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 <u>peer-reviewed article</u> 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 <u>Critically Endangered</u>. 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 <u>cultural 'fads'</u> (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:

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