UN environment programme

CMS

CONVENTION ON MIGRATORY SPECIES

UNEP/CMS/COP15/Inf.25.4.1a
04 December 2025
Original: English

15th MEETING OF THE CONFERENCE OF THE PARTIES
Campo Grande, Brazil, 23 to 29 March 2026
Agenda Item 25.4.1

QUANTIFICATION OF THE CONTEMPORARY WHALING AND AQUATIC WILD MEAT TAKE OF ALL CMS APPENDIX I-LISTED CETACEANS IN ALL REGIONS

(Prepared by the Secretariat)

Summary:

This document contains the report *Quantification of the Contemporary Whaling and Aquatic Wild Meat Take of All CMS Appendix I-Listed Cetaceans in All Regions* that was written in accordance with Decision 14.72 (a).

Quantification of the contemporary whaling and aquatic wild meat take of all CMS Appendix I-listed cetaceans in all regions

Nicola Hodgins & Jennifer Daan de Leur

Convention on the Conservation of Migratory Species of Wild Animals

June 2025

CMS

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Prepared by the Secretariat of the Convention on Migratory Species (CMS), June 2025.

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ACKNOWLEDGEMENTS

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Funded by the Government of Germany.

Citation: Hodgins, N. K. & de Leur, J.D.P. (2025). Quantification of the contemporary whaling and aquatic wild meat take of all CMS Appendix I-listed cetaceans in all regions, and development of recommendations. Convention on Migratory Species (CMS). Bonn, Germany. 70 pages.

COVER IMAGE

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Glossary

Aboriginal Subsistence Whaling does not seek to maximise catches or profit. It is entirely separate to commercial whaling and not subject to the moratorium on commercial whaling. Four IWC member countries conduct aboriginal subsistence hunts today: Denmark (Greenland), Russia (Chukotka), St Vincent and the Grenadines (Bequia) and the United States (Alaska, and also potentially a resumption of hunts previously undertaken by the Makah Tribe of Washington State).

Aquatic wild meat is defined as the products derived from aquatic mammals and reptiles that are used for subsistence food and traditional uses, including shells, bones and organs and also bait for fisheries. Aquatic wild meat is obtained through unregulated, and sometimes illegal, hunts as well as from stranded (dead or alive) and/or by caught animals. Three types of acquisition have been defined:

- Non-Targeted-Salvage acquisition is neither planned nor intentional but is the utilisation of an aquatic mammal which is already dead and usually found (a) stranded, or (b) accidentally drowned in a net, trap, or line (by catch).
- Non-Targeted-Deliberate acquisition is the intentional killing of an aquatic mammal when it is (a) found live-stranded on a beach, (b) caught alive in fishing gear, or (c) entrapped by natural phenomena (e.g., sea ice in high latitudes, changing water levels in rivers and channels).
- Targeted acquisition is the deliberate killing of free ranging aquatic mammals that are either encountered during the course of other activities (opportunistic) or are the main target and purpose of an expedition (directed).

Cetacean refers to all 94 species of whales, dolphins and porpoises.

Small cetacean refers to all toothed whales, excluding the sperm whale.

Whaling is the practice or industry of hunting and killing whales for their products such as but not limited to, oil, meat, or whalebone.

Introduction

One of the earliest records of whaling dates to the 4th century B.C. and can be found in the chronicles of the conquests of Alexander the Great (Ellis, 2018). Over the many hundreds of years to follow, many societies around the world conducted cetacean hunts, some of which brought several species and populations to the brink of extinction (Brownell *et al.,* 2008; Parsons & Rose, 2022; Reeves, 2022). At various times throughout the 20th century, protection mechanisms were put in place for several species of cetacean. For example, the North Atlantic, North Pacific and Southern right whales have been legally protected from commercial hunting since the 1930s (Cooke & Zerbini, 2018), blue whales have been legally protected worldwide since 1966 (Cooke, 2018b), and in 1986, the International Whaling Commission (IWC) introduced a global moratorium on all commercial whaling for large whale species, which remains in place today. National and regional protection measures have also been introduced, for example, the EU Habitats Directive (Council Directive 92/43/EEC) protects all cetacean species found in EU waters. However, illegal whaling on species for which there were protection measures in place, was known to continue in several locations around the world (Brownell Jr. et al*.,* 2009). In 2022, a quarter of the 94 cetacean species assessed for the IUCN Red List of Threatened Species were classified as being within a threatened category, meaning they are listed as Critically Endangered, Endangered, or Vulnerable (Braulik *et al.,* 2022).

The hunting of baleen and sperm whales *(Physeter macrocephalus*), either commercially, as Aboriginal Subsistence Whaling (ASW), or traditionally, continues in a few locations around the world (Clapham & Baker, 2018), whilst numerous small cetaceans are subjected to incidental, legal and illegal 'aquatic wild meat take', defined as '*Hunting or opportunistic taking of aquatic wild animals, where the meat, body parts, and/or eggs are consumed for local subsistence, used for traditional purposes, or traded for income*' (Convention on Migratory Species [CMS] Resolution 14.15, 2024), in all geographic regions (Altherr & Hodgins, 2018, 2024; Ingram *et al.,* 2022).

CMS Appendix I lists migratory species that have been assessed as facing a very high risk of extinction in the wild in the near future throughout all or a significant portion of their range (CMS Resolution 13.7, 2020). Parties that are a Range State to a migratory species listed in Appendix I agree to strictly protect them by: prohibiting the taking of such species, with very restricted scope for exceptions; conserving and where appropriate restoring their habitats; preventing, removing or mitigating obstacles to their migration; and controlling other factors that might endanger them (*Convention on the Conservation of Migratory Species of Wild Animals*, 1979).

Currently, eight species of baleen whale, including the Critically Endangered North Atlantic right whale (*Eubalaena glacialis*), and ten species/populations/sub-populations of toothed whales, from the largest, the sperm whale *(Physeter macrocephalus)*, to the Critically Endangered Baltic proper harbour porpoise *(Phocoena phocoena)*, are listed on CMS Appendix I (CMS, 2017). Historically, each of the 18 species/population/subpopulations have been subjected to targeted hunting, with some still hunted today, both legally and/or illegally.

In an industrialised and rapidly changing world, with the increase in human populations and subsequent demand on resources and the impacts of climate change, whales, dolphins and porpoises face an array of increasing and ever-changing threats. For example, given the poverty levels within small-scale fisheries communities, dolphin bycatch is now seen as a marketable additional resource and the line between non-targeted salvage, non-targeted deliberate and targeted hunting is becoming increasingly blurred (Altherr & Hodgins, 2024). The cumulative impact of past and present hunting pressure, combined with other anthropogenic activities, is a significant conservation concern for many species of cetacean.

As requested in CMS Decision 14.72(a) this report quantifies whaling and aquatic wild meat take between 2014 and 2024 for all CMS Appendix I-listed cetaceans in all regions and makes recommendations to Parties for their continued protection and conservation. It should be noted that by its very nature, it is difficult to get information on illegal catches anywhere in the world, therefore figures are likely to be an underestimate for some species.

Appendix I Species

- The territory of **Greenland** is under the jurisdiction of Denmark. However, as formally notified by Denmark, the Convention does not apply to Greenland.

The distribution and occurrence of cetacean species/sub-species/population/sub-population, can shift due to environmental and ecological changes and the lists presented in this report may not be comprehensive.

As per Article I, paragraph 1. (h). "Range State" in relation to a particular migratory species means any State (and where appropriate any other Party referred to under subparagraph (k) of this paragraph) that exercises jurisdiction over any part of the range of that migratory species, or a State, flag vessels of which are engaged outside national jurisdictional limits in taking that migratory species;

As per Article VI, paragraph 2. Parties shall keep the Secretariat informed in regard to which of the migratory species listed in Appendices I and II they consider themselves to be Range States, including provision of information on their flag vessels engaged outside national jurisdictional limits in taking the migratory species concerned and, where possible, future plans in respect of such taking.

Bowhead whale (*Balaena mysticetus*)

Listed on CMS Appendix I in 1979
Not listed on CMS Appendix II
CMS Parties in the range of the species/population: France, Ireland, Norway, United Kingdom.

Bowhead whale distribution © *IUCN 2012. Balaena mysticetus. The IUCN Red List of Threatened Species. Version 2024-2.*

The bowhead whale lives in Arctic and sub-Arctic waters and with a global population size of over 25,000 individuals (10,000 mature individuals), four identified subpopulations, all with varying population size estimates, and the species is currently listed as of Least Concern by the IUCN (Cooke & Reeves, 2018a).

Hunted from the mid-1500s for their oil and baleen, each subpopulation was exploited in turn to near extinction (Lydersen *et al.,* 2012) and all have been recovering at different rates. The Okhotsk Sea and East Greenland-Svalbard-Barents Sea sub-populations are each thought to

comprise less than 250 mature individuals and are listed as Endangered by the IUCN (Cooke *et al.,* 2018b; Cooke & Reeves, 2018b). The East Canada – West Greenland subpopulation is estimated to comprise between 4,500-11,000 individuals (Frasier *et al.,* 2015). Although the Bering-Chukchi-Beaufort (BCB) Sea subpopulation has not been assessed by the IUCN since 1996 (Cetacean Specialist Group, 1996) the population has been monitored for more than 30 years and has been increasing over that period at an estimated annual rate of 3.7% (range 2.8–5.4%) (Givens *et al.,* 2016).

Hunts of the Bering-Chukchi-Beaufort subpopulation by indigenous peoples of Alaska, Chukotka and West Greenland waters are regulated under the IWC Aboriginal Subsistence Whaling Management Procedure (ASWMP), Small hunts are also authorised in Canadian waters under co-management agreements between federal agencies and indigenous communities (Cooke & Reeves, 2018a). Quotas, or 'strike limits', are set by the IWC Scientific Committee in 6-year blocks. Between 2013 and 2018, indigenous people in the Bering-Chukchi-Beaufort Seas were allocated a quota of 67 whales per year, with a maximum total of 336 over the six years (N.B. 'carry-over' of unused quota is allowed as per IWC regulations).[1] In West Greenland, similar 6-year quota blocks are permitted for indigenous people to take a maximum of two whales a year. Quotas were renewed for the 2019-2025 seasons with the same annual quota, but with a new maximum total of 392 over the six years for the Bering-Chukchi-Beaufort Seas (IWC, 2024b). Between 2014 and 2024, both sanctioned hunts resulted in 679 bowhead whales being taken. The average number taken was 61.7 per year, the lowest taken was of 41 individuals in 2019, and the highest of 72 were taken in both 2021 and 2022.

Additional threats

Given their preferred habitat of Arctic and sub-Arctic waters, a major threat to the species' survival is climate change and associated sea ice loss. The expansion in industrial development and subsequent increased use of Arctic international shipping routes make these waters potentially harmful for marine wildlife (Reeves *et al.,* 2014), with increasing overlap between vessels and whales, elevating their risk of vessel collision (Halliday *et al.,* 2022). Three sub-populations, the Okhotsk Sea, East Canada-West Greenland, and the Bering-Chukchi-Beaufort Seas, currently overlap with commercial fishing. Entanglement rates, primarily from pot fishing gear, are relatively high for very large and presumably older bowhead whales with approximately 12% of harvested BCB bowheads showing entanglement scars (George *et al.,* 2021). Scarring from killer whale (*Orcinus orca*) attacks is frequently observed on large adult whales (George *et al.,* 2021) and as bowhead show a selection for sea ice when under a perceived predation threat by killer whales, the negative consequences of sea ice loss are compounded as they cope with more-frequent, longer exposures to predator threat (Matthews *et al.,* 2020).

Little is known about the cumulative effects of multiple stressors on Arctic cetaceans (Laidre *et al.,* 2015). However, there is concern that, as the sea ice diminishes, the Arctic will be subjected to increased vessel traffic, fishing activities and extractive industries, human-caused impacts on bowhead whales will also increase (Reeves *et al.,* 2012; Reeves *et al.,* 2014).

Trade

According to the CITES Trade database, between 2014 and 2024, there were three instances of bowhead whale meat and oil being traded: 1) 27 kg meat imported to Canada from the USA for personal use or circus/travelling exhibition (different purpose codes reported by importing and exporting countries) in 2014; 2) 1 (no unit) oil imported to the USA from Canada for personal use that was confiscated in 2021; and 3) 1-2 kg meat imported to Denmark from

[1] For each of these years the number of bowhead whales struck shall not exceed 67, except that any unused portion of a strike quota from the three prior quota blocks shall be carried forward and added to the strike quotas of subsequent years, provided that no more than 50 percent of the annual strike limit shall be added to the strike quota for any one year.

Greenland for personal or scientific use (different purpose codes reported by importing and exporting countries) in 2023.

The Bering-Chukchi-Beaufort Sea subpopulation of bowhead whale are subject to whaling under the IWC Aboriginal Subsistence Whaling Management Procedure with a 6-year quota block of a maximum of 67 whales a year, with a maximum total of 336, and an additional 6-year quota block of a maximum of two whales a year for ASW in West Greenland. Other populations of bowhead whale are not subject to known contemporary hunting.

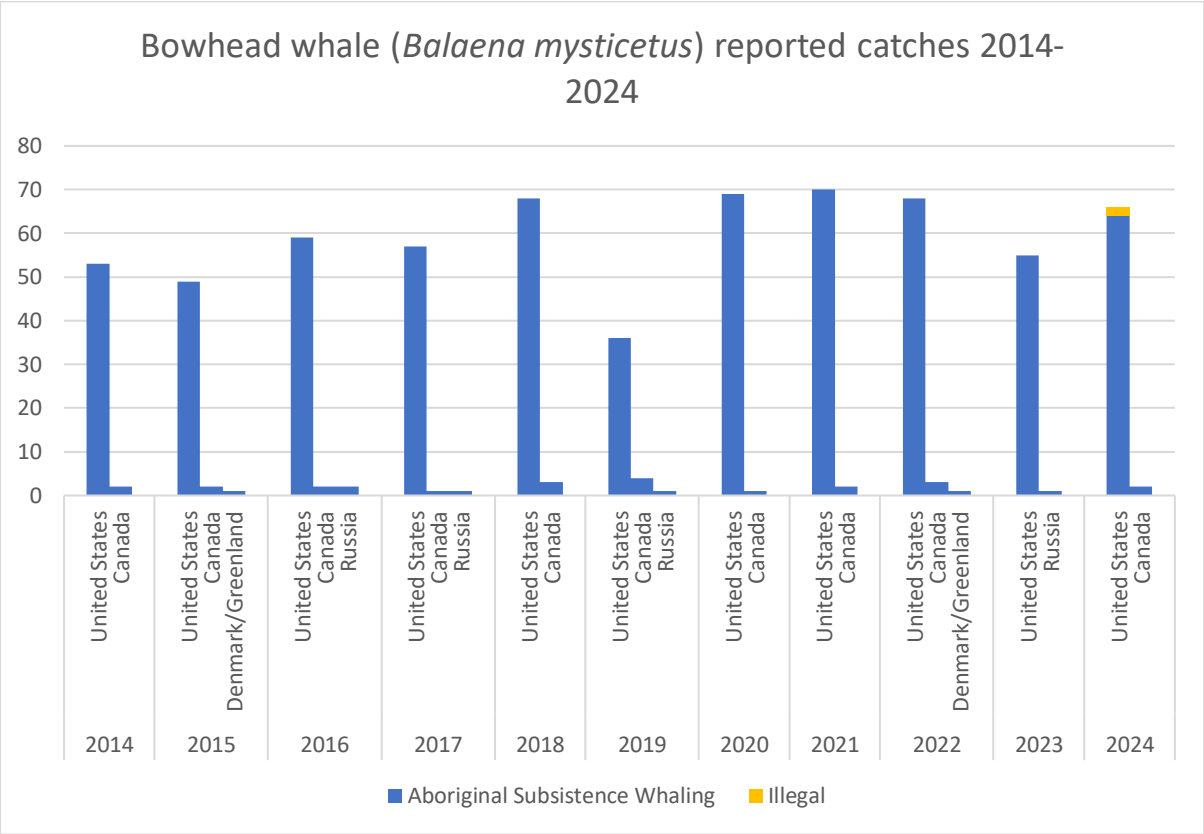


Figure 1. Reported catches of bowhead whales between 2014 and 2024, as per IWC data.

North Atlantic right whale (*Eubalaena glacialis*)

Listed on CMS Appendix I in 1979
Not listed on Appendix II
CMS Parties in the range of the species/population: Denmark, France, Ireland, Morocco, Norway, Portugal, Spain, United Kingdom.

North Atlantic right whale distribution © *IUCN 2012. Eubalaena glacialis. The IUCN Red List of Threatened Species. Version 2024-2.*

As with several other species of whale, North Atlantic right whales were protected from commercial whaling from the 1930s. However, whaling practices were so intensive that they may have numbered fewer than 100 individuals by 1935 (Waring, 2010). The estimated number of North Atlantic right whales in 2018 was 409 individuals, of which fewer than 250 were mature and with a lower estimated survival rate for females, the female proportion in the population was estimated to be only about 40% (Pettis *et al.,* 2021. Beginning in 2017, elevated mortalities of North Atlantic whales were documented in Canada and the United States. In 2017, an Unusual Mortality Event (UME) was declared, and is on-going (Marine Mammal Commission, 2024), the primary cause of mortality, serious injury, and morbidity in most individuals being either from entanglement in fishing gear or vessel strikes. This event is considered to have already affected more than 20% of the population, a significant impact on an Endangered species where deaths are outpacing births (Marine Mammal Commission, 2024). With their numbers continuing to decline, on October 23, 2023, the North Atlantic Right Whale Consortium announced that the North Atlantic right whale population estimate for 2022 was 356 individuals (Linden, 2023), including fewer than 70 reproductively active females (National Oceanographic and Atmospheric Administration [NOAA], 2023). The population continues to decline due to a combination of reduced calving rates and anthropogenic mortality from entanglement in fishing gear and vessel strikes (Garrison *et al.,* 2022) and the poor body condition of individuals within the population is of major concern for its future viability (Christiansen *et al.,* 2020). Appropriately, the species is listed as Critically Endangered by the IUCN (Cooke, 2020).

