





ISSUE BRIEF

BAN BYCATCH: The united states must ban seafood imports from countries failing to protect marine mammals

The United States is poised to trigger a potentially seismic change in international fishing practices that could save tens of thousands of whales, dolphins, and other marine mammals every year. Global fisheries kill or seriously injure more than 650,000 marine mammals annually by hooking, entangling, or trapping them in fishing gear.¹ This bycatch is the predominant threat to global marine mammal populations, which are already facing serious and growing pressures from the climate and biodiversity crises.



Common dolphins feeding on a sardine run off the Eastern Cape, South Africa.

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MAP 1: COUNTRIES WE SURVEYED FOR COMPLIANCE WITH U.S. STANDARDS

In 2016, the United States established a process for countries to demonstrate they meet U.S. bycatch standards in order to export seafood to the lucrative U.S. market, referred to as the MMPA Import Rule. We surveyed the following II countries of various income levels and capacity to assess whether they can demonstrate that all their fisheries' exports to the United States are meeting U.S. standards for marine mammal bycatch.



To reduce bycatch, U.S. fishers and foreign fishers exporting to the United States must comply with strong standards for protecting marine mammals. In the case of foreign fisheries, the Marine Mammal Protection Act (MMPA) has required all nations to meet U.S. bycatch standards in order to export seafood to the lucrative U.S. market since 1972, but the United States has never applied the requirement to the vast majority of seafood imports.

The situation changed in 2016, when the United States established a process for nations to show they are meeting U.S. standards. Under the MMPA Import Rule, the U.S. government will finally apply the MMPA's bycatch standards to all seafood imports on January 1, 2026.

Implementation and enforcement of MMPA import standards must be rigorous and robust to stem the tide of marine mammal bycatch and save many of these species from extinction. However, despite having years to prepare, most nations are unlikely to comply.

NRDC, Center for Biological Diversity, Animal Welfare Institute, and Environmental Investigation Agency surveyed 11 countries of various income levels and capacity from around the globe: Canada, Ecuador, Fiji, France, India, Indonesia, Mexico, Norway, South Africa, South Korea, and the United Kingdom (UK) (see Map 1). Our assessments of publicly available data from these countries revealed that it is unlikely any of them can demonstrate that all their fisheries' exports to the United States are meeting U.S. standards for marine mammal bycatch.

Despite a great divergence in the countries' wealth and capacity, we found troubling trends across our assessments:

- Countries are consistently failing to regularly assess the status of marine mammal populations in their national waters.
- Countries lack adequate monitoring to understand the impact fisheries are having on those marine mammal populations.
- Countries lack adequate regulations and measures to protect marine mammals.
- Countries that do have protective measures in place are not always enforcing them.

Meeting the MMPA standards is vital for the future of marine mammals around the globe. To the extent these trends are applicable to other nations, these findings raise concerns about bycatch's impact on the world's whales, dolphins, porpoises, seals, sea lions, and other marine mammals. It is also likely that the United States will need to ban at least some imports of wild-caught fish and fish products from most countries because they cannot show they are meeting U.S. standards.



California sea lions caught in a gillnet off the coast of Baja California, Mexico.



A harbor porpoise caught in a fishing net off the coast of Norway.

BYCATCH IS THE MOST SIGNIFICANT THREAT TO MARINE MAMMALS WORLDWIDE—AND THE UNITED STATES HAS THE MARKET POWER TO HELP STOP IT

Bycatch of marine mammals refers to animals that have been unintentionally entangled, entrapped, ensnared, or caught by nets, lines, traps, or hooks, or otherwise impacted by fishing gear.² The issue first came to public attention in the late 1960s, when hundreds of thousands of dolphins were killed in tuna purse seine nets in the eastern Pacific Ocean each year.³ The heart-wrenching practice of encircling dolphins in purse seine nets to catch tuna congregating beneath the dolphins sparked significant outcry and was, in part, responsible for the passage of the MMPA in 1972.⁴

