

**NOAA
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National Report on Large Whale Entanglements Confirmed in the United States in 2021

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National Marine Fisheries Service
Office of Protected Resources
Marine Mammal and Sea Turtle Conservation Division
Marine Mammal Health and Stranding Response Program

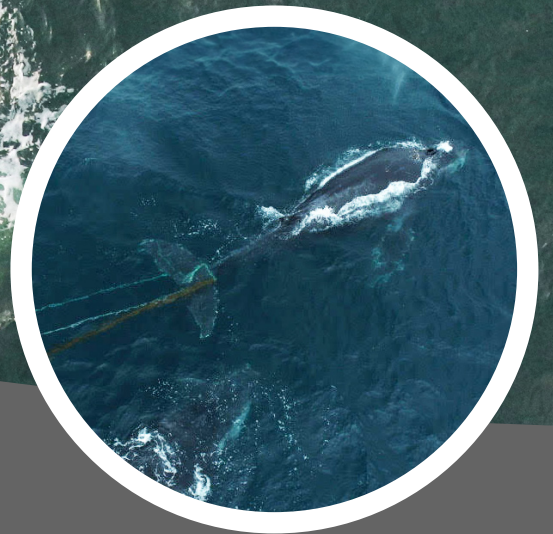


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Cover photo (background): Responders from the Georgia Department of Natural Resources attempt to grapple the gear from an entangled North Atlantic right whale (known individual #1803) on January 11, 2021. Grapples are specialized equipment that allow responders to retrieve trailing entangling gear from a distance, which is safer for both responders and the whale. Credit: Georgia DNR; NOAA Permit No. 18786.

Cover photo (circle): An entangled humpback whale first observed off Santa Barbara, California on August 28, 2021. Credit: Newport Coastal Adventures Whale Watch; NOAA Permit No. 18786.

Introduction

In 2021, there were 70 confirmed entangled large whales documented along the coasts of the United States, with 67 cases involving live animals and three cases involving animals that were dead (floating or stranded) when initially reported. All 70 whales were independently confirmed as entangled by members of the United States Large Whale Entanglement Response Network (Network) through photographic or video documentation, reports from multiple and/or experienced members of the on-water community, or field responses by authorized responders. Each confirmed entanglement case for 2021 (n=70) represents a unique individual whale and does not represent multiple reports of the same individual. NOAA Fisheries tracks subsequent reports of previously reported entangled whales to understand the nature of the entanglement, monitor associated injuries, and assess the animal's health status. Any subsequent reports of individual whales have been combined into a single record for the purposes of this summary to provide clarity on the number of entangled individuals in 2021.

Beyond the 70 confirmed cases, 16 additional cases were reported. However, 12 of those entanglements could not be confirmed with the information received, and the whales were not observed by Network members. The other four of the 16 additional cases were later confirmed not to have been entangled when reported. These 16 additional reports were tracked, but are not included in the overall total for 2021. Therefore, this summary report represents a conservative estimate of the number of large whale entanglements in U.S. waters and accounts for confirmed entanglement cases only. Some of these entanglements may have originated in waters outside the U.S., given that many large whale species travel long distances between their feeding and breeding grounds, and across international boundaries and oceans. Importantly, confirmed entanglements underestimate the true number of entangled whales, as many entangled whales go undetected (e.g., are not observed while entangled and die at sea). Moreover, the number of entanglements in any given year, and the relative increases and decreases observed and confirmed

by the Network, may not be representative of true increases and decreases in entanglements, given that the number of confirmed entanglements is not a precise estimator of actual entanglements.¹ NOAA Fisheries' goal is to document, collect, and identify entangling gear and marine debris during each response, in order to better understand the threats to whales, and work with fishermen and coastal communities to reduce future entanglements. However, definitive identification of the entangling material is not always possible.

Entangled large whales face a number of life-threatening risk factors and associated impacts. Entanglements often interfere with swimming, feeding, breathing, and/or other vital functions. Severe entanglements can cause serious injuries resulting in significant pain and suffering, can lead to amputations of flippers or flukes, and ultimately, can lead to death. Response operations to remove entangling gear are mounted by the Network for humane and welfare reasons. Response activities also collect important information and documentation to identify how whales become entangled, and which fishing gear and marine debris pose observable risks to the animals. Ultimately, response operations can have a significant positive impact on the conservation of these species. All large whale populations are protected under the Marine Mammal Protection Act (MMPA) of 1972, and several species or populations are listed as threatened or endangered under the Endangered Species Act (ESA) of 1973. Although the majority of responses in 2021 involved species and/or populations in the U.S. that are no longer considered threatened or endangered under the ESA, each response attempt by the Network provides an important opportunity for responders to improve their skills. It also allows responders to apply lessons learned from those cases to respond more effectively and safely to threatened and endangered species (e.g., North Atlantic right whales, *Eubalaena glacialis*), cases in which the rescue of each individual can be vital for the survival of their species.