Vessel strikes, particularly outside of the established seasonal management areas (SMAs) and with smaller vessels (Garrison *et al.,* 2022), as well as entanglement in fixed fishing gear are the two greatest threats facing North Atlantic right whales (Taylor & Walker, 2017). Evidence suggests that whales acquire new entanglement scars on a nearly annual basis, with juvenile whales acquiring scars at a higher rate than adults. Whilst 82.9% of individuals bear evidence of being entangled at least once, over half (59.0%) of the individuals have been entangled more than once (Knowlton *et al.,* 2012).

Trade

According to the CITES Trade database, between 2014 and 2024, there were two instances of North Atlantic right whale meat being traded: 1) meat (no unit given) imported to Canada from the United Kingdom for circus/travelling exhibition in 2020; 2) meat (no unit given) imported to the United Kingdom from Canada for circus/travelling exhibition in 2021.

North Atlantic right whales are not subject to contemporary hunting.

North Pacific right whale (*Eubalaena japonica*)

Listed on CMS Appendix I in 1979
Not listed on CMS Appendix II
No CMS Parties in the range of the species/population

North Pacific right whale distribution © *IUCN 2012. Eubalaena japonica. The IUCN Red List of Threatened Species. Version 2024-2.*

Although no current range-wide population size of North Pacific right whale is available, evidence suggests that they have never recovered from intensive whaling. With the number of mature individuals around 250, the species is listed as Endangered by the IUCN (Cooke & Clapham, 2018a). The northeast Pacific subpopulation is listed separately as Critically Endangered given the number of mature individuals is thought to be below 50 (Cooke & Clapham, 2018b).

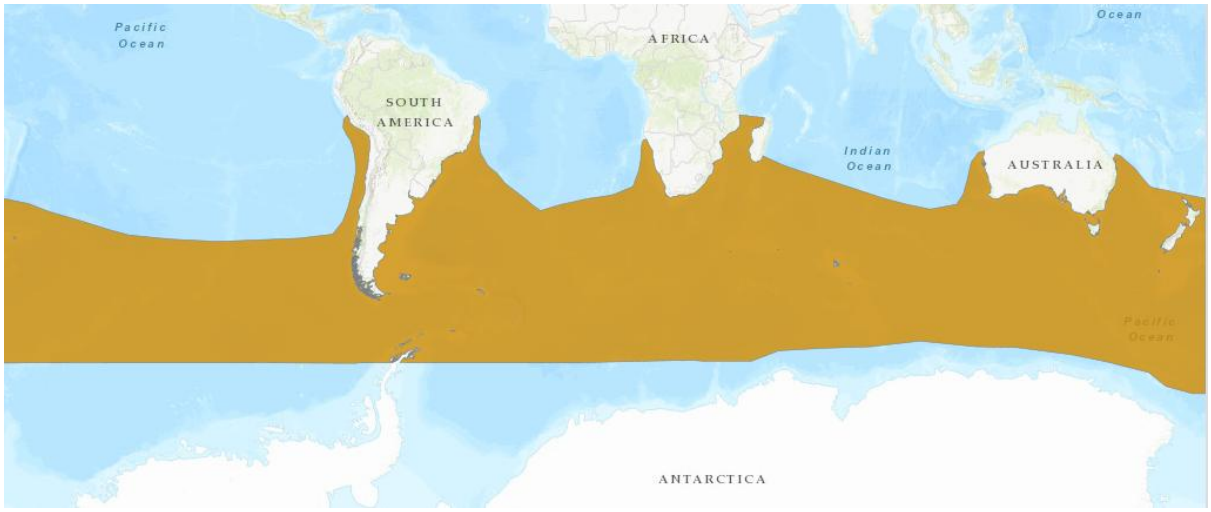
As with other species of right whale, the North Pacific right whale was protected from whaling in the 1930s, however, the population has been subject to illegal whaling in both the western and eastern North Pacific (Brownell Jr. *et al.,* 2009). Records show that 775 North Pacific right whales were taken illegally by Soviet whalers from 1935 to 1971, including 517 in the eastern North Pacific (Ivashchenko & Clapham, 2012; Ivashchenko *et al.,* 2017) highlighting the lack of contemporary understanding of the population status of the species.

With so little known about North Pacific right whales, quantifying the risks they face is difficult. However, there have been cases of known and suspected entanglements and ship strikes (Burdin *et al*., 2004). Right whales in the North Atlantic are known to be vulnerable to collisions with ships and the projected increase in shipping as the Arctic Ocean becomes more ice-free is a potential threat to the very small eastern North Pacific subpopulation in terms of ship strikes, as well as noise and pollution (Cooke & Clapham, 2018a).

North Pacific right whales are not subject to contemporary hunting.

Southern right whale (*Eubalaena australis*)

Listed on CMS Appendix I in 1979
Not listed on CMS Appendix II
CMS Parties in the range of the species/population: Argentina, Australia, Brazil, Chile, Madagascar, Mozambique, New Zealand, Norway, Peru, South Africa, United Kingdom, Uruguay



Southern right whale distribution © *IUCN 2013. Eubalaena australis. The IUCN Red List of Threatened Species. Version 2024-2.*

As with the North Atlantic right whale, southern right whales were hunted almost to extinction and depleted to a low of about 300 individuals by the 1920s (Romero *et al.,* 2022). The species began to recover following protection in the 1930s (as with other right whales), with an estimated total population size of 13,600 individuals in 2009 (IWC, 2013). Considering the 5-10-fold increase in the total species population since the 1970s, the southern right whale is not assumed to be under threat at the species level, and as such is listed as of Least Concern by the IUCN (Cooke & Zerbini, 2018).

Although four breeding populations of southern right whales (southwest Atlantic – Argentina, Uruguay, Brazil, southeast Atlantic – South Africa and Namibia; Australia; and southwest Pacific – New Zealand) have shown strong recoveries (Bannister *et al.,* 2001, 2016; Best *et al.,* 2001; Brandão *et al.,* 2013; Cooke *et al.,* 2001, 2015; Jackson *et al.,* 2016), two further suspected breeding populations (southeast Pacific – Chile and Peru, and southwest Indian Ocean – Madagascar and Mozambique) remain at very low numbers (Cooke & Zerbini, 2018) are relatively unknown and/or have suffered recent declines in the absence of whaling. The south-east Pacific subpopulation off Chile/Peru was hunted extensively in the 18th, 19th and 20th centuries by American, French and Chilean whaling fleets (Clarke, 1965) and has shown significantly reduced signs of recovery compared to other southern right whale populations (Castro Ayala *et al.,* 2024). Thought to number less than 50 mature individuals the subpopulation has been assessed separately, resulting in a listing of Critically Endangered by the IUCN (Cooke, 2018a). Due to unknown reasons, the population off South Africa appears to have declined sharply, evident in the number of single animals since 2010 and in cow-calf pairs since 2015 (Findlay *et al.,* 2017).

Compared with the western North Atlantic, the lower average density of human populations, and thus fishing, shipping, and other potentially harmful activities in the Southern Hemisphere, probably means this species is less affected by such activities than the North Atlantic right whale (IWC, 2013). However, the species still contends with a range of threats which may impact their recovery. Two major threats to southern right whales are entanglement in fishing gear and ship strikes (IWC, 2001). Research suggests that as Antarctic feeding grounds warm up, the average calf survival rate of southern right whales would be expected to decline (Leaper *et al.,* 2006). Therefore, ocean warming is likely to impede population recovery and cause population decline with the potential to disrupt food web interactions in the Southern Ocean, weakening that ecosystem's contribution to the mitigation of climate change at a global scale (Agrelo *et al.,* 2021).

Southern right whales are not subject to contemporary hunting.

Sei whale (*Balaenoptera borealis*)
Listed on CMS Appendix I in 2002
Not listed on CMS Appendix II
CMS Parties in the range of the species/population: Angola, Argentina, Australia, Brazil, Cabo Verde, Chile, Dominican Republic, Denmark[2], Ireland, Madagascar, Mauritania, Morocco, New Zealand, Norway, Peru, Portugal, Senegal, South Africa, Spain, United Kingdom, Uruguay.*

Sei whale distribution © *IUCN 2012. Balaenoptera borealis. The IUCN Red List of Threatened Species. Version 2024-2.*

The sei whale was heavily exploited by modern whaling and populations were significantly depleted in all areas (Horwood, 2018). From the late 1950s to the mid-1970s, following the depletion of blue, fin and humpback whales, the exploitation of sei whales was particularly intensive in the Southern Hemisphere and the North Pacific (Cooke, 2018d). Exploitation in the North Atlantic occurred over a longer period and was less intensive, except in the eastern North Atlantic, where the population appears not to have recovered (Cooke, 2018d). The global population is currently considered to number around 50,000 mature individuals, although projections of the population size indicate that the global population may be recovering, and sei whales are currently listed as Endangered by the IUCN (Cooke, 2018d).

Whaling for sei whales ceased in the North Pacific in 1975, the Southern Hemisphere in 1979 and in the North Atlantic from 1986 (Thomas *et al.,* 2016). In the North Pacific, a population of over 60,000 was reduced to about 15,000 (Horwood, 2018) while recent surveys indicate current abundance at over 30,000 (Hakamada & Matsuoka, 2015). Genetic studies have, to

[2] Denmark has taken out a reservation on sei whales since 2002.

date, not clearly defined different populations of sei whales (Kanda *et al.,* 2006), however, biologists have separated populations for management purposes (Horwood, 2018).

Japan resumed the hunting of sei whales in the North Pacific in 2002, under a scientific permit as part of the Japanese Whale Research Programme under Special Permit in the North Pacific (JARPN II) (Cooke, 2018d). From 2004-2013, the annual quota was 100 animals. However, beginning in 2014, Japan reduced the annual quota of sei whales from 100 to 90 individuals (Thomas *et al.,* 2016). In 2017, Japan increased its annual quota to 134 sei whales under its New Scientific Whale Research Programme in the western North Pacific (NEWREP-NP) (IWC, 2018b). In 2019, Japan left the IWC and resumed commercial whaling within their own EEZ, with a quota of 25 sei whales per year, which was set internally, without any independent review. In December 2024, Japan increased the sei whale quota for the 2025–2030 block to 56 whales, again with no independent review.

Between 2014 and 2024, a total of 689 sei whales have been taken with an average of 62.6 per year. A low of 23 individuals was recorded in 2023 and a high of 135 in 2018 (IWC, 2024a).

Additional threats
Due to their offshore distribution, there is very little information on current threats to sei whales. Although ship strikes, entanglement in fishing gear and noise pollution are likely to impact sei whales to a lesser degree, the potential impacts of climate and oceanographic change on sei whales pertaining to habitat, food availability, and potentially mass mortality events (MMEs) are of greater concern (National Marine Fisheries Service [NMFS], 2021). In March 2015, at least 343, primarily sei, whales mass stranded in a gulf of Southern Chile with their synchronous death attributed to Harmful Algae Blooms (HABs) during a building El Niño event. Increasing frequency and magnitude of MMEs due to climate change would have a direct and significant impact on sei whale populations and their prey, threatening their recovery (Häussermann *et al.,* 2017). The impacts of climate and oceanographic change on sei whale prey species could potentially contribute to mortality events for this species (NMFS, 2021).

Trade
The 90 sei whales taken in 2014, 2015 and 2016 under Special Permit by Japan are reflected in the CITES Trade database as '*90 bodies taken from the High Seas' (the marine environment not under the jurisdiction of any state).* In 2017 and 2018, there are two more reported instances of Japan taking sei whales from the High Seas, but this time reported as 1,120 tonnes and 990 tonnes of meat respectively. Sei whale meat is sold on Japanese domestic markets and is not known to be traded internationally.

The sei whale is hunted commercially in Japan, where there was a self-allocated quota of 25 whales per year from 2019 – 2024. This self-allocated quota has increased to 56 whales per year for 2025 – 2030.

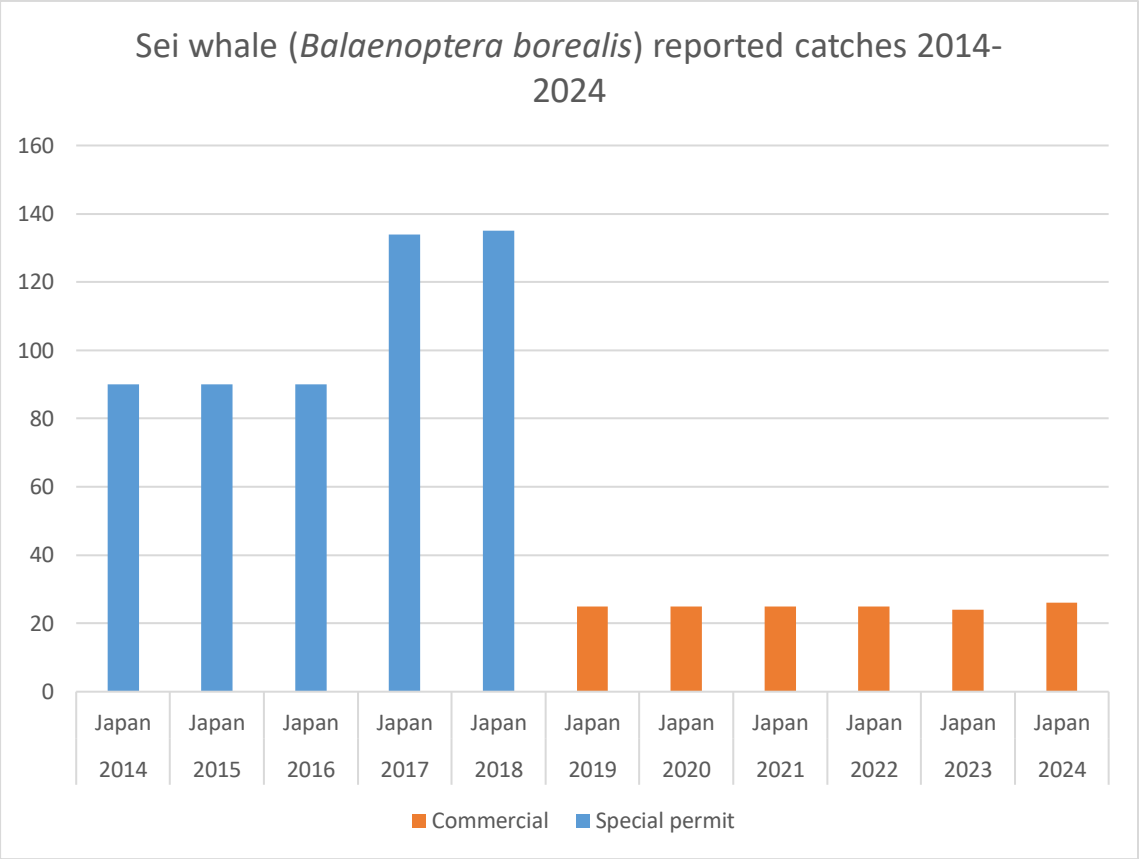
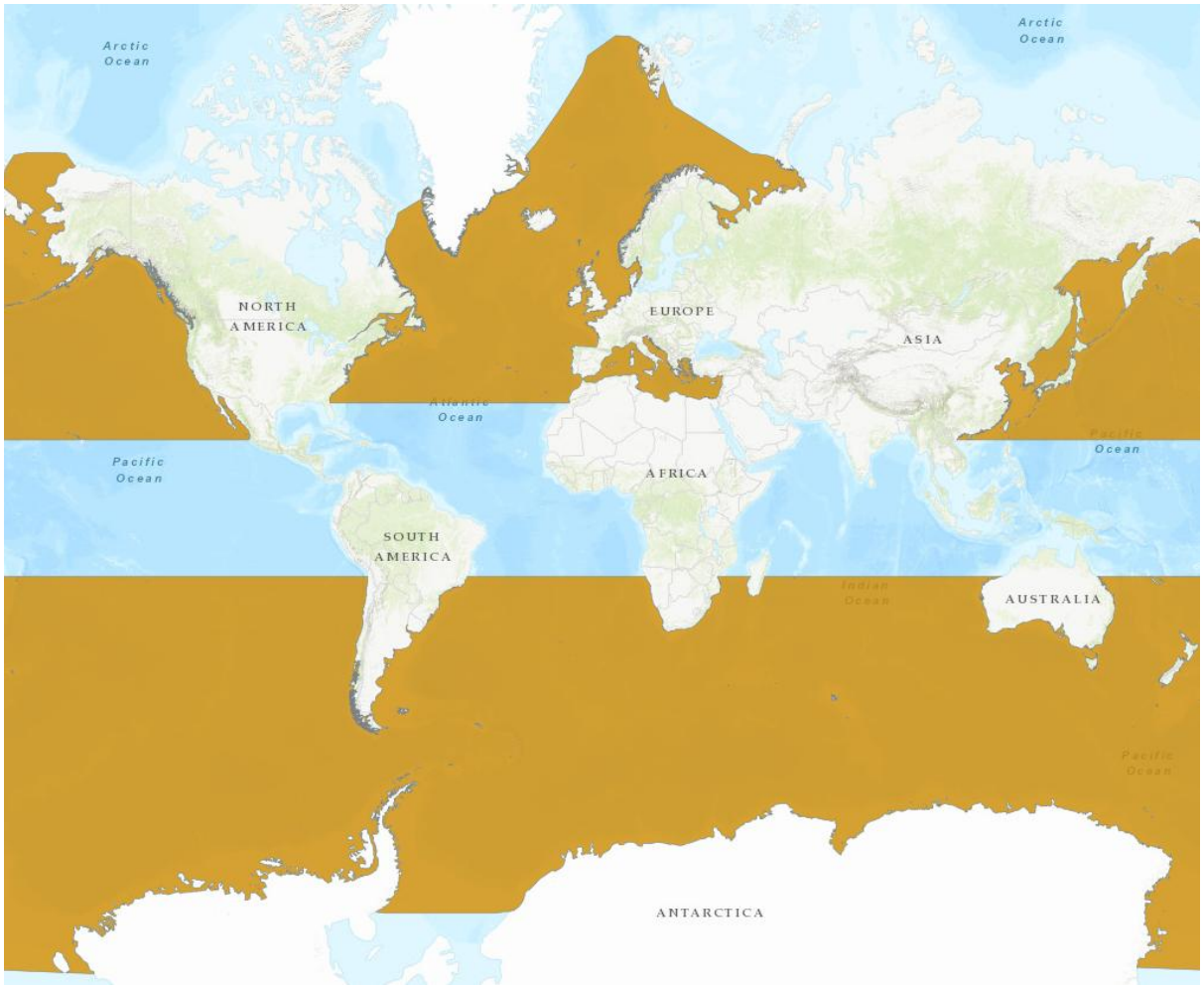


Figure 2. Reported catches of sei whales between 2014 and 2024.