Implementation of the MMPA led to reduced bycatch in U.S. waters, but bycatch continues to be the greatest source of human-caused deaths of marine mammals globally, killing or seriously injuring more than 650,000 animals each year.⁵ All coastal and many offshore species around the world have experienced some level of bycatch. For many severely depleted species, such as the vaquita porpoise (Phocoena sinus), Indian Ocean humpback dolphin (Sousa plumbea), New Zealand sea lion (Phocarctos hookeri), Māui dolphin (Cephalorhynchus hectori maui), and North Atlantic right whale (Eubalaena glacialis), fisheries bycatch is the most significant threat to their survival, putting them in danger of extinction.⁶ Large-scale foreign industrial fisheries are responsible for substantial marine mammal bycatch, but many marine mammal populations are also threatened by small-scale fisheries, some of which have market access to the United States.7

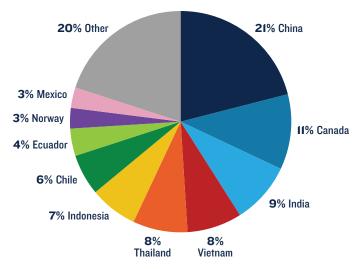
In addition to the population-level impacts on marine mammals, bycatch creates serious animal welfare concerns. While most marine mammals harmed by fisheries are caught and killed as bycatch, many animals that initially "escape" a bycatch incident can experience a range of injuries, including abrasions, cuts, broken bones, and even amputations. Suffering can be prolonged, with some animals dying weeks or even months after the event.⁸ And as climate change and warming waters cause marine mammals to alter their feeding and migration patterns, potentially leading them into areas of greater fishing concentration that lack protective measures, the challenge of mitigating bycatch will only intensify.⁹

THE UNITED STATES IS A SIGNIFICANT MARKET ACTOR

The United States and its bycatch import requirement have enormous potential to leverage change in global fishing practices. As of 2020, the United States was the leading seafood-importing country in the world, annually importing between 70 and 85 percent of its seafood (see Figure 1). This amounts to more than six billion pounds of products worth more than \$21 billion annually, accounting for more than 15 percent of the global value of marine food products in trade.¹⁰ As a major market force, the United States and its import regulations have the power to substantially impact global fisheries and reduce bycatch worldwide.

FIGURE 1: SOURCE OF U.S. SEAFOOD IMPORTS BY VOLUME

Annually, the United States imports between 70 and 85 percent of its seafood, amounting to more than 6 billion pounds of products worth more than \$21 billion.



BYCATCH IS CAUSED BY DEADLY GEAR

Fishers employ a wide variety of gear that poses varying degrees of bycatch threat. The highest-risk gear types include gillnets, purse seines, and trawls, as well as longlines and the vertical buoy lines associated with traps/pots (see Figure 2)."

Gillnets cause the vast majority of marine mammal bycatch worldwide; animals become entangled and drown in the wall of mesh netting. Most marine mammal species are susceptible to gillnet bycatch, which is "the primary driver of population declines" for many species.¹² Gillnets threaten vaquita in Mexico, Māui dolphins in New Zealand, Atlantic humpback dolphins (*Sousa teuszii*) off Africa, and Yangtze finless porpoises (*Neophocaena asiaeorientalis*) in China, among others.¹³ Drift gillnets are commonly used in Indian Ocean tuna gillnet fisheries, which have likely caused the mortality of over four million cetaceans (whales, dolphins, and porpoises) since the I950s.¹⁴

