and Portugal) and in neighbouring waters. We are concerned that factual errors related to these interactions are being repeated in the media, along with a narrative—lacking a basis in science or reality—that the animals are aggressively attacking vessels or seeking revenge against mariners. We believe this narrative inappropriately projects human motivations onto these whales and we are concerned that perpetuating it will lead to punitive responses by mariners or managers. The whales have shown a wide range of behaviours during the interactions, many of them consistent with playful social behaviour.

We therefore seek to clarify the facts on the basis of available scientific evidence. Much of this information comes from a [peer-reviewed article](#) published in *Marine Mammal Science* in 2022 by several signatories to this letter.

The Iberian orcas are categorised on the International Union for Conservation of Nature's Red List as [Critically Endangered](#). There may be fewer than 40 individuals in this population. They represent a geographically isolated, genetically distinct subpopulation, which feeds primarily on bluefin tuna.

These disruptive interactions with vessels began in earnest in July 2020. To date, at least 11 juveniles and four adult females have been identified as participating in or observing the interactions. There is no evidence of an identifiable 'leader' of these interactions. Researchers have given these 15 whales the Latin identifier *Gladis* and an individual name; for example, Gladis Blanca or Gladis Negra (White Gladis and Black Gladis, respectively, in English). Gladis Negra, a juvenile female—and one of the initially reported interacting animals—was observed with a head laceration in spring 2020 and a wound behind the dorsal fin later in 2021. Both injuries were of unknown origin.

The interactions have ranged from no contact with the vessel, through mild or moderate contact with no or minor damage to the vessel, to significant contact with severe damage (preventing navigation). Starting in spring 2021, at least five damaged vessels have sunk. Severe damage has occurred in only 20% of the interactions.

Despite the damage to vessels, we believe characterising the interactions as 'attacks' is misleading. While some parts of the vessels infrequently have teeth marks on them, the predominant damage to rudders and keels are due to strikes or rams with the head or body. The whales are not ripping the rudders apart, as they might if this were hunting behaviour. While the behaviour may be frightening (and costly) from a human perspective, from the whales' perspective, it seems to be somehow gratifying.

Orcas (and other dolphin species) elsewhere have been known to develop [cultural 'fads'](#) (novel behaviour that briefly persists and expands within a population—an analogy might be fashion trends in people), such as carrying dead fish on their heads. While these vessel interactions may be a similar phenomenon, they are persisting longer than typical fad behaviour, expanding within the population and escalating in impact. Nevertheless, it is possible the behaviour, as previous fads have, will disappear as suddenly as it appeared.

We urge the media and public to avoid projecting narratives onto these animals. In the absence of further evidence, people should not assume they understand the animals' motivations. The orca is an intelligent, socially complex species, and each population has its own culture—different vocalisations (known as dialects), prey preferences, hunting techniques, even different social structures and migratory behaviours. The Iberian orcas are exhibiting a behaviour never before seen with this consistency among cetaceans—even in the days of industrial whaling from wooden ships and boats, when far larger whales were known to smash or otherwise damage vessels, such incidents were relatively uncommon. Science cannot yet explain why the Iberian orcas are doing this, although we repeat that it is more likely related to play/socialising than aggression. However, it is unfounded and potentially harmful to the animals to claim it is for revenge for past wrongs or to promote some other melodramatic storyline.

When we are at sea, we are in the realm of marine life. We should not punish wildlife for being wild. We need to keep cool heads when wild animals exhibit novel behaviour and we must put greater effort into adapting our own actions and behaviour to the presence of wildlife. The survival of the species with which we share this planet depends on it.

Signed:

Naomi A. Rose, PhD  
Senior Scientist, Marine Mammal Biology  
Animal Welfare Institute  
USA

Artur Andriolo, PhD  
Profesor Titular, Universidade Federal Juiz de Fora  
Presidente, la Sociedad Latinoamericana de Especialistas en Mamíferos Acuáticos  
Brazil

Lucy Babey  
Director of Programmes  
ORCA  
United Kingdom

Robin W. Baird, PhD  
Hawai'i Program Director  
Cascadia Research Collective  
USA

Lance Barrett-Lennard, PhD  
Senior Research Scientist and Co-Director  
Raincoast Conservation Foundation  
Canada

Giovanni Bearzi, PhD  
President  
Dolphin Biology and Conservation  
Italy

Maddalena Bearzi, PhD  
President  
Ocean Conservation Society  
USA

Alessandro Bocconcelli, MSc  
Emeritus Research Scholar  
Woods Hole Oceanographic Institution  
USA