Fin whale (*Balaenoptera physalus*)
Listed on CMS Appendix I in 2002
Listed on CMS Appendix II in 2002
CMS Parties in the range of the species/population: Algeria, Angola, Argentina, Australia, Belgium, Brazil, Cabo Verde, Chile, Congo, The Democratic Republic of the Congo, Croatia, Cyprus, Denmark, Ecuador, Egypt, Denmark[3], Fiji, France, Gabon, Germany, Greece, Ireland, Israel, Italy, Lebanon, Libya, Madagascar, Malta, Mauritius, Monaco, Morocco, Mozambique, Netherlands, New Zealand, Norway, Peru, Philippines, Portugal, Russian Federation, Saudi Arabia, Seychelles, Slovenia, South Africa, Spain, Sweden, Syrian Arab Republic, Tunisia, United Kingdom.

[3] Denmark has taken out a reservation on fin whales since 2002.



Fin whale distribution © *IUCN 2014. Balaenoptera physalus. The IUCN Red List of Threatened Species. Version 2024-2.*

While the abundance of fin whales was negatively impacted by whaling (Wolf *et al.,* 2022), protection led to a noticeable recovery of fin whale population sizes, for example, large feeding aggregations of fin whales at the Antarctic Peninsula suggest the re-establishment of historical behaviours, and the return to ancestral feeding grounds signals a recovering population (Herr *et al.,* 2022).

Available global estimates suggest a total population size of 145,000 individuals (100,000 mature individuals) (North Atlantic: 70,000 whales in 2015; North Pacific: 50,000 whales in 2011; Southern Hemisphere: 25,000 whales in 2008) and the fin whale was recently downlisted from Endangered to Vulnerable by the IUCN (Cooke, 2018c). More recent population estimates however, propose the North Atlantic population to comprise only 40,000–60,000 (Wolf *et al.,* 2022 and literature within) individuals. Meanwhile, the Mediterranean subpopulation is considered to comprise less than 1,720 mature individuals and is listed as Endangered by the IUCN (Panigada *et al.,* 2021). Fin whales in the North Atlantic and North Pacific are subject to modern day whaling practices.

North Atlantic

In 2013, Iceland resumed contemporary commercial whaling of fin whales, issuing self-allocated quotas of 184 and 154 whales for 2013 and 2014 respectively. In 2015, Icelandic whalers took 155 whales followed by no whaling in 2016 and 2017. In 2018, 146 (incl. two rare blue/fin whale hybrids) whales were taken, whilst in 2019, although a self-allocated quota of 209 per/year until 2023 was issued, no whaling was undertaken until 2022 when 148

individuals were harvested. Despite having a self-allocated quota and a licence, because of animal welfare concerns, whaling was not conducted in 2023. Nor was whaling undertaken in 2024 despite there being a licence to take 128 individuals. On the 5th December 2024, the Icelandic Minister of Food and Agriculture, and acting Prime Minister, issued a fishing permit allowing the killing of 209 fin whales per year, for five years with the stipulation that *the annual catch of fin whales in the period 2018-2025 shall not exceed 161 animals in the East Greenland/West Iceland fishing area and a maximum of 48 fin whales in the East Iceland/Faroe Islands area*. The permit is to be extended annually by one year and up to 20% of each year's unused fishing quota may be carried over to the following year (Government of Iceland, 2024).

	Catch limit	**Catch number**
2013	184	134
2014	154	137
2015	155	155
2016	154	0
2017	150	0
2018	161	146
2019	209	0
2020	209	0
2021	209	0
2022	209	148
2023	209	24
2024	128 (99 for Greenland and West Iceland; 29 for East Iceland and Faroe Islands)	0

Table 1. Icelandic self-allocated catch limits and catch numbers for fin whales for 2013-2024, as per IWC data.

Aboriginal Subsistence Whaling (ASW) is undertaken by hunters in West Greenland where a quota of 19 fin whales per year has been in place since 2015 (IWC, 2016). The average catch has been 4 fin whales per year since 2018 (IWC, 2024a); calculated as 47% of the 2008-2012 quota, 53% of the 2013-2017 quota, and 22 % of the 2018-2023 quota (Government of Greenland, 2018).

North Pacific

Although legally protected from whaling by the IWC in the North Pacific from 1976, small catches continued off Korea until 1981 (Cooke, 2018c). However, in June 2024, Japan announced that they would resume fin whaling in their own EEZ and added 59 fin whales to whaling quotas (Japanese Fisheries Agency, 2024), 32 of which were taken during the 2024 season. There is no doubt that, due to commercial whaling, fin whale populations in the North Pacific declined substantially, for example the stock in the western North Pacific was estimated to have declined from an “initial level” of 44,000 to 17,000 in 1975 (Cooke, 2018c). Although there is currently no population estimate for fin whales in the North Pacific as a whole (Cooke, 2018c), the area of the northwestern Pacific that Japan was to resume hunts in was surveyed during 2002-2015 resulting in an estimate of approximately 4,000 fin whales (Hakamada & Matsuoka, 2016).

Between 2014 and 2024, a total of 710 fin whales were taken, with an average of 64.5 per/year. A low of two was recorded in 2021 (N.B. both in Greenland as there was no whaling

in Iceland or Japan in 2021), and a high of 168 in 2015. One illegal take that is known about, occurred in South Korea in 2015 (IWC, 2024a).

Additional threats

Fin whales are one of the more commonly recorded species of large whale reported in vessel collisions (IWC, 2018a). Although reported incidents have been very few relative to the abundance of the species, most collisions involving large vessels are probably not detected, and to date there has been no satisfactory quantitative assessment of the actual risk (Cooke, 2018c). There is, however, a high probability that in the Mediterranean Sea, the ship strike and fishery mortality is beyond the critical threshold fixed by the Agreement on the Conservation of Cetaceans of the Black Sea, Mediterranean Sea and contiguous Atlantic area (ACCOBAMS) (Sèbe *et al.,* 2023). Fin whales are also subject to entanglement in commercial fishing gear; however, it is likely that, globally, the threat from entanglement is low relative to the overall abundance of the species (Cooke, 2018c). Ingestion of marine debris is thought to be an emerging threat (Fossi *et al.,* 2012; Im *et al.,* 2020).

Trade

The CITES Trade database contains the known commercial fin whale meat export from Iceland to Japan, reporting 1624 tonnes (reported by importer) or 2546 tonnes (reported by exporter) in 2014, 2012 tonnes in 2015, 1556 tonnes 2017, 1977 tonnes in 2018, 1961 tonnes in 2019, and 1235 tonnes in 2020. The database contains a further '*9 bodies taken from the High Seas' (the marine environment not under the jurisdiction of any state)* imported to Japan for scientific purposes in 2014, and 100 g of meat imported to the USA from Japan in 2017 for personal use that was confiscated.

Fin whales are subject to ASW whaling in West Greenland with a permitted catch of 19 whales per year. The species is taken commercially in both Iceland and Japan, where self-allocated annual quotas of 209 and 59 whales respectively, are in place.

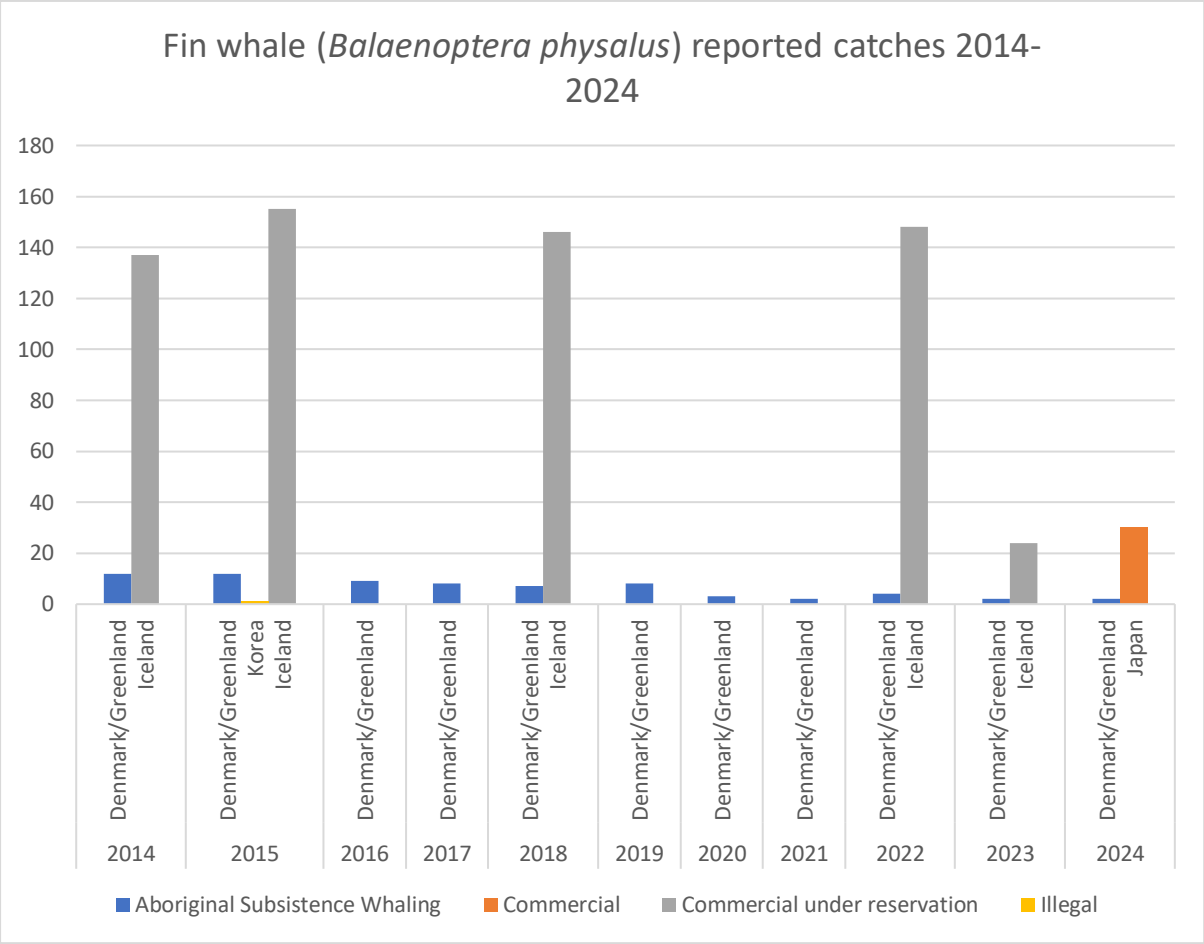
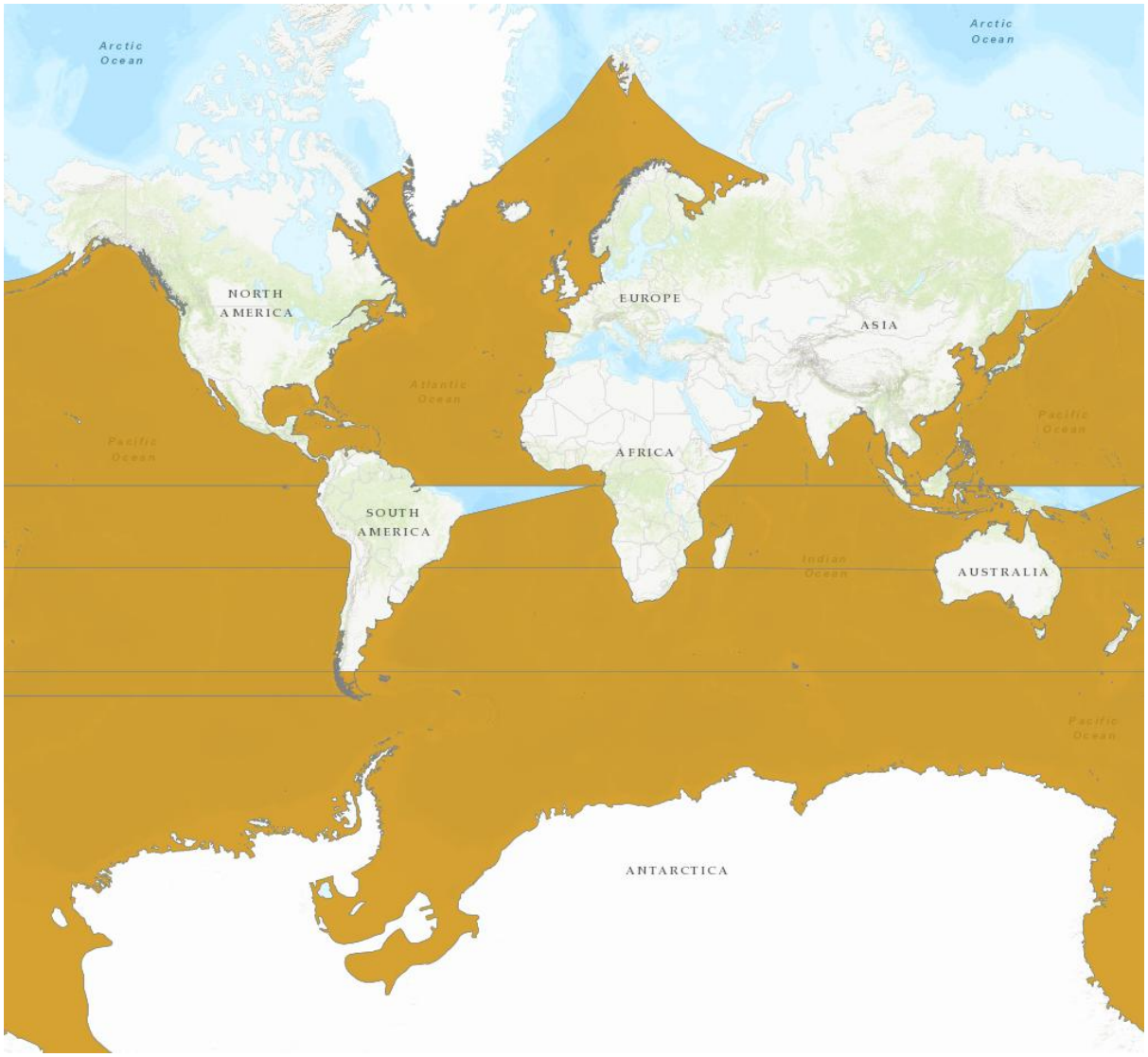


Figure 3. Reported catches of fin whales between 2014 and 2024, as per IWC data.

Blue whale (*Balaenoptera musculus*)
Listed on CMS Appendix I in 1979
Not listed on CMS Appendix II
CMS Parties in the range of the species/population: Angola, Argentina, Australia, Bangladesh, Brazil, Cabo Verde, Chile, Cook Islands, Costa Rica, Denmark, Djibouti, Ecuador, Denmark, Fiji, France, Gabon, India, Islamic Republic of Iran, Ireland, Kenya, Madagascar, Maldives, Mauritania, Mauritius, Morocco, Mozambique, New Zealand, Norway, Oman, Pakistan, Palau, Panama, Peru, Philippines, Portugal, Senegal, Seychelles, Somalia, South Africa, Spain, Sri Lanka, United Republic of Tanzania, United Kingdom, Uruguay, Yemen.



Blue whale distribution © *IUCN 2012. Balaenoptera musculus. The IUCN Red List of Threatened Species. Version 2024-2.*

The blue whale was hunted to the brink of extinction. In the North Atlantic for example, it is suggested that between 15,000-20,000 individuals were taken in historical whaling operations (Cooke, 2018b). An absolute minimum of 9,000 blue whales were recorded as caught in the North Pacific whilst a total of 5,276 blue whales were reported as caught in the eastern South Pacific (Allison, 2017). However, this latter figure is considered an underestimate, and the likely total kill is in the range 6,000-7,000 (Cooke, 2018b). The estimated total historical kill of pygmy blue whales is thought to be around 14,000 whales, whilst Antarctic blue whale (*B. m. ssp intermedia*) take numbered around 350,000 whales (Cooke, 2018f).

The current global population size of blue whales is plausibly in the range of 10,000-25,000 individuals, a similar number to those taken in the North Atlantic alone, with 5,000-15,000 mature individuals, compared with a 1926 global population of at least 140,000 mature individuals (Cooke, 2018b). Today, recognised as comprising five sub-species, the species is listed as Endangered by the IUCN (Cooke, 2018b), whilst the Antarctic blue whale is listed as Critically Endangered (Cooke, 2018f).

Information regarding the recovery of blue whale populations post-whaling is varied. Recent abundance estimates for the central and eastern North Atlantic rose from 298 in 1987 to 1,012 in 2001 (Pike *et al.,* 2009), and it has also been suggested that the eastern North Pacific

population of blue whale had recovered to near its pre-whaling abundance, estimated to be 1,750 - 2,500 whales (Monnahan *et al.,* 2015). On the other hand, recent surveys undertaken in the western North Pacific encountered no blue whales around the coast of Japan, where until the 1960s, at least 2,000 individuals are known to have been taken in coastal whaling operations (Miyashita *et al.,* 1996; Matsuoka *et al.,* 2016). In 1998, the circumpolar estimate of abundance for Antarctic blue whales was 2,280 (Cooke, 2018b). However, in a more recent study, between 2003 and 2019 a population estimate of 3,506 whales was derived, with a population growth rate estimate of between 10–11% (Olsen *et al.,* 2024).