¹ Pace III, R.M., Williams, R., Kraus, S.D., Knowlton, A.R. and Pettis, H.M., 2021. Cryptic mortality of North Atlantic right whales. *Conservation Science and Practice*, 3(2), p. 346.

Comparing Confirmed Entanglements in 2021 to Past Years

Confirmed Large Whale Entanglements by Region, 2007–2021

The number of confirmed large whale entanglement cases nationwide in 2021 (n=70) is below the average annual number of confirmed entanglements over the previous 14 years from 2007–2020 (n=72.3 ± 21.8; average + one standard deviation). However, nearly every NOAA Fisheries region experienced an increase in the number of confirmed large whale entanglements in 2021 when compared to the much lower than average number of confirmed cases in 2020, with the exception of the Greater Atlantic Region (Northeast and Mid-Atlantic), which saw the same number of confirmed large whale entanglements in 2021 (Figure 1).

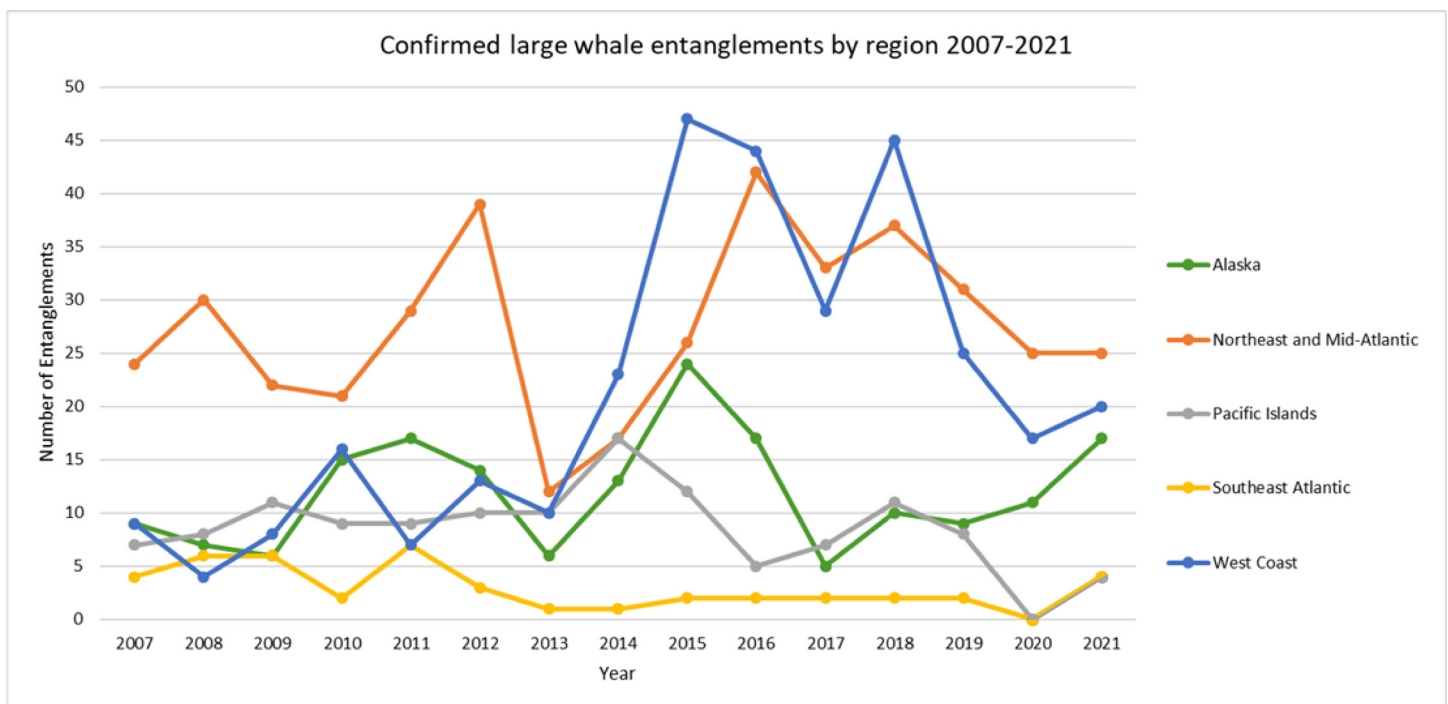


Figure 1. Confirmed large whale entanglements from 2007–2021. In 2021, most regions experienced an increase in confirmed large whale entanglements, with the exception of the Northeast and Mid-Atlantic, which documented the same number of cases as in 2020.

