

Dolphin bycatch in Europe: Bay of Biscay crisis and ways forward



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The incidental capture of protected marine species in fishing gear - bycatch - is considered the greatest threat to the welfare and conservation of cetaceans and other marine mammals globally.

Marine mammal bycatch around the world is so widespread, longstanding and often intrinsic to certain fisheries that it has come to be seen in some cases as an intractable problem. However, IFAW believes that humans and animals can thrive together and aims to reduce, and ultimately eliminate, the number of sensitive species caught in fishing gear by increasing awareness and promoting measures to end bycatch. IFAW also advocates for stronger legislation and strategies to ensure bycatch reduction can be achieved in fisheries around the world.

In the European Union (EU), all cetaceans are strictly protected under the Habitats Directive. Despite this, cetacean bycatch has been a major conservation and welfare concern throughout European waters for decades. Here, we present a roadmap for a step-by-step journey towards addressing one of the worst marine animal welfare and conservation cases in Europe.

The Bay of Biscay: more than 100,000 dolphins killed as bycatch since 1990

In the French waters of the Bay of Biscay, 1,900 fishing boats representing 13 types of fisheries target groundfish, molluscs and crustaceans, as well as small and large pelagic fish (i.e. sardines, anchovies and sea bass). The fishing industry that operates here ranges from small scale artisan fishermen to large commercial fishing vessels.

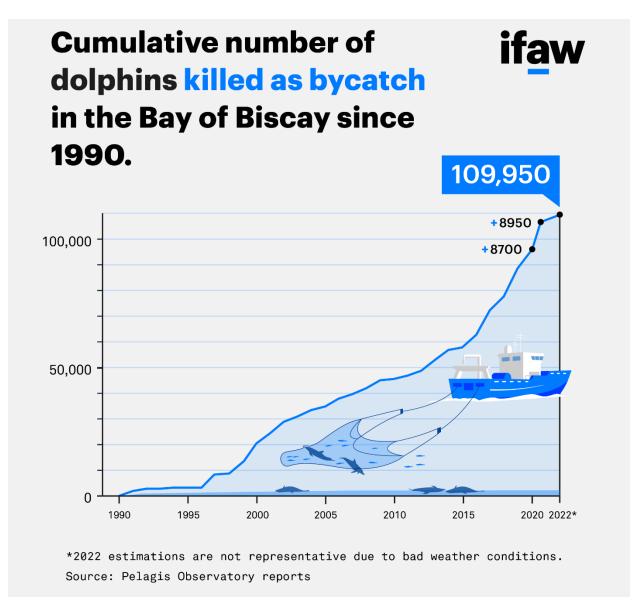
The Bay of Biscay is also important to common dolphins, which utilise the area to feed on many of the same fish targeted by these fisheries. Between January and March and between July and August each year, fish distribution and abundance result in an overlap between feeding dolphins and intense fisheries activities in areas of the Bay of Biscay, with the fishing gear types used causing bycatch of these dolphins.

Dolphins swim into the nets, ropes or lines and get trapped, cannot disentangle themselves and subsequently die without any possibility to surface for air.

This is not a new issue, but since 2016 strandings of dolphins with evidence of bycatch have occurred in unprecedented numbers along the Biscay coast.

Year on year, the number of bycaught dolphins has increased and according to scientific reports, common dolphin cumulative catches between 1990 and 2019 reached **89,000 dolphins**¹. Record high bycatch rates were also estimated between 2019 and 2021.

¹ Peltier H., Authier M., Caurant F., Dabin W., Dars C., Demaret F., Meheust E., Ridoux V., Van Canneyt, O., Spitz J., 2019. Etat des connaissances sur les captures accidentelles de dauphins communs dans le golfe de Gascogne – Synthèse 2019. Rapport scientifique dans le cadre de la convention avec le MTES. Observatoire PELAGIS – UMS 3462, La Rochelle Université / CNRS, 23 pages



In the longer term, recent studies indicate that the viability of this common dolphin population is strongly threatened by bycatch and, at the current increasing rate, there is an extinction risk².

Strong and concrete conservation measures are needed to prevent this from happening. As top predators, cetaceans play a very important role in maintaining healthy ocean ecosystems, but also in nutrient cycling processes as they move through different areas and defaecate at the surface which stimulates productivity³.