Although blue whales are protected from hunting pressure, fin-blue whale hybrids with a North Atlantic origin have been taken in Icelandic whaling operations (Fioravanti *et al.,* 2022). Hybridization events among these large marine mammals are likely to be underestimated and considered an additional potential threat to blue whale population recovery (Pampoulie *et al.,* 2021). This is supported by recent genome sequencing of North Atlantic blue whales (*Balaenoptera musculus musculus*), which revealed that around 3.5% of their DNA comes from fin whales (Jossey *et al.,* 2024).

Additional threats
Evidence suggests that ship strikes and associated injuries represent a large contributor to anthropogenic mortality (Rockwood *et al.,* 2017). Over 16% of the individuals in the Gulf of Saint Lawrence photo-identification catalogue appear to have scars or wounds resulting from ship strikes (Sears & Calambokidis, 2002), whilst blue whales off the coast of Sri Lanka face an increased threat of ship strike given the intensity of traffic (de Vos *et al.,* 2016). Hybridisation with fin whales is a potential emerging threat to their recovery as every single sample taken from blue whales living today had at least some fin whale DNA in the genome, meaning that the species might be less well-equipped to adapt to environmental threats (Jossey *et al.,* 2024).

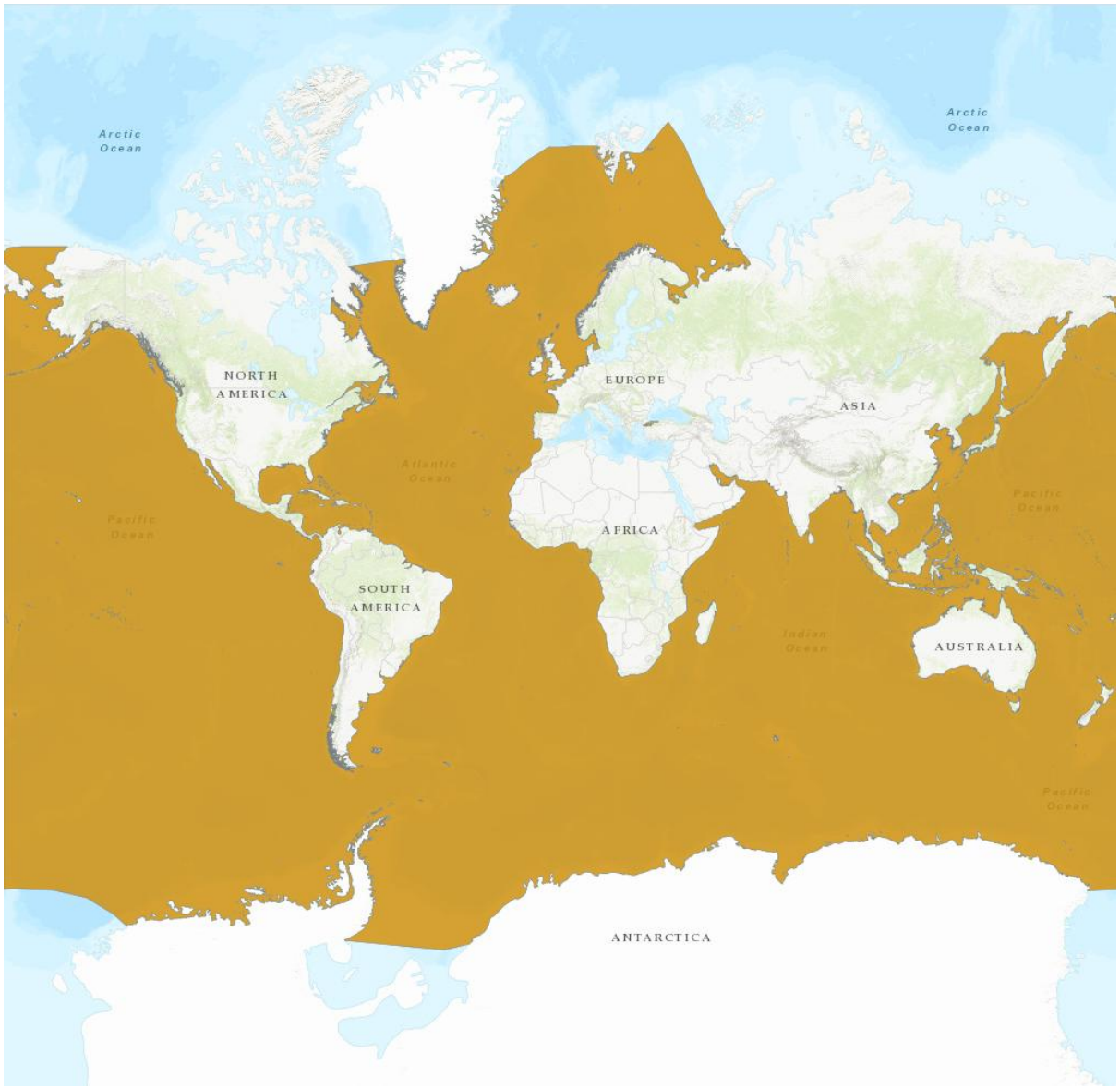
The impacts of resource competition (National Marine Fisheries Service, 1998), and climate change (Thomas *et al.,* 2016) have also been suggested as inherent difficulties in the species' recovery.

Trade
In 2016, 850 g meat was confiscated when imported to the USA from Japan for personal use.

Blue whales are not subject to contemporary whaling. However, blue/fin hybrids have been taken in commercial Icelandic whaling operations.

Humpback whale (*Megaptera novaeangliae*)

Listed on Appendix I in 1979
Not listed on Appendix II
CMS Parties in the range of the species/population: Angola, Antigua and Barbuda, Argentina, Australia, Bahrain, Belgium, Benin, Brazil, Cabo Verde, Cameroon, Chile, Congo, The Democratic Republic of the Congo, Cook Islands, Costa Rica, Cuba, Côte d'Ivoire, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Denmark, Fiji, France, French Guiana, Gabon, Gambia, Germany, Ghana, Guinea, Guinea-Bissau, Honduras, India, Islamic Republic of Iran, Iraq, Ireland, Israel, Jordan, Kenya, Liberia, Madagascar, Mauritania, Mauritius, Morocco, Mozambique, Netherlands, New Zealand, Nigeria, Norway, Oman, Pakistan, Palau, Panama, Peru, Philippines, Portugal, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Somalia, South Africa, Spain, Norway, Sri Lanka, Sweden, United Republic of Tanzania, Togo, Trinidad and Tobago, United Arab Emirates, United Kingdom, Uruguay, Yemen.



Humpback whale distribution © *IUCN 2012. Megaptera novaeangliae. The IUCN Red List of Threatened Species. Version 2024-2.*

Commercial whaling seriously depleted all humpback populations, yet since their protection in 1966 when the global population had been reduced to around 5,000 individuals (Baker *et al.,* 1993), there have been substantial increases in three recognized subspecies in the North Atlantic, North Pacific, and Southern Hemisphere. With a global population estimate of approximately 84,000 mature individuals out of a total of 135,000 whales, the species is listed as of Least Concern by the IUCN (Cooke, 2018e). The Arabian Sea subpopulation, with less than 100 individuals thought to remain (Minton et al*.,* 2011; Collins *et al.,* 2018), and the Oceania subpopulation, with approximately 4,329 individuals (Constantine *et al.,* 2012), have been assessed separately and both are listed as Endangered by the IUCN (Minton et al*.,* 2008; Childerhouse *et al.,* 2008).

Contemporary whaling continues to impact humpback whales in three known locations around the world.

West Greenland

Aboriginal Subsistence Whaling (ASW) of humpback whales is regulated by the IWC in West Greenland where a quota of 10 humpback whales per year has been in place since 2013 (IWC, 2016). The total catch between 2014 and 2024 was 43 whales (IWC, 2024a).

Saint Vincent and the Grenadines (SVG)

Aboriginal Subsistence Whaling (ASW) on the island of Bequia, targets humpback whales during their annual migration from their summer feeding grounds in the North Atlantic (Stevick *et al.,* 2018). Although meat, blubber and internal organs are utilized, oil is also used locally as an oral and topical medicine, for cooking, and for other household purposes (Fielding & Kiszka, 2021). During the 6-year 2013-2018 quota block, hunters were permitted to take a maximum total of 24 whales, this quota was then increased to 28 for the 2019-2025 seasons (IWC, 2016; IWC, 2024b). A total of 11 humpback whales were taken between 2014 and 2024 (IWC, 2024a).

West Africa
Very little is known about a whaling operation targeting humpback whales off the island of Annobón, Equatorial Guinea, however, recent video evidence confirmed that the practice, where calves are the primary target, is still on-going (Fielding & Barrientos, 2021). One difference between the whaling in Annobón and whaling in both Bequia and West Greenland, is that the whaling in the latter is regulated by the IWC whilst whaling in Annobón is regulated by local laws and customs. Similar cases of occasional humpback whale take have been documented in other nations in the Gulf of Guinea, but the scale is unknown (Fielding & Barrientos, 2021).

Global
Official catch statistics show 56 individual humpback whales having been taken between 2014 and 2024, with a low of two in 2022 and a high of nine in 2014. One humpback whale was captured in an ‘unauthorised take’ in the USA in 2016 (IWC, 2024a). An unknown number have been taken in whaling operations off West Africa.

There have been substantial increases in some populations of humpback whales. However, the species’ migration patterns introduce a complication when understanding the impacts of whaling on recovering humpback whale populations in the North Atlantic. The documented migration of an Icelandic humpback whale mother and calf pair from the West Indies breeding grounds highlights the connectivity and unknown impacts of whaling in the Caribbean (Basran *et al.,* 2023). Additionally, the confirmed migration of an individual from Cape Verde Islands (CVI) breeding ground to a western North Atlantic feeding ground off West Greenland, which is also the location of an aboriginal subsistence hunt, has strong implications for the conservation efforts of the small CVI population (Chosson *et al.,* 2024). A recently observed distribution shift of humpback whales around Greenland, which evidenced a significant decline in the number of individuals using the West Greenland feeding ground, increases the probability of an individual whale being hunted, raising further conservation concern for the small CVI population (Hansen *et al.,* 2018). Extreme distance movement demonstrates behavioural plasticity in humpback whales, which may play an important role in adaptation strategies to global environmental changes and perhaps be an evolved response to various pressures (Kalashnikova *et al.,* 2024).

Additional threats
Humpback whales face a variety of threats which vary in their intensity and severity depending on their location. In the North Atlantic, where they are currently subjected to hunting pressure, Harmful Algae Blooms (HABs), vessel collisions, and fishing gear entanglements are likely to moderately reduce the population size and/or the growth rate, whilst the impacts of climate change are unknown (Bettridge *et al.,* 2015). An Unusual Mortality Event (UME) has been declared from 2016 and is ongoing in response to elevated humpback whale mortalities along

the Atlantic coast of the USA. Of the whales examined, about 40 percent had evidence of human interaction, either ship strike or entanglement (NOAA, 2024).

Trade
There is one report of 22 (no units given) oil imported to Australia from Colombia in 2021 for scientific purposes. According to the TRAFFIC Wildlife Trade Portal, in 2019, 26 humpback whale bones and a jar of fat from whale flesh were seized in Libreville, Gabon.

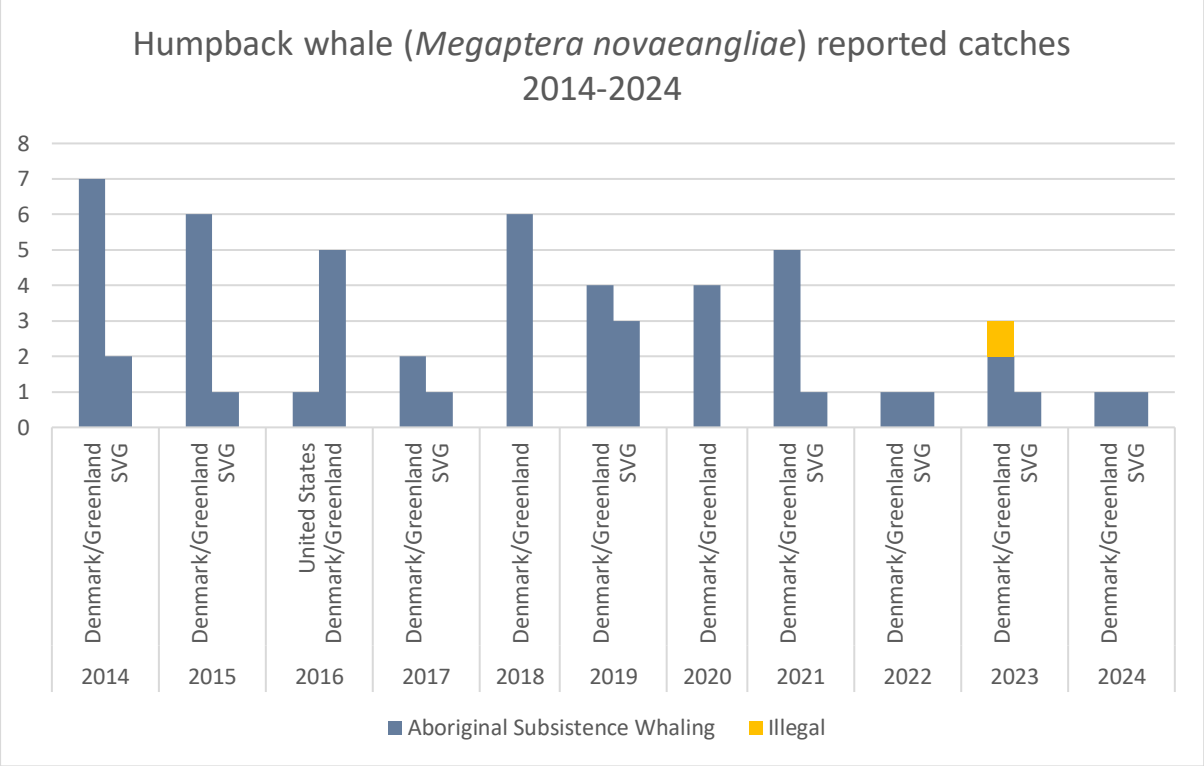
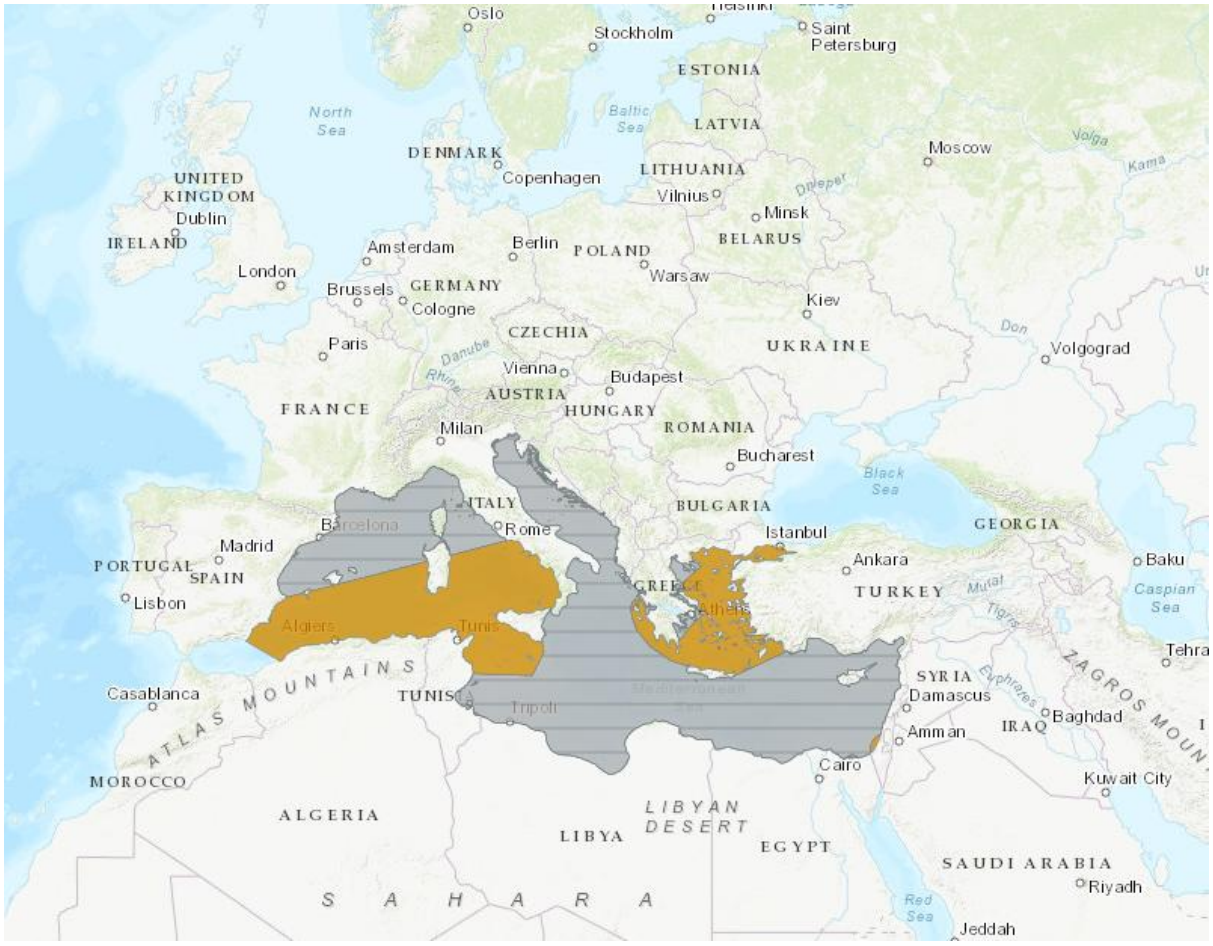


Figure 4. Reported catches of humpback whales between 2014 and 2024, as per IWC data.

Humpback whales are regulated under the IWC Aboriginal Subsistence Whaling Management Plan in West Greenland, with a 6-year quota block of a maximum of 10 whales per year. They are also subject to ASWMP in St. Vincent and the Grenadines, with a maximum total of 28 whales for the 2019-2025 period. Unregulated whaling is undertaken in Equatorial Guinea and potentially other countries in West Africa.