Impacts of the COVID-19 Pandemic

In 2021, the ongoing COVID-19 pandemic continued to impact many human activities, and likely influenced the number of people on the water who would have been able to sight and report entangled large whales. Scientific fieldwork efforts (surveys, photo identification work, and other assessments) and whale watch tours were diminished, or in some cases did not occur. Further complicating the analysis of entanglement data, activities were reduced in different ways and modified throughout the year as restrictions varied across the U.S. in response to local conditions. The Network was also impacted by the pandemic. Fewer responses could be initiated and, if conducted, were often more limited with fewer people per response vessel to maintain human safety (e.g., social distancing). All of these factors may have contributed to a lower than average number of observed, documented,

and confirmed large whale entanglements in 2021. It is also possible that the lower than average number of confirmed large whale entanglements in 2021 is unrelated to the COVID-19 pandemic. For example, many regions have reported large-scale environmental changes, like marine heat waves, that may also be affecting large whale entanglement rates and reporting.² Therefore, the lower than average number of confirmed large whale entanglements in 2021 may be due to some or all of these factors. NOAA Fisheries will continue to analyze data from 2021 and will continue to document future large whale entanglements in U.S. waters to better understand if the lower than average confirmed entanglements is a temporary decrease (possibly attributable to the COVID-19 pandemic) or represents a long-term reduction.

Entanglements by Whale Species

In 2021, six species of large whales were documented with entanglements: humpback whales (*Megaptera novaeangliae*), gray whales (*Eschrichtius robustus*), minke whales (*Balaenoptera acutorostrata*), North Atlantic right whales, sperm whales (*Physeter macrocephalus*), and fin whales (*Balaenoptera physalus*). For two of the 70 confirmed large whale entanglement cases, the entanglement was confirmed by Network members, but the whale could not be identified to species, and therefore those two cases have been classified as “unidentified.”

Table 1. Number of confirmed entanglements in 2021 and the 14-year average number of entanglements for each large whale species.³

Species	2021	2007–2020 Average
Blue Whale	0	0.5 ± 1.1
Bowhead Whale	0	0.1 ± 0.3
Bryde's Whale	0	0.1 ± 0.3
Fin Whale	1	2.1 ± 1.7
Gray Whale	5	7.1 ± 3.9
Humpback Whale	51	49.7 ± 19.6
Minke Whale	6	5.6 ± 1.6
North Atlantic Right Whale	3	4.4 ± 2.3
Sei Whale	0	0.4 ± 0.5
Sperm Whale	2	0.4 ± 0.8
Unidentified Whale	2	1.9 ± 1.6

² Lyman, Edward, et al. 2019. “Are recent population-level changes in the central North Pacific humpback whales (*Megaptera novaeangliae*) affecting entanglement threat and reporting rate?” Poster for 2019 Society for Marine Mammalogy Conference.

³ Large whale species not listed in the table have never been documented with a confirmed entanglement in U.S. waters.

Humpback whale (n=51 in 5 Regions)



In 2021, the number of confirmed entanglements of humpback whales was near the 14-year national average, and every region experienced at least one confirmed entangled humpback whale in 2021 (Table 1). In the Pacific, 31 humpback whales were confirmed entangled, which is consistent with the 14-year average for this ocean basin (31.2 ± 15.6). In the Atlantic, entanglements involving this species were also near the corresponding average (18.5 ± 6.5), with 20 confirmed entanglements in 2021.

Humpback whales are the most frequently reported entangled large whale species, representing 69 percent of all confirmed entanglements since 2007. Humpback whales are found throughout the world's oceans, and several populations have rebounded in recent years. Consequently, the frequency of entanglements seen in this species could be due to many factors, such as the increasing number of whales, a high degree of overlap in distribution of whales and fishing effort, growing coastal communities, increased reporting effort and educational outreach, or a combination of these or additional factors. The MMPA protects all humpback whale populations that occur in U.S. waters, and the ESA provides additional protections for some populations listed as endangered or threatened. In U.S. waters, humpback whales in the western north Atlantic and Hawai'i are no longer listed under the ESA, but some humpback whales in the eastern north Pacific are still listed. An Unusual Mortality Event (UME) was declared for humpback whales in the North Atlantic in 2016 and is still ongoing. Several of the whales that are included in the UME were determined or suspected to have died from entanglements, including one in 2021.