Jaime Bolaños, PhD  
Caribbean-Wide Orca Project (CWOP), Coordinator  
Sea Vida (Venezuela), Executive Director  
Venezuela

Silvia Bonizzoni, MSc  
Executive Director  
Dolphin Biology and Conservation  
Italy

Philippa Brakes, PhD  
Honorary Lecturer, University of Exeter  
Research Fellow, Whale and Dolphin Conservation  
New Zealand

Inês Carvalho, PhD  
Population and Conservation Genetics Group  
Instituto Gulbenkian Ciência  
Portugal

César Castro-Azofeifa  
Investigador sobre mamíferos marinos  
Escuela de Biología, Universidad de Costa Rica  
Centro Nacional de Alta Tecnología de Costa Rica  
Costa Rica

Phillip J. Clapham, PhD  
Senior Scientist  
Seastar Scientific Inc.  
USA

Mel Cosentino, PhD  
Marine mammal researcher  
Aarhus University  
Denmark

Darren P. Croft, PhD  
Professor of Animal Behaviour  
University of Exeter  
United Kingdom

Volker Deecke, PhD  
Professor of Wildlife Conservation  
University of Cumbria  
United Kingdom

Judith Denkinger, PhD  
Professor  
Universidad San Francisco de Quito, Galapagos Science Center  
Ecuador

Raúl E. Díaz Gamboa, PhD  
Vicepresidente  
Sociedad Mexicana de Mastozoología Marina  
Universidad Autónoma de Yucatán  
Mexico

Manuel E. dos Santos, PhD  
Professor  
MARE-Ispa  
Portugal

Cindy Elliser, PhD  
Research Director  
Pacific Mammal Research  
USA

Rocío Espada-Ruiz  
University of Sevilla, Ecolocaliza  
GTOA (Grupo de Trabajo Orca Atlántica/Atlantic Orca Working Group)  
Spain

Ruth Esteban, PhD  
Madeira Whale Museum  
GTOA  
Portugal

Lilián Flórez-González, MSc  
Founder, President  
Fundación Yubarta  
Colombia

Andrew Foote, PhD  
Researcher  
Centre for Ecological and Evolutionary Synthesis, University of Oslo  
Norway

John K. B. Ford, PhD  
Research scientist (emeritus), Pacific Biological Station, Fisheries and Oceans  
Co-chair, COSEWIC Marine Mammals Species Specialist Subcommittee  
Canada

Pedro F. Fruet, PhD  
Eliézer de C. Rios Professor, Museu Oceanográfico  
Universidade Federal do Rio Grande  
Brazil

Claire Garrigue, PhD  
Scientist  
French National Research Institute for Sustainable Development, UMR ENTROPIE  
New Caledonia (France)

Tilen Genov, PhD  
Morigenos – Slovenian Marine Mammal Society  
IUCN Cetacean Specialist Group  
Slovenia

Deborah Giles, PhD  
Science and Research Director  
Wild Orca  
USA

Christophe Guinet, PhD  
Senior Scientist, CNRS  
Centre d'Etudes Biologiques de Chizé  
France

Patricia Holm, PhD  
Professor  
Universität Basel  
Switzerland

Erich Hoyt  
Research Fellow, Whale and Dolphin Conservation  
Co-chair, IUCN SSC-WCPA Marine Mammal Protected Areas Task Force  
United Kingdom

Rodrigo Hucke-Gaete, PhD  
Director, Marine Mammal Laboratory, Universidad Austral de Chile  
Centro Ballena Azul  
Chile

Miguel Iñíguez Bessega, MSc  
President  
Fundación Cethus  
Argentina

Dan Jarvis  
Director of Welfare and Conservation  
British Divers Marine Life Rescue  
United Kingdom

Maria Clara Jimenez A.  
Alianzas para la Conservación  
Fundación Conservaré  
Colombia

Eve Jourdain, PhD  
Director and Researcher  
Norwegian Orca Survey  
Norway

Ulrich Karlowski, Biologist (Univ.)  
Board of Directors  
Deutsche Stiftung Meeresschutz  
Germany

Sven Koschinski, MSc  
Consultant, Marine Nature Conservation  
Meereszoologie  
Germany

Giancarlo Lauriano, PhD  
Senior researcher  
ISPRA - Institute for Environmental Protection and Research (ISPRA)  
Italy

Alfredo López Fernández, PhD  
University of Aveiro, CESAM  
CEMMA, GTOA  
Portugal

Ibiza Martínez Serrano, PhD  
Presidenta  
Sociedad Mexicana de Mastozoología Marina  
Universidad Veracruzana  
Mexico