Common dolphin (*Delphinus delphis*) - Mediterranean population

Listed on Appendix I in 2005
Listed on Appendix II in 1988 (along with populations in the North and Baltic Sea, Black Sea and eastern tropical Pacific)
CMS Parties in the range of the species/population: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Lebanon, Libya, Malta, Monaco, Montenegro, Spain, Slovenia, Syrian Arab Republic, Tunisia.



Common dolphin Mediterranean subpopulation distribution © *IUCN 2022. Delphinus delphis Inner Mediterranean subpopulation. The IUCN Red List of Threatened Species. Version 2024-2*

The 'Mediterranean population' of common dolphin was first listed Endangered by the IUCN in 2003 (Bearzi, 2003). A reassessment in 2021 found the number of mature individuals to be less than 2,500 with an estimated rate of decline likely between 5% and 10% annually, ensuring the newly named 'Inner Mediterranean subpopulation' retained the listing Endangered (Bearzi et al*.,* 2022). The Gulf of Corinth (GoC) is connected through a narrow strait to open Mediterranean waters. However, with less than 10 individuals thought to remain, and no interchange between the populations, the GoC subpopulation is listed as Critically Endangered by the IUCN (Bearzi *et al.,* 2020).

Although common dolphins are taken for bait and/or consumption elsewhere in the world (Altherr & Hodgins, 2024), the subpopulation in the inner Mediterranean is not impacted by directed hunts (Bearzi *et al.,* 2022).

Common dolphins used to be widely distributed across much of the Mediterranean (Notarbartolo di Sciara & Tonay, 2021). However, dolphins were long viewed as pests deserving systematic extermination, and the practice of killing small cetaceans (particularly common dolphins) was widespread until the 1960s. These past hunts are believed to have been a significant factor in precipitating the species' decline in the region (Bearzi *et al.,* 2022). Other threats may have contributed, singly or in synergy, to the continued decline of the population including prey depletion, fisheries bycatch, pollution, health risks, and climate change (Vella *et al.,* 2021). Although competition with fisheries is a source of concern, evidence suggests that bycatch alone is unlikely to be the factor most responsible for the decline of common dolphins in the region, but it may have played a significant role at certain

times and in certain areas (Bearzi *et al.,* 2003), for example caused by bycatch in driftnets (Bearzi *et al.,* 2022). High levels of PCBs in Mediterranean dolphins, compared to dolphins from other areas, imply possibilities of immune suppression and reproductive impairment (Fossi *et al.,* 2004).

The Mediterranean population of common dolphins is not subjected to hunting.

Lahille's bottlenose dolphin (*Tursiops truncatus gephyreus*)
Listed on Appendix I in 2024
Listed on Appendix II in 2024
CMS Parties in the range of the species/population: Argentina, Brazil, Uruguay

Lahille's bottlenose dolphin distribution © *IUCN 2019. Tursiops truncatus ssp. gephyreus. The IUCN Red List of Threatened Species. Version 2024-2.*

As recently as 2018, Lahille's bottlenose dolphins were confirmed to be a morphologically and genetically distinct subspecies (IWC, 2018b), and with only 360 mature individuals thought to remain, were listed as Vulnerable by the IUCN (Vermeulen *et al.,* 2019).

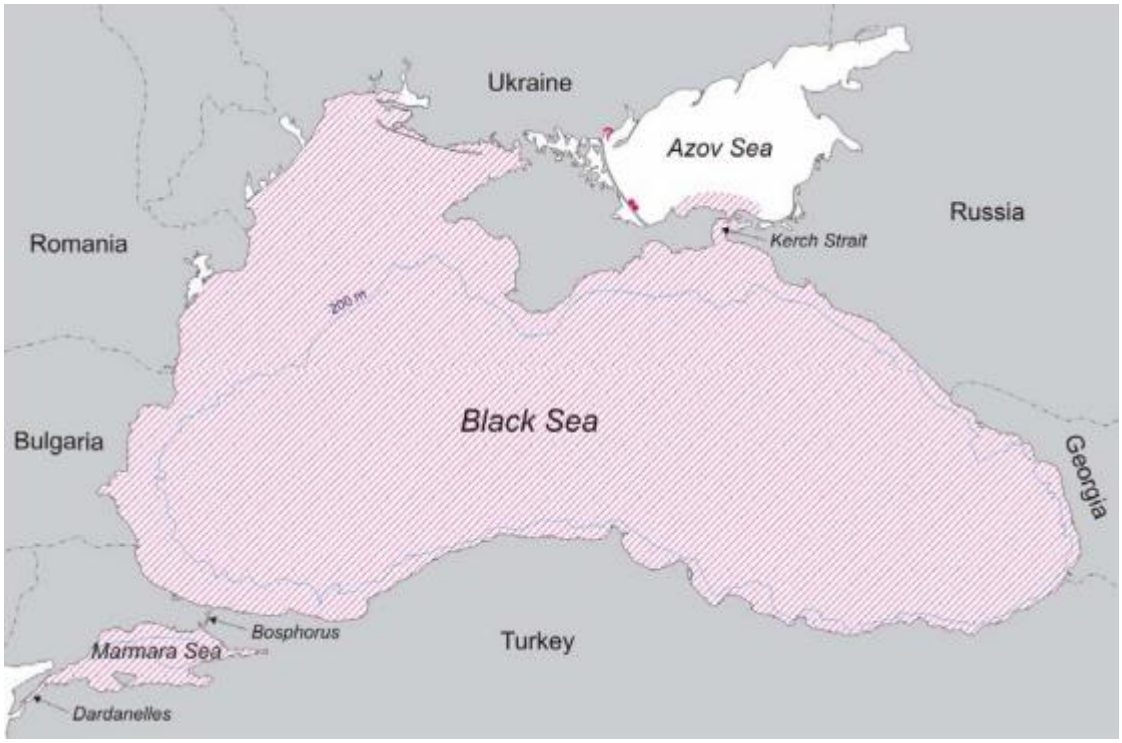
Although several other species, including common bottlenose dolphins, are known to be taken in directed and opportunistic hunts elsewhere in Brazil (Altherr & Hodgins, 2024), Lahille's bottlenose dolphins are not thought to be subject to contemporary hunting pressure. On the contrary, for over a century, in the city of Laguna on Brazil's southern coast, fishers have worked cooperatively with Lahille's bottlenose dolphins to find fish (Cantor *et al.,* 2023).

Due to their low numbers, high site fidelity and restricted coastal distribution, these dolphins are particularly sensitive to local anthropogenic impacts including pollution, reduced prey availability and bycatch (Vermeulen *et al.,* 2019). Within Brazil, incidental mortality in fishing

gear, especially coastal gillnet and beach-seine, is their major current threat (see Fruet *et al.,* 2012). Of particular conservation concern is the Argentina subpopulation, due to its small size, apparent genetic isolation from the rest of the subspecies and its low genetic variability (Vermeulen *et al.,* 2019).

Lahille's bottlenose dolphins are not subject to hunting.

Black Sea bottlenose dolphin (*Tursiops truncatus ponticus*)
Listed on Appendix I in 2009
Listed on Appendix II in 1991 (along with populations in the North, Baltic and Black Seas)
CMS Parties in the range of the species/population: Bulgaria, Georgia, Romania, Ukraine



Black Sea Bottlenose dolphin distribution. © *IUCN 2012. Tursiops truncatus ponticus, supplementary information. The IUCN Red List of Threatened Species.*

The Black Sea bottlenose dolphin is genetically distinct from other bottlenose dolphin populations in the eastern and western Mediterranean and the northeastern Atlantic (Natoli *et al.,* 2005). Surveys in 2019, suggest an overall population size of about 18,000 (excluding Russian waters) or 42,000 (including Russian waters) individuals, confirming that bottlenose dolphins are the least abundant cetacean in the Black Sea (Notarbartolo di Sciara & Tonay, 2021). The subspecies is currently listed as Endangered by the IUCN (Birkun, 2012), which is supported by more recent evidence presented by ACCOBAMS, noting at least a 50% population decline between 1971 and 2019, habitat deterioration, a decrease in prey populations due to invasion of alien species and overfishing, and exploitation (Notarbartolo di Sciara & Tonay, 2021).

As with other Black Sea cetacean populations, the Black Sea bottlenose dolphin was subject to extensive hunting by all Black Sea countries and live capture for military, commercial and scientific purposes by some, until a ban on cetacean fisheries in 1983 (Birkun Jr., 2002a; Birkun, 2012). Despite the ban, illegal take – predominantly for live trade – is still known to occur (Marine Connection, 2017) and isolated cases of deliberate killing and harassment have been reported in coastal fisheries (Birkun, 2012).

Additional threats
The declining population is subject to an array of other threats. Currently, one of their main threats is accidental mortality in fishing gear, especially in bottom-set gillnets (Notarbartolo di Sciara & Tonay, 2021). Most cetacean bycatch, however, is due to illegal, unreported and unregulated (IUU) fishing operations, making it difficult to estimate the true number of deaths (Popov *et al.,* 2023). Both large-scale pelagic trawling and small-scale coastal fisheries affect the species indirectly by depleting their prey populations (Birkun, 2012), whilst the invasion of alien species is also thought to reduce their prey and degrade their habitat (Birkun Jr., 2002a). Black Sea bottlenose dolphins are at chronic risk of opportunistic bacterial infections attributable to multi-microbial contamination from untreated waste in coastal waters, and there is evidence that they are vulnerable to morbillivirus infection, similar to the other Black Sea cetacean species (Birkun Jr., 2002b).

Russia's invasion of Ukraine presents a significant threat to Black Sea cetaceans, with a resulting sharp increase in cetacean mortality since the beginning of the war in 2022. Individuals were found stranded with evidence of fresh war-related injuries, starvation and hypothermia, and the combination of acoustic disturbance and explosions during military operations is thought to lead to frequent and lethal decompression incidents (Wegrzyn *et al.,* 2023).

The Black Sea bottlenose dolphin is subject to illegal hunting.

Irrawaddy dolphin (*Orcaella brevirostris*)

Listed on Appendix I in 2009
Listed on Appendix II in 1991
CMS Parties in the range of the species/population: Bangladesh, India, Philippines

Irrawaddy dolphin distribution © *IUCN SSC Cetacean Specialist Group 2017. Orcaella brevirostris. The IUCN Red List of Threatened Species. Version 2024-2.*

The current range-wide population size of Irrawaddy dolphins is unknown with abundance estimates only available for a few portions of their range, where they are known to exist in very small local subpopulations and consequently, the species is listed as Endangered by the IUCN (Minton *et al.,* 2017). There are currently six recognized subpopulations of Irrawaddy dolphin, yet with estimates of mature individuals in all six estimated to be less than 50, all are listed as

Critically Endangered (Dolar *et al.,* 2018; Smith, 2004; Smith and Beasley, 2004a, 2004b; Smith *et al.,* 2023).

Due to their preference for coastal and riverine waters, Irrawaddy dolphins have been impacted by varying levels of hunting, for food, bait and for live capture for the captivity industry, throughout their range. Although protected by national legislation, illegal take is known to be ongoing. For example, in Indonesia, the Irrawaddy dolphin is primarily threatened by bycatch in fisheries, however, deliberate hunting further contributes to the species' decline (Brownell *et al.,* 2019). Additionally, in Malaysia, incidentally caught Irrawaddy dolphins are used for human consumption or shark bait (Jaaman *et al.,* 2005; Jaaman *et al.,* 2008).

Additional threats
The most severe threat to Irrawaddy dolphins is incidental mortality from entanglement in fishing gear, particularly gillnets. However, habitat loss, particularly from dams in riverine populations, degradation from declining or altered freshwater flows, pollution and disturbance from vessel traffic, are all of concern (Minton *et al.,* 2017).

The Irrawaddy dolphin is subject to illegal hunting.

Atlantic humpback dolphin (*Sousa teuszii*)

Listed on Appendix I in 2009
Listed on Appendix II in 1991
CMS Parties in the range of the species/population: Angola, Benin, Cameroon, Congo, The Democratic Republic of the Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mauritania, Nigeria, Senegal, Togo.

Atlantic humpback dolphin distribution © *IUCN SSC Cetacean Specialist Group 2017. Sousa teuszii. The IUCN Red List of Threatened Species. Version 2024-2.*

Up-to-date information on the abundance of Atlantic humpback dolphins is scarce. However, it is considered that the species' total abundance across the recognised 11 management

stocks is <3,000 individuals (Collins, 2015) with likely <1,500 mature individuals. The species is listed as Critically Endangered by the IUCN (Collins *et al.,* 2017).

Atlantic humpback dolphins are amongst at least 18 species of small cetaceans known to be exploited as aquatic wild meat in West Africa (Altherr & Hodgins, 2018, 2024; Ingram *et al.* 2022). However, species composition of catches is sometimes difficult to verify. Landed dolphins are mainly used as food either locally or in areas further from the coast; however, they are also used in traditional medicine (Ingram *et al.,* 2022). The species is considered disproportionately impacted by wild meat harvest, because of its small population size (IWC, 2019), inshore habitat use, and high vulnerability to capture in small-scale coastal fisheries (Van Waerebeek *et al.,* 2017; Bamy *et al.,* 2021). It is thought that absence of records in Ghana may be due to localized extinction of the species in Ghanaian waters (Van Waerebeek *et al.,* 2009).

Additional threats
The species' reliance on habitats that are intensively used by humans exposes it to a range of anthropogenic threats including bycatch/entanglement in fishing gear, habitat degradation and lack of availability, pollution and prey depletion (Minton *et al.,* 2022). Of these, entanglement is the most pervasive, likely causing population declines throughout the species' range (Collins *et al.,* 2017; Weir *et al.,* 2021).

Trade
Evidence suggests that despite national prohibitions, small cetaceans, including Atlantic humpback dolphins, are targeted, consumed and marketed in many African countries (Altherr & Hodgins, 2018). There is an indication of increased commercial interest in dolphin products and some evidence of a limited trade in dolphin meat in Guinea (Collins *et al.,* 2015) and Cameroon (Van Waerebeek *et al.,* 2017), with Atlantic humpback dolphin one of the species traded.

The Atlantic humpback dolphin is subject to illegal hunting.

Baltic proper harbour porpoise (*Phocoena phocoena*) – Baltic proper population
Listed on Appendix I in 2023
Listed on Appendix II in 1988
CMS Parties in the range of the species/population: Denmark, Estonia, Finland, Germany, Latvia, Lithuania, Poland, Sweden

Baltic proper harbour porpoise distribution © *IUCN 2023. Phocoena phocoena Baltic Sea subpopulation. The IUCN Red List of Threatened Species. Version 2024-2.*

Although there are no reliable estimates of pre-exploitation population size (Carlström *et al.,* 2023), since the mid-20th century, the number of harbour porpoises in the Baltic Sea is known to have collapsed (Amundin *et al.,* 2022). Genetic data show that the Baltic Proper population of harbour porpoise is demographically independent from the neighbouring population, and with an estimated 216 mature individuals, it is listed as Critically Endangered by the IUCN (Carlström *et al.,* 2023).

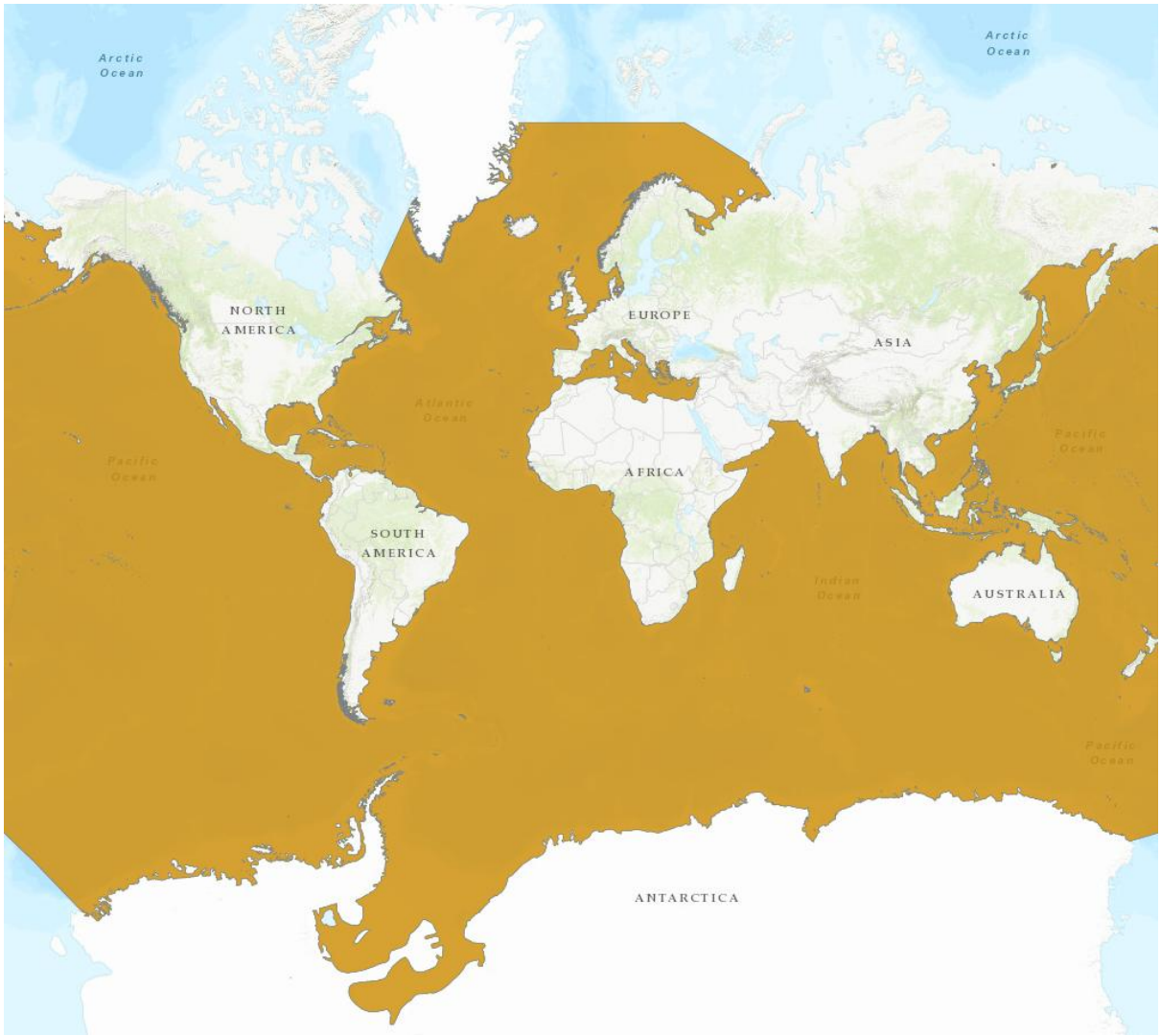
Historically, harbour porpoise from the Baltic Proper population were intentionally hunted throughout their range, whilst also unintentionally bycaught in fishing gear (HELCOM, 2022). Although directed catches are no longer undertaken, bycatch in fishing gear remains the most significant threat to the population (International Council for the Exploration of the Sea [ICES], 2019). With the population estimated to have declined by 64% over the last 36 years and the number of bycaught animals alone far exceeding the Potential Biological Removal (PBR) limit (Carlström *et al.,* 2023), bycatch is predicted to lead to a population collapse of ≤50 animals by the end of the century (Cervin *et al.,* 2020).