² Etienne Rouby. Population dynamics of elusive species: The case of the common dolphin in the North-East Atlantic Ocean. Life Sciences [q-bio]. La Rochelle Université, 2022. English. NNT: .tel-03878173

³ Gilbert, L., Jeanniard-du-Dot, T., Authier, M. *et al.* Composition of cetacean communities worldwide shapes their contribution to ocean nutrient cycling. *Nat Commun* **14**, 5823 (2023). https://doi.org/10.1038/s41467-023-41532-y

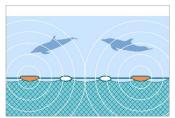
Some progress since 2020: first fishing closures in the Bay of Biscay

Although all species of cetacean are protected under European law⁴ and through International Agreements⁵, EU Member states have largely failed to implement concrete conservation measures to protect them from bycatch.

In response to this lack of action, the European Commission (EC) has initiated infringement procedures against several EU Member states. If no satisfactory conclusion is found, the matter could be referred to the Court of Justice, which can impose financial sanctions.

Upon the request of the EC, the International Council for the Exploration of the Sea (ICES) produced specific advice on emergency measures to prevent bycatch of common dolphin and Baltic harbour porpoise in the North-East Atlantic ⁶. In both cases, ICES advised a combination of spatial temporal fishing closures and the use of pingers on certain types of fishing gear.

Pingers:



Acoustic Deterrent Devices (ADDs), commonly referred to as 'pingers', are electronic or mechanical devices that emit sounds. They are fixed to fishing gear and emit sounds to encourage cetaceans to avoid of the fishing gear with the goal of preventing them from becoming entangled. However, although pingers have been found to be effective at

reducing harbour porpoise bycatch in gill nets, there is less evidence for their success in reducing bycatch of common dolphins.

In the Bay of Biscay, the efficiency of pingers (notably on trawling gear) has been tested over recent years. According to scientific advice, it has been concluded that additional trials need to be conducted before a wider roll-out of such devices⁷.

Caution is key—numerous scientific publications suggest harmful effects of pingers deployed at a large scale because of the disturbance caused by the additional underwater noise they produce.

⁴ Habitats Directive (<u>Council Directive 92/43/EEC</u>) & Marine Strategy Framework Directive (MSFD) (<u>Directive - 2008/56 - EN - EUR-Lex</u> (europa.eu)).

⁵ Agreement on the Small Cetaceans of the Baltic, North-East Atlantic, Irish and North Seas (ASCOBANS) and the Agreement on the Conservation of Cetaceans in the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS)

⁶ ICES. 2020. EU request on emergency measures to prevent bycatch of common dolphin (Delphinus delphis) and Baltic Proper harbour porpoise (Phocoena phocoena) in the Northeast Atlantic. In Report of the ICES Advisory Committee, 2020. ICES Advice 2020, eu.2, <u>EU request on emergency measures to prevent bycatch of common dolphin (Delphinus delphis) and Baltic Proper harbour porpoise (Phocoena phocoena) in the Northeast Atlantic (figshare.com)</u>

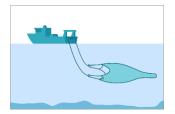
⁷ ICES. 2023. EU additional request on mitigation measures to reduce by-catches of common dolphin (Delphinus delphis) in the Bay of Biscay (ICES Subarea 8). In Report of the ICES Advisory Committee, 2023. ICES Advice 2023, sr.2023.01b. https://doi.org/10.17895/ices.advice.23515176

In 2024, in line with ICES advice and thanks to intensive NGO persistence, a one-month fishing closure was introduced in French Biscay waters, following a decision of the *Conseil d'Etat* (French highest administrative court)⁸. The one-month closure implemented by a decree⁹ applied to all boats over eight metres in length using at-risk gear to dolphins and was effective between 22 January and 20 February 2024.

Following this one-month fishing closure, a sharp decline in bycatch numbers was reported compared to previous years over the same time period¹⁰. This has shown that removing at-risk fishing activities from dolphin habitats in the Bay of Biscay during critical periods of the year positively impacts dolphin welfare and conservation. However, levels of dolphin bycatch increased again at the end of the closure period and further measures are needed to ensure these animals are protected.