Paula Méndez Fernandez, PhD  
Marine Mammal Researcher  
Pelagis Observatory, La Rochelle University  
GTOA  
France

Olaf Meynecke, PhD  
CEO, Humpbacks & High-rises Inc  
Marine Scientist, Whales and Climate Program  
Australia

Eduardo Morteo Ortiz, PhD  
Director  
Laboratorio de Mamíferos Marinos de la Universidad Veracruzana (LabMMar-IIB-ICIMAP-UV)  
Mexico

Alexandra Morton  
Researcher  
Raincoast Research Society  
Canada

Giuseppe Notarbartolo di Sciara, PhD  
Honorary President  
Tethys Research Institute  
Italy

Laetitia Nunny, MSc  
Science Officer  
OceanCare  
Spain

Liliana Olaya-Ponzone  
University of Sevilla  
GTOA  
Spain

Christian D. Ortega Ortiz, PhD  
Professor  
Universidad de Colima  
Mexico



Daniel M. Palacios, PhD  
Endowed Associate Professor in Whale Habitats  
Marine Mammal Institute, Oregon State University  
USA

Mario A. Pardo, PhD  
Research Associate  
CONAHCYT – CICESE  
Mexico

E. C. M. Parsons, PhD  
Associate Professor  
Centre for Conservation and Ecology, University of Exeter  
United Kingdom

Héctor Pérez Puig, MSc  
Coordinador Programa de Mamíferos Marinos  
Centro de Estudios Culturales y Ecológicos Prescott, A.C.  
Mexico

M. Rafael Ramírez-León, PhD  
Postdoctoral researcher  
Departamento de Oceanografía Biológica, CICESE  
Mexico

Marianne H. Rasmussen, PhD  
Research Professor  
University of Iceland  
Iceland

Randall Reeves, PhD  
Chair  
IUCN SSC Cetacean Specialist Group  
Canada

Ryan Reisinger, PhD  
Lecturer in Marine Ecology  
University of Southampton  
United Kingdom

Fabian Ritter, Dipl-Biol  
President, Director of Research  
M.E.E.R. e.V.  
Germany

Lorenzo Rojas-Bracho, PhD  
Senior Expert, Whales  
Ocean Wise  
Canada

Hiram Rosales Nanduca, PhD  
Professor, Universidad Autónoma de Baja California Sur  
Coordinator, Marine Megafauna and Fisheries Research Group  
Mexico

Filipa Samarra, PhD  
Research specialist  
University of Iceland  
Iceland

Eduardo R. Secchi, PhD  
Professor  
Marine Megafauna Ecology and Conservation Laboratory, Federal University of Rio Grande-  
FURG  
Brazil

Jörn Selling  
Biologist  
firmm  
Spain

Maritza Sepúlveda, PhD  
Profesora  
Laboratorio de Ecología de Mamíferos Marinos (LECMMAR), Universidad de Valparaíso  
Chile

Marina Sequeira  
Institute for Nature Conservation and Forests  
GTOA  
Portugal

Salvatore Siciliano, PhD  
Pesquisador Titular  
Grupo de Estudos de Mamíferos Marinhos da Região dos Lagos  
Brazil

Tiu Similä, PhD  
Head of Science  
Whale2Sea  
Norway

Mark Peter Simmonds, OBE  
Director of Science  
OceanCare  
United Kingdom

Courtney E. Smith, PhD  
Affiliate Faculty  
Department of Environmental Science and Policy, George Mason University  
USA

Jennifer B. Tennessen, PhD  
Senior Research Scientist  
Center for Ecosystem Sentinels, University of Washington  
USA

Paul Tixier, PhD  
Researcher, marine mammal ecology and their interactions with human activities  
French National Research Institute for Sustainable Development, IRD MARBEC  
France

Jared Towers  
Executive Director  
Bay Cetology  
Canada

Fernando Trujillo, PhD  
Founder, Scientific Director  
Fundación Omacha  
Colombia

Jorge Urbán R., PhD  
Professor  
Universidad Autónoma de Baja California Sur  
Mexico

Ingrid N. Visser, PhD  
Founder  
Orca Research Trust  
New Zealand

Lindy Weilgart, PhD  
Senior Ocean Noise Expert and Policy Consultant, OceanCare  
Adjunct, Department of Biology, Dalhousie University  
Canada

Hal Whitehead, PhD  
Professor  
Dalhousie University  
Canada

Alex Zerbini, PhD  
Senior Scientist  
Cooperative Institute for Climate, Ocean and Ecosystem Studies, University of Washington  
USA