Polychlorinated biphenyl (PCB) levels in harbour porpoise from the Baltic Sea region were up to 254% higher than for conspecifics in neighbouring waters (Berggren et al., 1999), and pollution is considered a significant threat to the population, along with underwater noise, prey depletion and habitat loss and degradation (ICES, 2019). Habitat loss and degradation caused by high nutrient loads in combination with the hydrogeographic situation of the Baltic Sea, leading to hypoxic and anoxic conditions, may further reduce the potential for recovery of the Baltic Proper Harbour Porpoise population (Carlström *et al.,* 2023).

The Baltic Proper harbour porpoise is not subject to hunting.

Sperm whale (*Physeter macrocephalus*)

Listed on Appendix I in 2002
Listed on Appendix II in 2002
CMS Parties in the range of the species/population: Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Australia, Bangladesh, Belgium, Benin, Bosnia and Herzegovina, Brazil, Cabo Verde, Cameroon, Chile, Congo, The Democratic Republic of the Congo, Cook Islands, Côte d'Ivoire, Costa Rica, Croatia, Cyprus, Denmark, Djibouti, Dominican Republic, Ecuador, Egypt, Equatorial Guinea, Eritrea, Denmark, Fiji, France, French Guiana, Gabon, Gambia, Germany, Ghana, Greece, Guinea, Guinea-Bissau, Honduras, India, Islamic Republic of Iran, Ireland, Israel, Italy, Kenya, Lebanon, Liberia, Libya, Madagascar, Maldives, Malta, Mauritania, Mauritius, Monaco, Montenegro, Morocco, Mozambique, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Palau, Panama, Philippines, Portugal, Samoa, Sao Tome and Principe, Saudi Arabia, Senegal, Seychelles, Slovenia, Somalia, South Africa, Spain, Sri Lanka, Sweden, Syrian Arab Republic, United Republic of Tanzania, Togo, Tokelau, Trinidad and Tobago, Tunisia, United Arab Emirates, United Kingdom, Uruguay, Yemen.



Sperm whale distribution © *IUCN 2019. Physeter macrocephalus. The IUCN Red List of Threatened Species. Version 2024-2.*

Historical whaling resulted in a decline of 57% in global sperm whale populations and has caused social disruption, reducing recovery rates for a decade or two afterwards (Whitehead & Shin, 2022). There is no direct evidence that any part of the population has increased since the cessation of whaling operations, and in some areas, there is concern that populations are continuing to decline (Taylor *et al.,* 2019). With a global population size around 850,000

individuals (Whitehead & Shin, 2022) the sperm whale is listed as Vulnerable by the IUCN (Taylor *et al.,* 2019). The Mediterranean subpopulation of sperm whales has been separately assessed and, with the number of mature whales likely <2,500, is listed as Endangered by the IUCN (Pirotta *et al.,* 2021).

Although large-scale commercial whaling is no longer undertaken, a small-scale traditional fishery targeting sperm whales continues in the village of Lamalera, Lembata Island, Indonesia. Between 1991 and 2014 there were large annual fluctuations in the number of individuals captured, however, with an average of 14/year, a total of 407 sperm whales were taken (Kojima & Egami, 2019; Ramadhan, 2015). Between 2014 and 2024, a total of 146 individuals were taken, although no information is currently available for either 2023 or 2024 (IWC, 2024a). Several other species of small cetacean are also targeted, including short-finned pilot whales (*Globicephala macrorhynchus*) and killer whales (*Orcinus orca*), with whaling occurring throughout the year. Cetaceans are used for food, currency, medicine, and handicrafts (Porter & Lai, 2017).

Although Japan reported sperm whale catches between 2000 and 2013, no catches have been reported post-2014 (IWC, 2024a).

Additional threats
Sperm whales face an array of other threats including entanglement in fishing gear, ingestion of fishing gear and marine debris, noise pollution, chemical pollution and ship strikes (Taylor *et al.,* 2019 and literature within).

Trade
According to the CITES Trade database, in 2016, two cosmetics (no unit) and 1 extract (no unit) were confiscated when imported to Senegal from the USA. In 2018, a tail was imported to Canada from the USA for the purpose of a circus/travelling exhibition. The database also contains reference to an unspecified good that was confiscated in 2019 when imported to the USA from Mexico for personal or commercial purpose (different purpose codes reported). Most recently, in 2022, 15 ml of wax for personal use was confiscated when imported from Malaysia to the USA. As noted above, sperm whale derivatives are also traded domestically within whaling communities in Indonesia.

Sperm whales are subject to whaling practices in Indonesia.

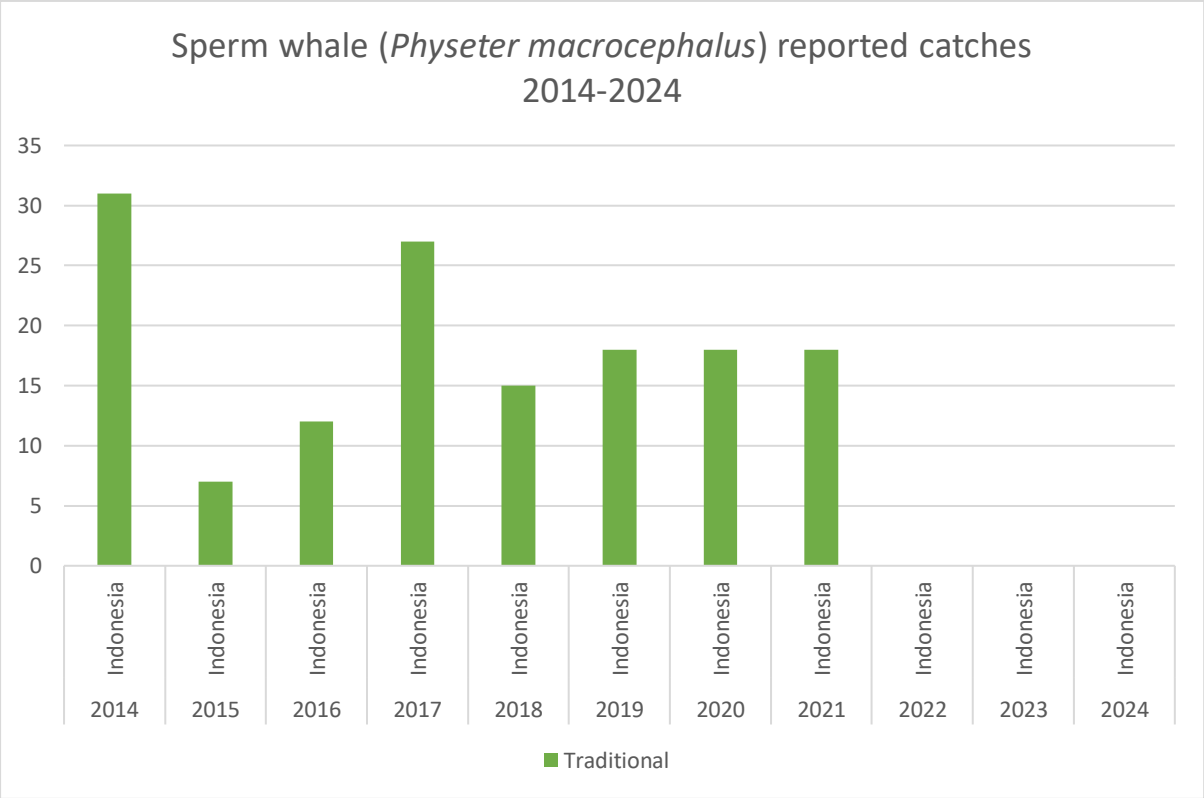
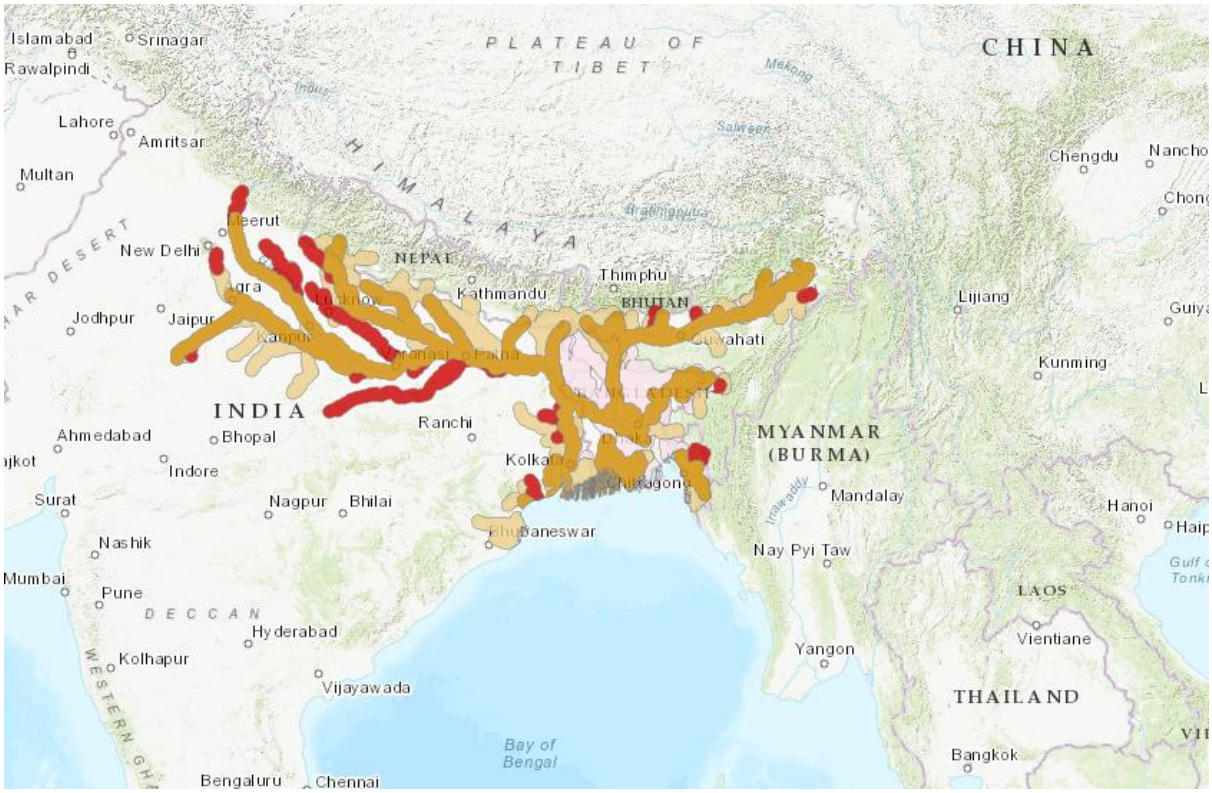


Figure 5. Reported catches of sperm whales between 2014 and 2024, as per IWC data.

Ganges river dolphin (*Platanista gangetica*)

Listed on Appendix I in 2002
Listed on Appendix II in 1991
CMS Parties in the range of the species/population: Bangladesh, India



Ganges river dolphin distribution © *Kelkar, N., Smith, B.D., Alom, M., Dey, S., Paudel, S. & Braulik, G.T. 2022. Platanista gangetica. The IUCN Red List of Threatened Species. Version 2024-2.*

Based on the sum of all dolphin counts and abundance estimates from surveys conducted across the range, although uncertainty in actual abundance persists, there are thought to be approximately 5,200 individual Ganges River dolphins remaining and they are listed as Endangered by the IUCN (Kelkar *et al.,* 2022).

Although the capture and killing of Ganges River dolphins is prohibited across their range, illegal targeted hunting with harpoons still occurs in some parts of India, with targeted killing significant in the states of West Bengal, Assam, and Bihar (Choudhury *et al.,* 2019; IWC, 2020; Kelkar *et al.,* 2022; Kolipakam *et al.,* 2020). Targeted hunting and bycatch have also been reported from Bangladesh, as a result of which, in some areas, dolphins are now extirpated (Choudhury *et al.,* 2019). Dolphin hunting and oil extraction is thought to be rampant and regular along the Ganges River on the India-Bangladesh border (Kolipakam *et al.,* 2020), whilst large-scale killing along the banks of the Ganga in Murshidabad and Malda for the oil trade and medicinal purposes is responsible for the death of at least 50 dolphins, including juveniles, every year (Human Environment Alliance League, 2019). While fishers are aware of the conservation status and precarious population size of the species, due to the difficulty in implementation and enforcement, they still engage in capture and killing of river dolphins, with almost 58% of those interviewed selling entangled dolphins for oil (Kolipakam *et al.,* 2020).

Additional threats
In addition to directed take, due to its preferred habitat and proximity to human populations, the Ganges River dolphin faces an array of additional threats including canal entrapment, high dams, irrigation barrages and water diversion, sand mining and dredging, shipping and underwater noise and accidental entanglement in fishing gear (including both legal and illegal gears) (Braulik *et al.,* 2021). Bycatch is considered the leading cause of death (Kelkar & Dey, 2020) and worryingly, even non-targeted deaths due to net entanglement contribute to the dolphin oil market for oil-bait fishing, as well as medicinal purposes (Kolipakam *et al.,* 2020). Additionally, the shift away from nets made of natural fibres to monofilament plastic nets means that entanglement in lost or abandoned gear is now considered a major threat to the species (Nelms *et al.,* 2021a).

Trade
There is regular local, cross-state and cross-border trade between India and Bangladesh (Braulik *et al.,* 2021; Kolipakam *et al.,* 2020).

Ganges River dolphins are subject to illegal hunting.

La Plata dolphin / Franciscana (*Pontoporia blainvillei*)
Listed on Appendix I in 1997
Listed on Appendix II in 1991
CMS Parties in the range of the species/population: Argentina, Brazil, Uruguay

Franciscana distribution © *IUCN SSC Cetacean Specialist Group 2017. Pontoporia blainvillei. The IUCN Red List of Threatened Species. Version 2024-2.*

Throughout their range, franciscana exhibit extensive subpopulation structure and are managed as four discrete Franciscana Management Areas (FMAs); FMA I - coastal waters of Espírito Santo and Rio de Janeiro States, Brazil; FMA II - São Paulo, Paraná, and Santa Catarina States, Brazil; FMA III - coastal waters of Rio Grande do Sul State, southern Brazil, and Uruguay; and FMA IV - coastal waters of Argentina (Zerbini *et al.,* 2017). Although there is no range-wide abundance estimate for the species, estimates have been calculated for a portion or a whole of individual FMAs. With an approximate range-wide population of 35,500 individuals, they are listed as Vulnerable by the IUCN (Zerbini *et al.,* 2017). Fully protected by Range State national legislation, although there have been no recent reports of direct take of franciscana (Zerbini *et al.,* 2017), small scale opportunistic illegal take is thought to continue (Altherr & Hodgins, 2018, 2024).

Additional threats

Franciscana is the most endangered small cetacean in the western South Atlantic. Its coastal distribution makes it vulnerable to entanglement in both artisanal and industrial fisheries, especially gillnets, with fishing-related mortality the major threat to its survival (Secchi *et al.,* 2022). Research from the early 2000s suggested that levels of bycatch were not sustainable in all FMAs and that franciscana in FMAs II, III and IV would decline by at least 30% in 25 years (Secchi & Fletcher, 2004; Secchi, 2006). The low reproductive potential and short life span make the franciscana highly susceptible to current non-natural removal rates and alongside the threat of bycatch, they face the impacts of habitat degradation (including noise and chemical pollution), depletion of fish stocks, marine debris and climate change (Secchi *et al.,* 2021).