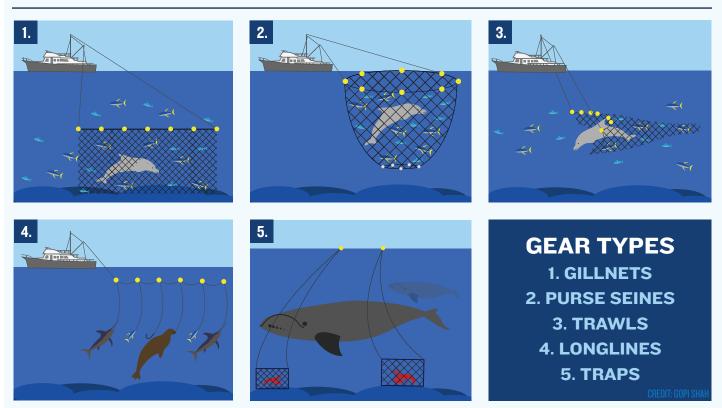
Purse seines are nets that encircle entire schools of fish. The bottom of the net is drawn or "pursed" shut to capture the entire school. The presence of dolphins, porpoises and whales can be used to locate schooling fish, and the marine mammals are caught in the enclosed nets. Tuna purse seine fisheries killed hundreds of thousands of dolphins annually in the eastern tropical Pacific during the I960s and I970s, but the number of deaths dropped substantially after the National Marine Fisheries Service (NMFS) implemented the MMPA import provision for this fishery.¹⁵ Yet purse-seine bycatch continues in many countries, particularly for spotted and spinner dolphins, as well as some baleen whales.¹⁶

Trawls are nets, typically shaped like a cone, towed behind a boat either in the water column or on the bottom. Trawls threaten an array of marine mammals, with "interactions ... occur[ring] throughout the world's oceans," wherever trawls and marine mammals overlap in distribution.¹⁷ Trawls threaten Māui dolphins in New Zealand, short-beaked common dolphins (*Delphinus delphis*) in western Europe, and Commerson's dolphins (*Cephalorhynchus commersonii*) in Argentina.¹⁸

Additionally, marine mammals are often entangled or hooked in **longline gear**, which is suspended from buoys at various depths depending on the target species. Hooks are suspended from the longline at intervals. NMFS identifies Risso's dolphins (*Grampus griseus*), bottlenose dolphins (*Tursiops spp.*), and several species of whales as longline bycatch.¹⁹

Buoy lines and groundlines attached to pots or traps used to catch fish and shellfish pose a risk to baleen whales.²⁰ For example, both minke whales (*Balaenoptera acutorostrata*) and humpback whales (*Megaptera novaeangliae*) have been entangled in Scottish creel fisheries targeting lobster, crab, and langoustines.²¹

FIGURE 2: GEAR TYPES



American consumers have demonstrated for decades that they do not wish to purchase products from fisheries that cause marine mammal deaths and support regulations that protect marine mammals from bycatch.²² This is especially true in the context of the vast carnage to marine mammals, which threatens many populations with extinction.

Beginning on January 1, 2026, all fisheries that export to the United States must meet U.S. bycatch standards. This requirement will not affect subsistence fishers abroad (who fish to feed their families and not to sell their catch) or fishers selling their product locally (most fish caught around the globe remains within national markets).²³ However, individuals and corporations with sufficient connections, financial resources, and access to export their product to the United States will need to comply. The U.S. government has committed—including through cooperative research, training, and technology transfer—to help nations comply with the import requirement.²⁴

Unfortunately, our research shows that most—if not all nations will struggle to meet these new requirements.

UNITED STATES WILL NOW APPLY REQUIREMENTS TO PROTECT MARINE MAMMALS TO FOREIGN FISHERIES

The Marine Mammal Protection Act clearly requires importing nations to comply with U.S. bycatch standards (see Text Box). The law serves three main purposes. First, it incentivizes protection of marine mammals abroad by linking access to U.S. markets to bycatch reduction in foreign fisheries. Second, it provides assurance to American consumers that the seafood they consume has been caught using methods and gear that protect whales, dolphins, and other marine mammals in compliance with the United States' strong standards for marine mammal protection. And third, it levels the playing field for U.S. fishers by requiring foreign fishers exporting to the United States to meet the same standards for marine mammal bycatch.

The MMPA import provision would accomplish these goals if it were correctly and rigorously applied. However, for the past 50 years, fish and fish products have entered the U.S. market daily without any accompanying proof, reasonable or otherwise, that the catch did not harm marine mammals in excess of U.S. standards. As a result, the U.S. government has allowed the importation of fish and fish products from fisheries that have killed or seriously injured hundreds of thousands of marine mammals in violation of U.S. law. U.S. fishers have been operating at a disadvantage for half a century, competing against foreign fisheries that have been allowed to indiscriminately kill marine mammals as they fill their holds, while U.S. consumers have been unwittingly funding these foreign fisheries through their seafood purchases.