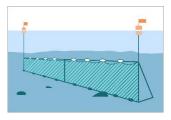
At-risk gear: Fishermen use different types of fishing gear to catch a wide variety of target species. These different fishing methods are associated with the incidental capture of non-target species aka. bycatch. In the Bay of Biscay, at-risk gear linked to the highest bycatch of common dolphins, are:

Pelagic trawl nets



They are generally much larger than bottom trawls nets and can be towed by one or two boats (pair trawling). Designed to target fish in mid- and surface waters¹¹,

Gillnets and trammel nets



They are made up of strings of single, double or triple netting walls, vertical, near the surface, in midwater or on the bottom. Can be used either alone or, as is more usual, in large numbers placed in lines ('fleets') of nets¹².

⁸ <u>Le juge des référés du Conseil d'Etat suspend les dérogations à la fermeture de la pêche dans le Golfe de Gascogne - Conseil d'État (conseiletat.fr)</u>

⁹ <u>Arrêté du 17 janvier 2024 établissant des mesures spatio-temporelles pour les navires battant pavillon étranger, visant la réduction des captures accidentelles de petits cétacés dans le golfe de Gascogne pour l'année 2024 - Légifrance (legifrance.gouv.fr)</u>

¹⁰ Bilan des échouages durant la fermeture de la pêche à risque – PELAGIS (cnrs.fr)

¹¹ FAO 2024. Fishing Gear types. Midwater trawls (nei). Technology Fact Sheets. In: Fisheries and Aquaculture. Rome. https://www.fao.org/fishery/en/geartype/400/en

¹² FAO 2024. Fishing Gear types. Gillnets and entangling nets. Technology Fact Sheets. In: Fisheries and Aquaculture. Rome. https://www.fao.org/fishery/en/geartype/107/en

What's next?

Comprehensive, concrete mitigation measures that follow scientific recommendations need to be implemented in a timely manner to help safeguard common dolphins in the Bay of Biscay now and into the future.

- 1. In the short-term, it is clear that fishing closures are the most effective measure to protect dolphins in the Bay of Biscay. If the annual bycatch rate is still high in 2024, fishing closures should be extended to reduce dolphin mortality below the reference levels agreed by the Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR). In line with ICES advice¹³, a three-month fishing closure in winter, from January to March, and one-month in summer, from mid-July to mid-August, would allow the greatest number of dolphins to be spared.
- 2. A transition towards sustainable and just fisheries is urgently required to make a lasting impact. IFAW recognises that fishing closures imply that there will be significant profit loss across the sector if nothing is done to bridge this income gap. For the closures in 2024, a compensation package of €30m was allocated to impacted fishermen and fishmongers, but this is not sustainable in the longer term.

Therefore, incentive schemes and rewards for fishermen will be needed to help fisheries with the highest bycatch levels make the changes needed in France and in the EU. This would support the viability of fisheries in the Bay of Biscay without harming dolphins. IFAW believes that incentive-based solutions could help change fishing practices to mitigate bycatch, while collecting additional scientific data to establish the most effective measures. This is possible to achieve by allocating bonus/malus fishing rights according to certain criteria to be defined (e.g., dolphin bycatch numbers per boat, fishing in sensitive areas, type of gear used, collection of scientific data).

3. To facilitate this transition, the fisheries system and policies must change at national and European level. Under Article 17 of the European Union's Common Fisheries Policy, France and EU Member States fishing rights should be allocated according to economic, social and environmental criteria. However, social contribution and environmental impacts are still not adequately considered and offer room for innovation. With its ageing fleet facing regulatory, financial and technological constraints, the French fishing industry is at a turning point.

¹³ Op. cit.

EU and French fishing policies will need to be amended to bring about structural change and room for adaptation.

In line with the latest recommendations from the Scientific Committee of the International Whaling Commission¹⁴ and ICES Advice¹⁵, IFAW calls for a step-by-step strategy:

In the short term, the French government must implement precautionary emergency measures (i.e. spatial and temporal fishing closures for 'at risk' gear) to meet conservation objectives. This means eventually extending the closure period beyond one-month for at least the next three years.

In parallel, the development of incentive-based measures is needed to help change fishing practices in the long run. To support fishermen in this fair and sustainable transition, changes in the fisheries system and policies at the national and EU level are also required.

Considering the many challenges and stakes at play in the Bay of Biscay, concerted action with all stakeholders is also key to finding and implementing innovative solutions.



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