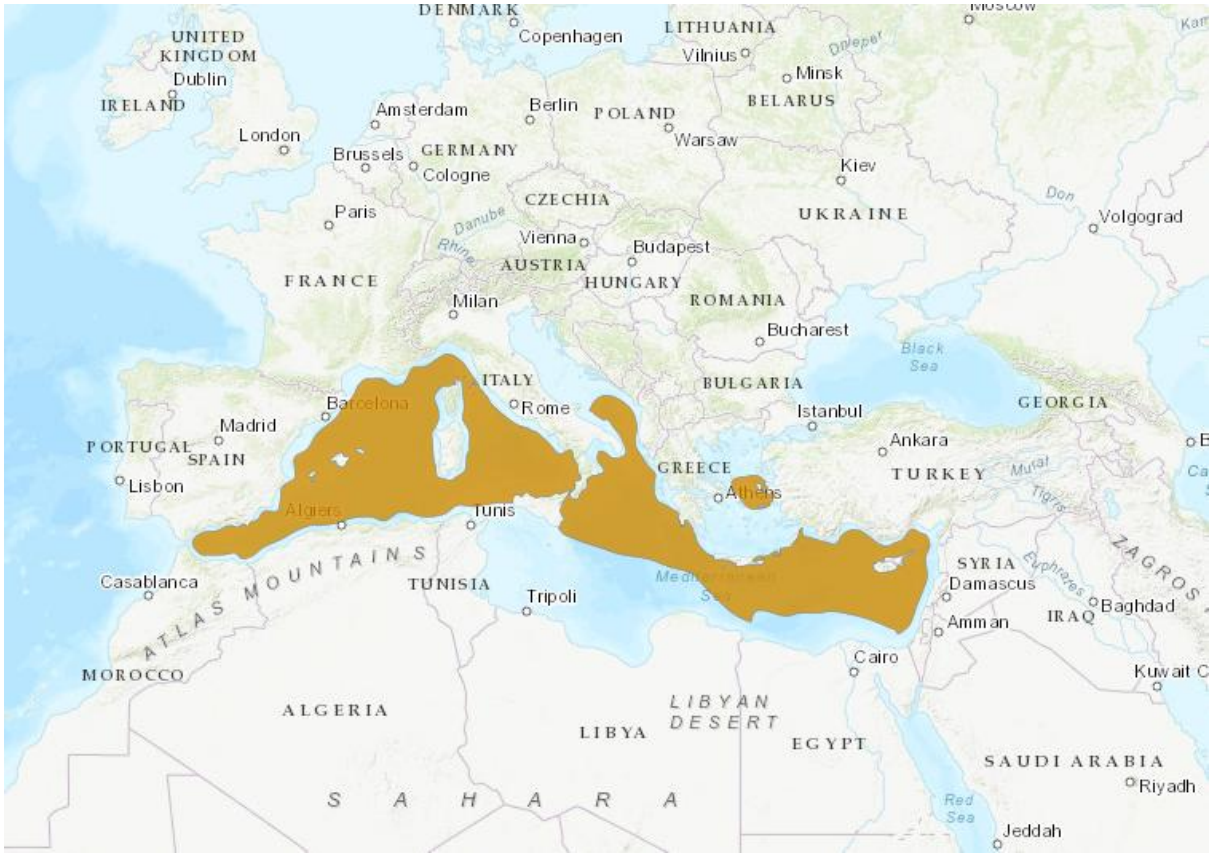
Trade

One skeleton was confiscated when exported from Uruguay to the USA for commercial purposes in 2015.

Franciscana (La Plata) dolphins are thought to be subject to small scale opportunistic illegal take.

Cuvier's beaked whale (*Ziphius cavirostris*) - Mediterranean subpopulation

Listed on Appendix I in 2014
Not listed on Appendix II
CMS Parties in the range of the species/population: Albania, Algeria, Bosnia and Herzegovina, Croatia, Cyprus, Egypt, France, Greece, Israel, Italy, Monaco, Spain, Lebanon, Libya, Malta, Montenegro, Morocco, Slovenia, Syrian Arab Republic, Tunisia, United Kingdom



Cuvier's beaked whale © *IUCN 2020. Ziphius cavirostris Mediterranean subpopulation. The IUCN Red List of Threatened Species. Version 2024-2.*

The Mediterranean subpopulation of Cuvier's beaked whale is genetically distinct from other populations of the species (Cañadas & Notarbartolo di Sciara, 2018) and with a total abundance of less than 6,000 individuals (Cañadas *et al.,* 2017) it is listed as Vulnerable by the IUCN (Cañadas & Notarbartolo di Sciara, 2018).

Although there is evidence of small-scale historical hunting on this population (Northridge, 1994), and the species is known to be taken elsewhere in the world (Altherr & Hodgins, 2018, 2024), no contemporary deliberate take is thought to occur on the Mediterranean subpopulation.

Additional threats
The main mortality factors impacting this subpopulation include naval sonar (and other anthropogenic noise), entanglement in illegal pelagic driftnets, and ingestion of plastic debris and it is projected that in the absence of effective management to mitigate the ongoing threats, the population will continue to decline (Notarbartolo di Sciara & Tonay, 2021).

The Mediterranean subpopulation of Cuvier's beaked whale is not subject to contemporary hunting.

Discussion

Baleen whales

At one time or another, and to varying degrees, all baleen whale species listed on CMS Appendix I were subjected to targeted hunts, and all showed significant declines in their abundance. Even with the cessation of whaling, the recovery of a population is compounded by additional threats facing the species and some, like the North Atlantic and North Pacific right whales, have never recovered (Cooke & Clapham, 2018a; Garrison *et al.,* 2022; Pettis *et al.,* 2020). For others, like the blue whale, their recovery is unknown but thought to be impeded by other threats (Rockwood *et al.,* 2017). Southern right whales are protected from hunting and several populations are thought to have recovered however, some populations are still showing declines in the absence of whaling Past overexploitation and a coastal distribution have rendered some populations highly vulnerable to anthropogenic impacts, resulting in their near extinction (Garcia-Cegarra *et al.,* 2021).

The remaining CMS Appendix I baleen whales are subjected to contemporary whaling to varying degrees and present a more complicated picture with a lack of information available as to their status, with subpopulations recovering at different rates and an array of additional and increasing threats, resulting in complex cumulative impacts.

The bowhead whale is subjected to regulated hunts. However, it is known to be recovering in a portion of its range, which interestingly correlates to where there continues to be hunting pressure from ASW (Cooke *et al.,* 2018; Cooke & Reeves, 2018b; Frasier *et al.,* 2015; Givens *et al.,* 2016). Little is known about the cumulative effects of multiple stressors on Arctic cetaceans (Laidre *et al.,* 2015) and there is concern that, as the sea ice diminishes, the Arctic will be subjected to increased vessel traffic, fishing activities and extractive industries, human-caused impacts on bowhead whales will also increase (Reeves *et al.,* 2012; Reeves *et al.,* 2014).

Sei whales are thought to be making a possible recovery, but little is known regarding the population still targeted by Japanese whalers. According to the IWC, Japan is targeting the Western Coastal population of sei whales which is the most depleted of the North Pacific sei whale populations with approximately 400 whales. The threat of direct harvest is ranked as medium in the recovery plan (National Marine Fisheries Service, 2021).

Whilst fin whales are also thought to be recovering, due to ecological changes, the species has shown a remarkable decline in West Greenland (Hansen *et al.,* 2018), presenting a compounding conservation concern for a population that is subjected to ASW hunts. As hybridisation can, in some cases, lead to the extinction of distinct species through introgressive swamping of the genome (Rhymer & Simberloff, 1996), the recently documented hybridisation between the species and blue whales is a factor that may impede the recovery of both species, with genome sequencing of North Atlantic blue whales (*Balaenoptera musculus musculus*) revealing that around 3.5% of their DNA comes from fin whales (Jossey *et al.,* 2024). The consequences of renewed whaling pressure on fin whales, and by proxy, blue whales, in both the North Atlantic and the North Pacific remain to be seen.

Historical catch data provides evidence that Antarctic blue whales were once many times more abundant than all blue whales in the rest of the world combined, and although their numbers are thought to be slowly recovering in the absence of hunting pressure, they remain Critically Endangered (Cooke, 2018f).

Humpback whales continue to be subject to whaling in the North Atlantic. Whaling under the IWC ASWMP is undertaken in both West Greenland and St. Vincent and the Grenadines, whilst unregulated whaling is known to occur in Equatorial Guinea and possibly elsewhere in West Africa. However, both St. Vincent & the Grenadines and Greenland (Denmark) are IWC

Member States, whilst Equatorial Guinea is not. This additional take are of an unknown quantity, and, given recent studies demonstrate deviation from known migratory destinations and movements between ocean basins, this presents an additional threat to North Atlantic humpback whale population recovery and conservation (Kalashnikova *et al.,* 2024 and literature within).

All species of baleen whale on CMS Appendix I are impacted by additional threats and sub-lethal stressors are known to threaten the recoveries of vulnerable whale populations even in the absence of direct harvest (Stewart *et al.,* 2021). Often it was (and still is) the largest, hence oldest, individuals that are targeted by hunters and it has recently been suggested that the potential for great longevity by all balaenid and perhaps most great whales, has been masked by the demographic disruptions of industrial whaling (Breed *et al.*, 2024). Older individuals make vital contributions to cultural transmission, population dynamics, and ecosystem processes and services (Kopf *et al.,* 2024) yet the potential for extreme life spans mean that reaching stable age distributions that include the oldest age classes could still be 50 or 100 years away (Breed *et al.*, 2024). By affecting the sex ratio and/or the social cohesion of females, reduced recovery rates of populations have been observed well after whaling ceased (Whitehead & Shin, 2022). Vachon *et al.,* (2022) highlight the dangers of extrapolating study results across geographical areas and cultural groups and quantification of the impacts of whaling and aquatic wild meat, should take into account data on catch sex and age ratio, as this can have implications for the survival of whale populations. However, mitigation can be achieved where the threats are understood and quantified. For example, shipping occurs across 92% of whale ranges, yet <7% of risk hotspots contain management strategies to reduce collisions. Full coverage of hotspots could be achieved by expanding management over only 2.6% of the ocean's surface (Nisi *et al.,* 2024). For pygmy blue whales, impacted by historical whaling by Soviet fleets, by moving shipping lanes slightly further offshore, the expected frequency of ship strikes would be greatly reduced (Priyadarshana *et al.,* 2016).

Toothed whales

All CMS Appendix I listed species of toothed whale were subjected to various degrees of hunting in the past. For some, this threat has been abated, whilst for others, it continues either legally or illegally. Unlike the hunting of most baleen whales, the exploitation of small cetaceans (defined as all toothed whales except the sperm whale), is not regulated by any international convention or intergovernmental agency (Baker & Steel, 2018) and countries that permit the take of small cetaceans do so through self-allocated quotas. Some, Greenland for example, does report its catch data to IWC, whereas some others publish national quotas and takes online, e.g., Japan. Others, like St. Vincent and the Grenadines, do not formally report or publish their catch data. Illegal catches (and subsequent use and trade), by their very nature, remain largely undocumented.

As a result of whaling, sperm whales experienced an almost 40% reduction in their global population size (Whitehead & Shin, 2022). This intense historical whaling caused social disruption, reducing recovery rates, and although some sperm whale populations in relatively undisturbed areas show modest signs of recovery, others, living with more intense anthropogenic pressures, appear to be declining (Whitehead & Shin, 2022). In Indonesia, the only remaining place where sperm whales are routinely hunted, habitat preference assessments can help inform future marine management and policy. For example, inter-island areas are very important for sperm whales and deserve special attention regarding the management of human activities (Sahri *et al.,* 2020).

Of the remaining nine listed species/populations/subpopulations of toothed whales, only the Mediterranean sub-populations of common dolphin and Cuvier's beaked whale, Lahille's dolphin, and the Baltic proper harbour porpoise are no longer subjected to hunting pressure. However, despite being a threat of unlikely significance today, deliberate killing effects might have cumulated with other pressure factors currently impacting the Mediterranean

subpopulation of common dolphins (Notarbartolo di Sciara & Tonay, 2021), impeding their recovery. The remaining four species/populations/subpopulations continue to be taken in opportunistic and illegal captures (Altherr & Hodgins, 2018, 2024) and population estimates show all their numbers to be declining.

Due to the nature of illegal hunts, reliable data on the number and extent of species and individuals exploited are poorly documented or known (Leeney *et al.,* 2015). A lack of catch data can lead to serious errors in assessment of the size and status of populations and erroneous management advice, ultimately contributing to their collapse (Brownell Jr. *et al.,* 2009). As a result, quantifying the impact of aquatic wild meat take on Appendix I toothed whale species (excluding the sperm whale) is challenging, but of utmost importance to the conservation of these species.

As noted, although the hunting of small cetaceans is illegal in most countries around the world, directed and opportunistic hunts of CMS Appendix I listed species continue. For example, deliberate hunting of Irrawaddy dolphins in the Mahakham River, Borneo, Indonesia is known to be contributing to the species' decline (Brownell *et al.,* 2019), whilst surveys with local fishers carried out along the Cambodian coastline between September-November 2023 found evidence of dolphins (likely including Irrawaddy dolphins) being eaten and/or sold (S. Tubbs, personal communication, December 6th 2024).

In recent decades, the use of dolphin meat and fat as bait in commercial fisheries has increased exponentially (Altherr & Hodgins, 2018, 2024). Compounded by the increasing commercial value of dolphin meat, a gradual transition between targeted hunting and commercialised bycatch has been documented (Altherr & Hodgins, 2018, 2024), yet reporting is limited due to the illegal nature of most of the take. In some Atlantic humpback dolphin range countries for example, evidence shows that bycaught dolphins are used as shark bait or for human consumption, giving them commercial value, which can motivate targeted hunting (Ingram *et al.,* 2022; Weir *et al.,* 2021; Van Waerebeek *et al.,* 2017). This lucrative nature of dolphins is mirrored in India where Ganges River dolphin oil is highly valued as a fish attractant, hence fishermen have a strong incentive to kill any dolphin found alive in their nets and even to set their nets strategically in the hope of capturing dolphins (Sinha & Kannan, 2014). For example, an investigation by the Human and Environment Alliance League (HEAL) in 2019 found that bycaught Ganges River dolphins in West Bengal are immediately killed instead of being released because a dead dolphin is of great value. The subsequent trade happens across state and even international borders (Braulik *et al.,* 2021). Ganges River dolphins are likely to be further hindered by spatial and genetic isolation, small group size, risky behavioural activities, direct dolphin-fisheries interaction, and habitat modification (Paudel & Koprowski, 2020).

Bycatch is the most prevalent threat facing CMS Appendix I toothed whale species (excluding the sperm whale). For instance, although no longer threatened by deliberate take, the franciscana is unlikely to cope with the current levels of bycatch and faces population collapse unless urgent mitigation measures are put in place (Secchi *et al.,* 2021). It is also likely that Atlantic humpback dolphins make up a considerable proportion of bycatch in artisanal fisheries (Leeney *et al.,* 2015), whilst the population of the Baltic Proper harbour porpoise is predicted to collapse as a direct result of bycatch within the next century (Cervin *et al.,* 2020).

Many coastal communities are turning to the marine environment for their protein needs (Altherr & Hodgins, 2024), which will have a direct impact on the coastal populations of small cetaceans. The killing of dolphins to eliminate an alleged competitor has been documented around the world and considering dwindling fish stocks is expected to further increase (Altherr & Hodgins, 2024). For example, fishers in Bangladesh admitted to intentionally killing bycaught dolphins (likely Ganges River dolphins), as punishment for damaging nets (Dewhurst-Richman *et al.,* 2020). In the Tristao Islands, Guinea, where fish landings have been severely

depleted, there are concerns for the future of the Atlantic humpback dolphin because of the commencement of utilisation of dolphin meat by fishers. Only recently, the use of dolphins as food was reported from Sao Tomé and Príncipe (Nuno *et al.,* 2023) – a practice not documented from this country before (Segniagbeto *et al.,* 2019).

Cetaceans with a more coastal or restricted distribution, which include the Irrawaddy, Atlantic humpback, and franciscana dolphin, are at higher risk of extinction (Braulik *et al.,* 2023). Moreover, reductions in population size and absence of gene flow can lead to reductions in genetic diversity, reproductive fitness, and a limited ability to adapt to environmental change, which also increases the risk of extinction (Furlan *et al.,* 2012). Genetic data show that the Baltic Proper subpopulation is demographically independent from the neighbouring population, and should it go extinct, it cannot be rescued by immigration of individuals from another population (Carlström *et al.,* 2023). The Baltic proper harbour porpoise is facing an extremely high risk of extinction, highlighting the need for immediate and efficient conservation actions through international cooperation (Amundin *et al.,* 2022).

The rapid pace of the climate crisis and the large number of potential cumulative and synergistic stressors, including pollution and overfishing, further worsen the situation for small cetaceans (Acharyya *et al.,* 2023; Haria *et al.,* 2023; Nelms *et al.,* 2021b). Any additional loss in the short-term owing to their exploitation as a human food source or bait will decrease the resilience of populations and increase the likelihood of functional and actual extinction by the end of the century (Altherr & Hodgins, 2024).

Of significant concern is that over the past 10 years, several Caribbean, West and Central African countries have put forward Resolutions on Food Security to the IWC. In all its various forms, the Resolutions emphasise the importance of recognising whales as a vital resource for food security, especially for developing nations. Yet to date, they have failed to garner the required support that ensures adoption. However, the potential remains and there is concern that a Resolution endorsing the various uses of whales in relation to food security, could open the door to further exploitation of whale populations, potentially undermining conservation efforts that have been decades in the making.

One major obstacle in the conservation of CMS Appendix I species is the lack of updated population information and the paucity of data on illegal and opportunistic take. Management advice and monitoring plans need to be adaptive to allow emerging and cumulative threats to be addressed and mitigated against. However, positive steps have been taken to address the population decline in several species. In an effort to reverse the decline of franciscana dolphin, in 2016, the IWC endorsed the Conservation Management Plan for Franciscana with the overall aim of protecting franciscana habitat and minimising anthropogenic threats, particularly bycatch. In 2024, also in an effort to reverse the decline and protect relevant habitat, the IWC endorsed Safeguarding The Future Of The Endangered Lahille's, a 5-year action plan to aid in their recovery (Fruet *et al.,* 2023). Additionally, the IWC endorsed A Conservation Management Plan for Lahille's bottlenose dolphins *Tursiops truncatus gephyreus*. Other collaborative efforts include the CMS Concerted Action for franciscana (CMS Concerted Action 14.5, 2024) and the Single Species Action Plan for the Atlantic humpback dolphin (CMS Resolution 14.10, 2024). However, for these initiatives to be successful, collaboration between Range States is critical, as is the political will to reduce other on-going pervasive threats.

Summary

Approximately 45 per cent of CMS Appendix I listed cetacean species are subject to contemporary whaling and aquatic wild meat take. Of the 18 species of cetacean currently listed on CMS Appendix I,

- **Eight** (North Atlantic, North Pacific and southern right whales, blue whales, the Mediterranean subpopulation of common dolphin, the Mediterranean subpopulation of

Cuvier's beaked whale, Lahille's bottlenose dolphin, and the Baltic proper harbour porpoise subpopulation) are not subject to whaling/hunting;

- **Three** (bowhead, fin and humpback whales) are hunted under the IWC ASWMP;
- **Two** (fin and sei whales) are hunted commercially. Both species are hunted in Japan, whilst fin whales are hunted in Iceland;
- **Five** (Black Sea bottlenose dolphin, Irrawaddy dolphin, Atlantic humpback dolphin, the franciscana and Ganges River dolphin) are hunted illegally; and
- **Two** (sperm and humpback whales) are taken in unregulated hunts.