More than 15 years ago, conservation organizations petitioned the federal government to finally apply the MMPA import provision to certain fish from countries failing to comply with the act.²⁵ Pursuant to a settlement agreement, NMFS adopted regulations (the "MMPA Import Rule") in 2016 to implement the import provisions of the MMPA for all fish imports.²⁶



A humpback whale entangled in fishing line in the Hawaiian Islands Humpback Whale National Marine Sanctuary.

THE MMPA IMPORT RESTRICTIONS

The MMPA requires nations to meet U.S. bycatch standards in their export fisheries or suffer a ban on their fish and fish product imports. Section IOI(a) (2) of the act states:

The Secretary of the Treasury shall ban the importation of commercial fish or fish products from fish which have been caught with commercial fishing technology which results in the incidental kill or incidental serious injury of ocean mammals in excess of United States standards. For purposes of applying the preceding sentence, the Secretary—

Shall insist on reasonable proof from the government of any nation from which fish or fish products will be exported to the United States of the effects on ocean mammals of the commercial fishing technology in use for such fish or fish products exported from such nation to the United States.²⁷

These simple and clear sentences accomplish a great deal. First, they place an affirmative duty on the U.S. government to ban imports from fisheries that do not meet U.S. standards. The phrase "shall ban" provides no discretion; if a foreign fishery catches fish in a manner that incidentally kills or seriously injures whales, dolphins, or other marine mammals in excess of U.S. standards, the U.S. government must bar that fish from entering the U.S. market.

The MMPA does not define "U.S. standards" in its definition section, but it does state in the sentence preceding the import ban language that "it shall be the immediate goal that the incidental kill or incidental serious injury of marine mammals permitted in the course of commercial fishing operations be reduced to insignificant levels approaching a *zero* mortality and serious injury rate."²⁸ In addition, the MMPA requires domestic fisheries to reduce bycatch to below the "potential biological removal level" (PBR), a conservative calculation of the maximum number of animals that can be removed from a population while still allowing it to "maintain its optimum sustainable population."²⁹ While there may be several elements that make up U.S. standards, the clear goal of the MMPA is to reduce bycatch to insignificant levels approaching zero, and PBR is a threshold for domestic fisheries.

Second, the law says the country from which the fish is exported is responsible for demonstrating the impact a fishery has on marine mammals. It requires the U.S. government to "insist on reasonable proof" from the exporting nation. Congress intended to squarely place the burden on exporting nations to show they meet U.S. standards for marine mammal bycatch. The law does not instruct the U.S. government to prove foreign nations' bycatch is problematic, to compile its own assessment, or to speculate. Instead, the MMPA instructs the U.S. government to demand that exporting nations provide reasonable proof of the impacts their fisheries are having on marine mammals for the purpose of determining whether those impacts exceed U.S. standards.

Thus, the MMPA is clear: the government must bar foreign commercial fish or fish products from entering the United States unless countries from which the products are exported have demonstrated the impact of fishing on marine mammals and that impact does not exceed U.S. standards for marine mammal protection.

THE NEW MMPA IMPORT RULE REQUIRES PROOF OF COMPLIANCE

To implement the MMPA import provision, the MMPA Import Rule requires countries wishing to export fish to the United States to apply for and receive a "comparability finding" from NMFS for each export fishery.³⁰ While initially, products from fisheries that did not receive a comparability finding would be banned starting January 1, 2022, the National Marine Fisheries Service extended that deadline to 2023, then 2024, and now to January 2026.

A comparability finding is essentially a determination that a country's bycatch and bycatch program, as applied to an individual export fishery, meet U.S. standards.

To receive a comparability finding, a country must show that every export fishery operating within its exclusive economic zone complies with the MMPA by:

- 1. "Prohibit[ing] the intentional mortality or serious injury of marine mammals in the course of commercial fishing operations in the fishery"
- 2. "Maintain[ing] a regulatory program" for the fishery "that is comparable in effectiveness to the U.S. regulatory program"³¹

The MMPA Import Rule defines a comparable regulatory program by identifying the various components NMFS believes are necessary for a comparable bycatch management program (see Text Box).