Common name	Species name	Listed on CMS Appendix I or II	Subject to whaling
Bowhead whale	*Balaena mysticetus*	I	ASW
North Atlantic right whale	*Eubalaena glacialis (North Atlantic)*	I	No known reports
North Pacific right whale	*Eubalaena japonica (North Pacific)*	I	No known reports
South Pacific right whale	*Eubalaena australis*	I	No known reports
Sei whale	*Balaenoptera borealis*	I & II	Commercial
Fin whale	*Balaenoptera physalus*	I & II	ASW and commercial
Blue whale	*Balaenoptera musculus*	I & II	No known reports
Humpback whale	*Megaptera novaeangliae*	I & II	ASW and local indigenous hunts
Common dolphin	*Delphinus delphis* (Med only)	I & II	No known reports
Lahille's bottlenose dolphin	*Tursiops truncatus gephyreus*	I & II	No known reports
Black Sea bottlenose dolphin	*Tursiops truncatus ponticus*	I & II	Illegally
Irrawaddy dolphin	*Orcaella brevirostris*	I & II	Illegally
Atlantic humpback dolphin	*Sousa teuszii*	I & II	Illegally
Baltic proper harbour porpoise	*Phocoena phocoena* (Baltic proper pop)	I & II	No known reports
Sperm whale	*Physeter macrocephalus*	I & II	Local indigenous hunts
Ganges river dolphin	*Platanista gangetica*	I & II	Illegally
Fransiscana/La Plata dolphin	*Pontoporia blainvillei*	I & II	Illegally
Cuvier's beaked whale	*Ziphius cavirostris* (Med sub-pop only)	I	No known reports

Table 2. CMS Appendix-I listed cetaceans subject to contemporary whaling.

A note on the Trade of CMS Appendix I listed species

For most of the CMS Appendix I cetaceans, there is no clear picture of the extent to which their meat or other derivatives are traded, domestically, regionally and internationally. Although the CITES database contains examples of legal international trade, the true extent of trade, both legal and illegal and both domestically and internationally, is not known at this moment due to a lack of data, and a lack of species-specific (and importantly population-specific) data. This hinders any attempt at quantifying the impact trade has on the CMS Appendix I listed species. Cetaceans comprise 3% of the meat seizure records reported in the 2016-2020 CITES annual illegal Trade Reports and both the TRAFFIC and CITES trade databases contain several seizures and trades respectively, of whale meat and oil. There is however some evidence (from the CITES Trade database, the TRAFFIC wildlife trade portal and CITES annual illegal trade reports) that many of the CMS Appendix I listed species are legally and illegally traded, making it a factor that cannot be disregarded for conservation and management strategies.

Recommendations

(1) Whaling and aquatic wild meat take

- Where indigenous hunting takes place, quotas should only be set following scientific advice and in conjunction with local indigenous communities, always using the precautionary principle. Age and sex composition of the catch should also be considered when setting quotas and should be monitored.
- In Range States where cetaceans are legally consumed, Parties should address human health concerns and ensure the well-being of their citizens. Parties should also introduce mandatory testing of cetacean products, mandatory labelling of cetacean products and national health and safety guidelines, including maximum safe levels for mercury.
- Range States where illegal take (and trade) takes place, should increase awareness and education amongst local communities regarding the relevant protective legislation and associated penalties.
- Range States implementing management strategies should consider the large number of potential cumulative and synergistic stressors, including the impacts of climate change and chemical pollution, that may be affecting targeted populations of CMS Appendix I listed species.

(2) Enforcement

- Parties should enforce national legislation prohibiting the capture of and trade in, Appendix I listed species and undertake regular inspections to determine species identity.
- Where relevant, Parties should implement a ban on the use of small cetaceans as bait for fishing and promote alternatives, as well as provide training on the handling and soft release of bycaught dolphins.

(3) Research

- Parties should undertake full assessments of all CMS Appendix I listed species using their waters, providing population abundance estimates and, where possible, trends.
- Parties should monitor the effect of continued/renewed/increased whaling pressure from non-CMS Parties (Iceland and Japan) on the fin whale, and monitor/increase data collection and reporting on the extent of hybridisation with blue whales.

- Parties should increase data gathering/understanding of migratory patterns of CMS Appendix I listed species to further the understanding/quantification of the extent to which populations are subject to contemporary whaling/hunting pressure as well as other threats.

(4) Trade

- CMS Resolution 12.15 explicitly recognized that the increased demand for aquatic wild meat is a threat to aquatic wildlife in many regions around the world, and Parties should develop methods to evaluate the impact of trade in aquatic wild meat on wildlife populations.

(5) Reporting

- Where relevant, Parties should make catch data (both legal and, where known, illegal) for small cetaceans available in their National Reports to CMS and provide this data to the IWC.
- Parties should increase data gathering/reporting on domestic and regional trade of Appendix I species.
- Parties should consider undertaking a similar quantification of contemporary whaling and aquatic wild meat take on CMS Appendix II listed species of cetacean.

(6) Collaboration

- Parties should encourage accession to CMS by non-Parties that are Range States of Appendix I-listed cetaceans that are subject to contemporary whaling and/or illegal hunts;

Actions to address other threats

CMS Appendix I-listed cetaceans subject to contemporary whaling and/or aquatic meat take are also at risk from other threats, which the recommendations below aim to address. These build on the priorities set out in Resolution 14.9 *Conservation Priorities for Cetaceans*.

- Implement urgent and drastic reduction/modification of fishing effort and practice, including implementing mitigation methods – e.g., change in gear type, use of pingers etc. – to avoid the collapse of populations of both the franciscana dolphin and the Baltic Proper harbour porpoise.
- Identify ship/whale collision risk hotspots and implement management strategies to reduce collisions in such hotspots and elsewhere.
- Increase data gathering/reporting on current threats to all Appendix I species in Exclusive Economic Zone (EEZ) waters – e.g., ship strikes, bycatch, etc.
- Undertake species-specific habitat preference assessments in EEZ waters to identify critical habitat and implement management strategies relevant to human activities.
- Support existing CMS Concerted Actions and Single Species Action Plans, as well as other initiatives to reverse the decline of CMS Appendix I listed species, populations and subpopulations, and/or implement similar plans for those species not currently subject to such initiatives.

Acknowledgements

The authors thank Dr Lindsay Porter, Vice-Chair of the IWC Scientific Committee for her valuable comments on an earlier draft. The CMS Secretariat and the authors thank the Government of Germany for their financial support.

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Appendix

Table A. Catch numbers for CMS Appendix-I listed cetaceans for 2014-2024.

Catch numbers for small cetaceans (Atlantic humpback dolphin, Black Sea bottlenose dolphin and Ganges River dolphin) are **not IWC data**, but an estimated quantification based on studies, surveys and news articles.

A note on IWC catch data
IWC catch numbers include lost whales (i.e. whales which were killed but not landed), but do not include bycatch. IWC categorizes catches as whaling under objection, whaling under reservation, special permit whaling, aboriginal subsistence whaling (ASW), illegal catches by IWC Member States, commercial whaling by non-Member States, non-commercial catches by non-Member States, and unconfirmed reports of catches by non-Member States. All IWC catch data is based on the numbers reported to IWC by Member and non-Member States.

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2014-2024
Bowhead whale	*Balaena mysticetus*	55	52	63	59	71	41	70	72	72	56	68	679
North Atlantic right whale	*Eubalaena glacialis (North Atlantic)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
North Pacific right whale	*Eubalaena japonica (North Pacific)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
South Pacific right whale	*Eubalaena australis*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sei whale	*Balaenoptera borealis*	90	90	90	134	135	25	25	25	25	24	26	689

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2014-2024
Fin whale	*Balaenoptera physalus*	149	168	9	8	153[4]	8	3	2	152	26	32	710
Blue whale[5]	*Balaenoptera musculus*	0	0	0	0	0	0	0	0	0	0	0	0
Humpback whale	*Megaptera novaeangliae*	9	7	6	3	6	7	4	6	2	4	2	56
Common dolphin*	*Delphinus delphis (Med only)*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*
Lahille's bottlenose dolphin	*Tursiops truncatus gephyreus*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Black Sea bottlenose dolphin	*Tursiops truncatus ponticus*	*No take reported found*	*No take reported found*	*No take reported found*	3[6]	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	3
Irrawaddy dolphin	*Orcaella brevirostris*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*	*No take reported found*

[4] Includes two catches listed as fin whale that were blue/fin hybrids.
[5] Although the IWC reports that no blue whales have been caught since the moratorium on whaling came into force in 1986, two fin whale catches reported in 2018 were blue/fin hybrids.
[6] Three illegally captured live Black Sea bottlenose dolphins were discovered in Russia in 2017.

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2014-2024
Atlantic humpback dolphin	*Sousa teuszii*	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	Estimate at least 2-3 per year on average, likely much more	18 confirmed in period of 2009-2016 At least 20-30 estimated, likely much more
Baltic proper porpoise*	*Phocoena phocoena (Baltic proper pop)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Sperm whale[7]	*Physeter macrocephalus*	31	7	12	27	15	18	18	18	0	0	0	146
Ganges river dolphin[8]	*Platanista gangetica*	35-50 estimated	35-50 estimated	35-50 estimated	35-50 estimated	35-50 estimated	35-50 estimated 25 bruised carcasses	6 confirmed 35-50 estimated	1 confirmed 4 suspicious	35-50 estimated	1 confirmed 35-50 estimated	1 confirmed 35-50 estimated	33 confirmed 350-500 estimated

[7] According to IWC, for the years 2019-2024, there is no official numbers on catches, so the numbers are based on the average of the 2016-2018 catches.
[8] For many of the reported mortality cases, cause of death cannot be determined, so catch numbers are likely higher than reported.

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	Total 2014-2024
							were found between Sep 2019 and Aug 2020		35-50 estimated				
Fransiscana/La Plata dolphin	*Pontoporia blainvillei*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Cuvier's beaked whale*	*Ziphius cavirostris (Med sub-pop only)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*Subpopulation specific.

Table B. IWC catch limits for CMS Appendix-I listed cetaceans for 2014-2024.

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Bowhead whale	*Balaena mysticetus*	Bering-Chukchi-Beaufort Seas: 67[9]	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67[10]	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67	Bering-Chukchi-Beaufort Seas: 67
		West Greenland: 2	West Greenland: 2[11]	West Greenland: 2	West Greenland: 2	West Greenland: 2	West Greenland: 2	West Greenland: 2	West Greenland: 2	West Greenland: 2	West Greenland: 2	West Greenland: 2
		All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0
North Atlantic right whale	*Eubalaena glacialis (North Atlantic)*	0	0	0	0	0	0	0	0	0	0	0
North Pacific right whale	*Eubalaena japonica (North Pacific)*	0	0	0	0	0	0	0	0	0	0	0

[9] For the years of 2013-2018, the total catch may not exceed 336. Any unused portion of a strike quota from any year (including 15 unused strikes from the 2008-2012 quota) shall be carried forward and added to the strike quotas of any subsequent years, provided that no more than 15 strikes shall be added to the strike quota for any one year.
[10] For the years of 2019-2025, the total catch may not exceed 392. Any unused portion of a strike quota from the three prior quota blocks shall be carried forward and added to the strike quotas of subsequent years, provided that no more than 50 percent of the annual strike limit shall be added to the strike quota for any one year.
[11] For 2015-2018, any unused portion of the quota for each year shall be carried forward from that year and added to the quota of any subsequent years, provided that no more than 2 shall be added to the quota for any one year.

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
South Pacific right whale	*Eubalaena australis*	0	0	0	0	0	0	0	0	0	0	0
Sei whale	*Balaenoptera borealis*	0	0	0	0	0	0	0	0	0	0	0
Fin whale	*Balaenoptera physalus*	West Greenland: 19	West Greenland: 19	West Greenland: 19	West Greenland: 19	West Greenland: 19	West Greenland: 19[12]	West Greenland: 19	West Greenland: 19	West Greenland: 19	West Greenland: 19	West Greenland: 19
		All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0
Blue whale	*Balaenoptera musculus*	0	0	0	0	0	0	0	0	0	0	0
Humpback whale	*Megaptera novaeangliae*	West Greenland: 10	West Greenland: 10[13]	West Greenland: 10	West Greenland: 10	West Greenland: 10	West Greenland: 10	West Greenland: 10	West Greenland: 10	West Greenland: 10	West Greenland: 10	West Greenland: 10
		St. Vincent & The Grenadines: 24 in total 2013-2018					St. Vincent & The Grenadines: 28 in total 2019-2025					
		All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0	All other areas: 0

[12] For 2019-2025, any unused portion of a strike quota from the prior quota block under a Strike Limit Algorithm management advice shall be carried forward and added to the strike quotas of subsequent years, provided that no more than 50 percent of the annual strike limit shall be added to the strike quota for any one year.

[13] For 2015-2018, any unused portion of the quota for each year shall be carried forward from that year and added to the strike quota of any of the subsequent years, provided that no more than 2 strikes shall be added to the strike quota for any one year.

Common name	Species name	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Common dolphin	*Delphinus delphis (Med only)*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Lahille's bottlenose dolphin	*Tursiops truncatus gephyreus*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Black Sea bottlenose dolphin	*Tursiops truncatus ponticus*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Irrawaddy dolphin	*Orcaella brevirostris*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Atlantic humpback dolphin	*Sousa teuszii*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Baltic proper porpoise	*Phocoena phocoena (Baltic proper pop)*	0	0	0	0	0	0	0	0	0	0	0
Sperm whale	*Physeter macrocephalus*	0	0	0	0	0	0	0	0	0	0	0
Asian River dolphin	*Platanista gangetica*	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Fransiscana/La Plata dolphin	*Pontoporia blainvillei*	0	0	0	0	0	0	0	0	0	0	0
Cuvier's beaked whale	*Ziphius cavirostris (Med sub-pop only)*	0	0	0	0	0	0	0	0	0	0	0

Table C. CITES Reported Trade in Meat or Oil from CMS Appendix-I Listed Cetaceans

A note on CITES trade data
To complement the data collected on catch numbers for CMS Appendix I listed cetaceans, the CITES Trade Database was consulted. This database includes reported data from national reports from CITES Parties. It is important to note that neither domestic nor illegal trade is included, and data might not always be fully correct. In addition, data for 2022-2024 might not be fully complete, as the compilation and publication of reported data usually takes two years. For this report, for each CMS Appendix-I listed cetacean, the corresponding database was downloaded in the comparative tabulation format filtering for the years 2014-2024. Trade was assessed as per the CITES guide; P = personal use, Q = circus or travelling exhibition, E = education. Only trade instances of meat, oil, and body parts were included for this report.

The CITES database contains no trade data on specific subspecies or populations. Thus, although there are instances of meat traded for some of the cetaceans of which subspecies and populations listed on CMS Appendix-I (Black Sea bottlenose dolphin, Baltic proper harbour porpoise, Ganges River dolphin, common dolphin, Cuvier's beaked whale), this data has not been included in this table or the report.

Year	App.	Taxon	Importer	Exporter	Origin	Importer reported quantity	Exporter reported quantity	Term	Unit	Purpose	Source
2014	I	Balaena mysticetus	CA	US		27		meat	kg	P	W
2014	I	Balaena mysticetus	CA	US			27	meat	kg	Q	W
2021	I	Balaena mysticetus	US	CA		1		oil	Number of specimens	P	I
2023	I	Balaena mysticetus	DK	GL		2000		meat	g	P	W
2023	I	Balaena mysticetus	DK	GL			1	meat	kg	S	W
2020	I	Eubalaena glacialis	CN	GB	XX	1		meat	Number of specimens	Q	O
2021	I	Eubalaena glacialis	GB	CN	XX		1	meat	Number of specimens	Q	O

2014	I	Balaenoptera borealis	JP	HS		90		bodies		S	X
2015	I	Balaenoptera borealis	JP	HS		90		bodies		S	X
2016	I	Balaenoptera borealis	JP	HS		90		bodies		S	X
2017	I	Balaenoptera borealis	JP	HS		1119662.84	meat	kg		S	X
2018	I	Balaenoptera borealis	JP	HS		990201.52	meat	kg		S	X
2014	I	Balaenoptera physalus	JP	IS		1624313.04	2546000	meat	kg	T	W
2015	I	Balaenoptera physalus	JP	IS			2012000	meat	kg	T	W
2017	I	Balaenoptera physalus	JP	IS			1556000	meat	kg	T	W
2017	I	Balaenoptera physalus	US	JP	IS	100		meat	g	P	I
2018	I	Balaenoptera physalus	JP	IS			1977500	meat	kg	T	W
2019	I	Balaenoptera physalus	JP	IS		1.961.185	1690000	meat	kg	T	W
2020	I	Balaenoptera physalus	JP	IS			1235000	meat	kg	T	W
2020	I	Balaenoptera physalus	NL	IS			3.5	meat	kg	S	W
2021	I	Balaenoptera physalus	NO	IS			2800	meat	g	S	W
2023	I	Balaenoptera physalus	ES	IS		550		meat	Number of specimens	S	W
2016	I	Balaenoptera musculus	US	JP		850		meat	g	P	I

2021	I	Megaptera novaeangliae	AU	CO			22	oil		S	W
2016	I	Physeter macrocephalus	SN	US	XX	2		cosmetics		L	I
2016	I	Physeter macrocephalus	SN	US	XX		1	extract		L	I
2019	I	Physeter macrocephalus	US	MX	XX	1		unspecified	Number of specimens	P	I
2019	I	Physeter macrocephalus	US	MX	XX	1		unspecified	Number of specimens	T	I
2022	I	Physeter macrocephalus	US	MY	XX	15		wax	ml	P	O
2015	II	Pontoporia blainvillei	US	UY		1		skeletons		T	I