By assessing the components of a regulatory program, NMFS should be able to determine if a fishery is meeting U.S. standards. It will know: 1) the status of the whales, dolphins, and other marine mammals interacting with the fishery, including which populations may be declining; 2) the number of marine mammals seriously injured or killed during fishery operations based on reliable data; 3) the steps, if any, the regulatory program requires fisheries to take to reduce bycatch; 4) the bycatch limit for marine mammals interacting with the fishery; and 5) whether the bycatch for the fishery exceeds the bycatch limit.

Finally, like the MMPA, the MMPA Import Rule places the burden on exporting countries to demonstrate that each export fishery meets these requirements. The rule states that the "harvesting nation shall submit... an application... along with documentary evidence demonstrating" that the conditions have been met for each fishery.³² Accordingly, to achieve a comparability finding under the MMPA Import Rule, a country must demonstrate and document that it meets each of the conditions above or that it maintains a regulatory program that "effectively achieves comparable results."³³

COMPONENTS OF A COMPARABLY EFFECTIVE REGULATORY PROGRAM

To demonstrate a comparably effective regulatory program, a country must show that it maintains a program "that includes or effectively achieves comparable results as" the following components:

- a. "Marine mammal assessments ... for stocks ... that are killed or seriously injured in the fishery"
- b. "An export fishery register," listing all fishing vessels in the fishery, including time, season, gear type, and target species
- c. Regulatory requirements that include:
 - i. Vessel operators report all marine mammal injury or death
 - ii. Fishers implement measures to reduce mortality/ serious injury
- d. Monitoring procedures in the export fishery to estimate mortality/serious injury from the fishery and cumulatively from other export fisheries on the same marine mammal stocks
- e. Calculation of bycatch limit for marine mammals taken in the fishery. The bycatch limit is the PBR level or a "comparable scientific metric"
- f. Demonstration that mortality/serious injury from the fishery (and cumulatively with other export fisheries) does not exceed the bycatch limit

COUNTRIES CANNOT DEMONSTRATE THEY MEET U.S. STANDARDS

The 11 countries we assessed are unlikely to be able to demonstrate that all fisheries exporting to the United States meet U.S. standards as required under the MMPA Import Rule. Bycatch is unsustainable in many parts of the world but regularly goes undocumented and unmanaged. Fishers use commercial fishing gear that is known to cause high rates of bycatch, but incidents often remain unreported. In some places where data do exist, bycatch is prevalent and, in some cases, it is unsustainable. For example, high rates of bycatch are occurring in Norway, where harbor porpoises (Phocoena phocoena) and harbor seals (Phoca vitulina) are regularly caught in bottom-set gillnets for cod and monkfish.³⁴ In France, bycatch of common dolphins (Delphinus delphis) in the Bay of Biscay is above the MMPA's PBR standard, which means it is harming the ability of the species to maintain its optimum sustainable population.³⁵ Bycatch of large whales, including southern right whales (Eubalaena australis) and humpback whales, is also regularly documented in South Africa's west coast rock lobster fishery, though total numbers are unknown.³⁶

STUDY METHODOLOGY

For each country, we searched the scientific literature and government reports on the status of marine mammals within that country's waters and on evidence of bycatch. For additional bycatch information, we reviewed data from multilateral environmental agreements, regional fisheries management organizations, the International Whaling Commission and, in some cases, information obtained under freedom of information laws. We also examined each country's legal regime managing fisheries, protected species, and marine mammals. Finally, we consulted with experts on each national report, which, in most cases, included review by in-country researchers or local nongovernmental organizations. The collection of national reports can be found <u>here</u>.

We observed four main shortcomings for most of the 11 nations/fisheries we assessed: (1) a lack of marine mammal population monitoring, (2) a lack of adequate bycatch monitoring, (3) a lack of regulations to mitigate bycatch, and, in some places where there were bycatch mitigation measures in place, (4) ineffective enforcement. Each of these shortcomings is discussed below, and a summary overview is shown in Figure 3. These factors prevent countries from being able to calculate PBR or a comparable scientific metric for all marine mammal populations interacting with export fisheries, and therefore the countries cannot ensure or prove—that bycatch is not harming marine mammal populations in excess of U.S. standards.

FIGURE 3: COUNTRIES CANNOT DEMONSTRATE THEY ARE MEETING U.S. STANDARDS

Based on our research, the II countries we assessed are unable to demonstrate that all fisheries exporting to the United States meet U.S. standards as required under the MMPA Import Rule. While some countries have higher standards than others, no country meets all of them.

	Canada	Ecuador	Fiji	France	India	Indonesia	Mexico	Norway	South Africa	South Korea	United Kingdom
Bans fisheries from intentionally killing marine mammals											
Conducts stock assessments											
Maintains register of exporting fisheries											
Requires bycatch reporting											
Requires bycatch mitigati											
Monitors bycatch											
Calculates bycatch limits for marine mammal stocks											
Demonstrates bycatch is below limit for all fisheries											

Likely meets U.S. standards

• Only some fisheries meet U.S. standard or more data is needed

Fails to meet U.S. standard for all fisheries

1. Data on Marine Mammal Populations Are Inadequate or Nonexistent

Overall, we found an overwhelming lack of data on marine mammal populations globally, which prevents countries from determining how various bycatch levels impact populations. For most countries assessed, governments do not appear to be conducting any marine mammal population surveys or stock assessments. Some countries are not even able to list the marine mammal species inhabiting their waters. While some nations, such as Canada, France, and the UK, have conducted some marine mammal surveys, they do not appear to meet the requirements of the MMPA Import Rule for marine mammal stock information, distribution, and abundance.³⁷ The surveys in these countries either do not cover all marine mammal species or are not conducted on a regular basis, making it impossible to document population trends. Norway was the only country we found to require regular surveys of its marine mammal stocks.³⁸

2. Countries Lack Adequate Bycatch Monitoring

Most countries assessed did not have systems in place for monitoring and reporting bycatch. Accurately monitoring bycatch using observers on vessels is necessary to quantify the number of animals from each population that are killed or seriously injured each year. For some fisheries, like those operating in India, bycatch is not recorded at all, while in other countries bycatch is recorded only through a logbook by crew members, even though scientific studies have demonstrated that logbooks vastly underestimate the total amount of bycatch. One recent study showed that bycatch recorded by onboard observers was an average of 774 percent higher than bycatch recorded in logbooks in trawls, 7,348 percent higher than in nets, and 1,725 percent higher than in hook and line gear.³⁹ Without sufficient observer coverage, bycatch will likely be underestimated, and some species may not be recorded.

It has been estimated that to ensure reasonably accurate bycatch measurements, fishing vessels should have observers on board for 20 percent of their fishing effort when common species of marine mammals might be taken as bycatch, and at least 50 percent if their fishing could impact rare species.⁴⁰ In our research, we found that while some countries, such as Canada and France, place observers in some fisheries, the observer coverage was too low to accurately estimate bycatch. Several fisheries in France have observers on just 0.1 to 1 percent of vessels, with only trawlers reaching levels of 5 percent.⁴¹ In Canada, a snow crab fishery in the Gulf of St. Lawrence has 10 percent observer coverage, and the target observer coverage for six groundfish fleet sectors ranges from 5 to 10 percent. This is below what is mandated for similar fisheries in the US, with observer coverage for the U.S. Pacific snow crab fishery and groundfish fishery at 20 and 90 percent, respectively.⁴²

3. Countries Lack Adequate Regulations to Protect Marine Mammals From Bycatch

In addition to many nations not knowing the status of marine mammals in their waters or bycatch levels, most countries do not have regulations that require fisheries to mitigate bycatch. There are no bycatch mitigation measures for any fisheries in six countries that we assessed: Ecuador, Fiji, India, Indonesia, South Africa, and South Korea.⁴³ Some countries, such as Canada, France, and the UK, have bycatch mitigation measures in place for some, but not all, fisheries.⁴⁴ For example, the UK has seasonal gear restrictions in place and requires acoustic deterrent devices (ADDs) on some vessels 12 meters and longer to reduce bycatch of dolphins and porpoises.45 However, ADDs are not required on vessels smaller than 12 meters, which made up at least 74 percent of the UK's fishing fleet in recent years.46 In Canada, some bycatch mitigation measures are implemented in license requirements, but they differ between fisheries. For example, Canada's Atlantic herring gillnet fishery, which exports to the United States, does not have any bycatch mitigation measures beyond reporting lost gear.47

4. Some Countries Are Not Enforcing Existing Bycatch and Fisheries Management Measures

Several of the countries we assessed that have adopted measures to mitigate bycatch and protect marine mammals are not adequately enforcing their regulations. Mexico, for example, has various laws and decrees to regulate fishing, but it lacks monitoring and enforcement, enabling illegal and nonselective fishing to take place.⁴⁸ In the upper Gulf of California, Mexico's failure to enforce several conservation measures, including a ban on the use of gillnets and restrictions on activities in key areas for the critically endangered vaquita porpoise, has led to the vaquita's near extinction.⁴⁹

Indonesia also has a history of inadequate enforcement of regulations and poor fisheries management, including illegal, intentional captures of protected marine mammals and a lack of compliance with management rules and gear restrictions. Historically, of all the measures governing Indonesia's fisheries, only those focusing on vessel licensing and the designation of marine protected areas have been fully carried out, and sometimes even this implementation is not completely effective.⁵⁰

POLICY RECOMMENDATIONS

The U.S. government has had an obligation to ban fish imports that fail to meet U.S. standards since December 21, 1972. Nonetheless, it has not implemented the law, and the regulations it adopted in 2016 provided a five-year exemption period, which the government has now extended three times through December 31, 2025. Marine mammals, consumers, and U.S. fishers have waited long enough. During this period of negligence, tens of thousands of whales, dolphins, and other marine mammals have died in excess of U.S. standards each year, consumers have been unknowingly supporting the killing of marine mammals around the world, and U.S. fishers have invested millions of dollars to meet standards while the government has applied no standard to imports, creating unfair competition.

Based on our finding that most countries and foreign fisheries are not adhering to U.S. standards for the protection of marine mammals during commercial fishing operations—and will be unlikely to comply with the MMPA Import Rule—we put forth the following recommendations:

A. The U.S. Government Must Reject Seafood Imports From Nations That Fail to Submit Robust Data to Demonstrate Compliance

The United States should fully implement the MMPA to cover all fish and fish product imports immediately. The MMPA requires data collection on marine mammal populations, reliable bycatch data, and data on the effectiveness of bycatch reduction programs. NMFS must insist that countries provide such data and must ban imports of fish and fish products from countries that fail to do so.

B. Countries Should Not Receive an "A" for Effort

The MMPA leaves no room for half measures, reliance on promises, or best guesses. It requires countries to show the impact of their export fisheries on marine mammals. NMFS should not base its determination on country promises of future action or the hoped-for results of regulatory by catch regimes for which there are insufficient data.

C. Exporting Countries Must Do More

Countries wishing to maintain access to the U.S. market must make significant progress in the management of their export fisheries. They must develop programs for assessing marine mammal populations and means to reliably monitor bycatch, and they must put in place and enforce measures to limit bycatch. While the focus of our assessments was specific to compliance with U.S. law, most of these countries have made commitments in other forums—such as the Kunming-Montreal Global Biodiversity Framework (GBF)—to ensure that fish harvest and trade minimize impacts on nontarget species.

Thus, reducing bycatch not only is necessary for countries to meet U.S. standards but is something these countries have committed to do for the good of biodiversity and human wellbeing. We should hold them to those commitments.

THE KUNMING-MONTREAL GLOBAL BIODIVERSITY FRAMEWORK COMPELS LIMITING MARINE MAMMAL BYCATCH⁵¹

In December 2022, the parties to the UN Convention on Biological Diversity adopted the Kunming-Montreal Global Biodiversity Framework, which provides a pathway for achieving the global vision of a world living in harmony with nature by 2050. The II countries we assessed are parties to the Biodiversity Convention and are bound by the GBF. The framework includes 23 global targets for urgent action between now and 2030. Many of the targets have implications for reducing marine mammal bycatch. For example, Target 5 *(use, harvesting, and trade of wild species is sustainable, safe, and legal)* states:

Ensure that the use, harvesting and trade of wild species is sustainable, safe and legal, preventing overexploitation, minimizing impacts on non-target species and ecosystems, and reducing the risk of pathogen spillover, applying the ecosystem approach, while respecting and protecting customary sustainable use by indigenous peoples and local communities.

In addition to Target 5's explicit commitment to minimize impacts on nontarget species, Target IO (areas under agriculture, aquaculture, fisheries, and forestry are managed sustainably), Target I5 (businesses assess and disclose biodiversity dependencies, impacts, and risks and reduce negative impacts), and Target I6 (sustainable consumption choices are enabled and food waste reduced by half) require actions relevant to regimes for protecting marine mammals in the course of commercial fishing.

D. The United States Should Have a Robust Agenda for Global Engagement on Reducing Marine Mammal Bycatch

The MMPA requires the Secretary of Commerce to work with foreign governments to develop agreements for the conservation of all marine mammals and encourages the sharing of information on best practices. The United States should expand its efforts to promote binding conservation management measures focused on marine mammal bycatch mitigation across the regional fisheries management organizations to which it is a party. Regional fisheries management organizations, such as the Inter-American Tropical Tuna Commission, are well positioned to devise and fund plans to collect data on bycatch, marine mammal populations, and the effectiveness of mitigation technologies. In addition, the United States should continue to support technical workshops—such as the 2019 UN Food and Agriculture Organization (FAO) expert meeting to develop technical guidelines to reduce bycatch of marine mammals in capture fisheries-where experts can review and share best practices for bycatch mitigation.52

CONCLUSION

Populations of whales, dolphins, porpoises, and other marine mammals around the world are suffering from bycatch in commercial fisheries that export their catches to the United States. Bycatch rates are alarmingly high and often exceed what U.S. law allows. This is particularly troubling given available management and mitigation technology and the ability of the profitable seafood industry to invest in harvesting practices that minimize impacts to marine mammals.

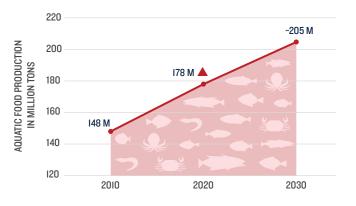
According to the FAO, global capture fisheries and aquaculture produced some 178 million tons of fish and other aquatic animals in 2020, valued at a staggering \$405 billion.⁵³ By 2030, aquatic food production is forecast to increase by 15 percent, which could increase marine mammal entanglement (see Figure 4).⁵⁴ As a lucrative industry and one of the major contributors to the world economy, the global fishing sector has the resources available to prevent marine mammal

bycatch. For example, Ecuador, India, Indonesia, and Norway collectively exported roughly \$7 billion worth of seafood products to the United States in 2022. If those countries used just 0.5 percent of the value of those exports, they could have funded \$35 million in bycatch research and mitigation efforts.⁵⁵

Unfortunately, many nations currently exporting fish to the United States do not track the impact their fishing industries are having on marine mammals, nor are they taking steps comparable to the United States to limit harm to these animals. Our assessment of 11 countries spanning a spectrum of wealth and capacity revealed that it is unlikely they can demonstrate that they are meeting U.S. standards for all export fisheries. To save and prevent the suffering of countless marine mammals, satisfy the concerns of consumers, and meet U.S. fishers' expectations of fairness, the United States should ban imports from these and other countries whose fisheries do not meet U.S. standards.

FIGURE 4: INCREASE IN AQUATIC FOOD PRODUCTION WILL AMPLIFY RISKS FOR MARINE MAMMAL ENTANGLEMENT

According to the Food and Agriculture Organization of the United Nations (FAO), global capture fisheries and aquaculture generated 178 million tons of fish and other aquatic animals in 2020, worth \$405 billion. Aquatic food production is expected to grow by 15% by 2030, which will increase the risk of marine mammal entanglement.



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