Gray whale (n=5 in 2 Regions)



The number of confirmed gray whale entanglements in 2021 in U.S. waters was fewer than recent years, but

near the 14-year average for gray whales (Table 1). In the U.S., gray whales only occur in the Pacific Ocean, and all confirmed entanglements in 2021 were first reported in the West Coast or Alaska Regions. Most gray whales migrate between their summer foraging grounds off the coast of Alaska and their winter breeding grounds in Mexico, passing by Washington, Oregon, and California on each trip; however, a few gray whales have been reported in the Arctic and Gulf of Alaska in winter. Additionally, some remain off the coast of northern California, Oregon, and Washington during the summer. There are two populations of gray whales, and both are protected under the MMPA. The eastern North Pacific population that is found along the U.S. West Coast and Alaska was delisted from the ESA in 1994, and as such, they are no longer considered a threatened or endangered species. However, the western North Pacific population, typically found along the coast of Russia and Asia, is listed as endangered under the ESA, and some individuals from that population have been documented in the eastern North Pacific. An UME was declared for gray whales in the eastern North Pacific in 2019 and is ongoing. Several of the whales included in the UME were determined to have died or become injured from entanglements, but no deaths from entanglements were documented in 2021.

Minke whale (n=6 in 3 Regions)



The number of confirmed minke whale entanglements in 2021 in U.S. waters was similar to the 14-year average (Table 1). Minke whales are present in both the Atlantic and Pacific Oceans, and in 2021 the initial locations of confirmed entanglements were in the Alaska, West Coast and Greater Atlantic Regions. Minke whale populations are protected under the MMPA, but are not listed under the ESA. An UME was declared for minke whales in the Northern Atlantic in 2017 and is ongoing. Preliminary findings in several of the whales included in the UME have shown evidence of entanglements. Several of the whales included in the UME were determined to have died from entanglements, including two in 2021.

North Atlantic right whale (n=3 in 2 Regions)



The number of confirmed North Atlantic right whale entanglements in U.S. waters in 2021 was near the 14-year average (Table 1). Although the number of confirmed right whale entanglements in the U.S. was near average, the overall entanglement risk to this species remains a great concern.⁴ North Atlantic right whales are protected under the MMPA and listed as endangered under the ESA. Their population is small, with fewer than 350 individuals remaining, and the species continues to decline. Entanglements in fishing gear and vessel collisions are the two primary factors impeding recovery of the species. NOAA Fisheries declared an UME for this species in 2017, which was ongoing throughout 2021, and also designated the species a “[Species in the Spotlight](#).” The UME was declared because a high number of dead or seriously injured⁵ whales were discovered in Canadian and U.S. waters. Several of the whales included in the UME were determined to have died or become injured from entanglements, including the one case that was documented in 2021. Some North Atlantic right whales migrate from cold water feeding grounds (historically along the U.S. East Coast between New England and Canada) to warm water breeding grounds (between Georgia and northern Florida). All entanglements of right whales are of concern; even if an entanglement is not life threatening, the stress and drag created by entangling gear may delay reproduction (resulting in a skipped year or years between calves) or prevent females from successfully giving birth.⁶ Given the endangered status of North Atlantic right whales and the declining trend of the species, any entanglement is a major threat to the species’ recovery.⁷

4 Sharp, S.M., McLellan, W.A., Rotstein, D.S., Costidis, A.M., Barco, S.G., Durham, K., Pitchford, T.D., Jackson, K.A., Daoust, P.Y., Wimmer, T. and Couture, E.L., 2019. Gross and histopathologic diagnoses from North Atlantic right whale *Eubalaena glacialis* mortalities between 2003 and 2018. *Diseases of aquatic organisms*, 135(1), pp.1-31.

5 NMFS interprets the regulatory definition of serious injury (50 CFR 229.2) as any injury that is “more likely than not” to result in mortality, or any injury that presents a greater than 50 percent chance of death to a marine mammal.

6 Van der Hoop, J., Corkeron, P. and Moore, M., 2017. Entanglement is a costly life-history stage in large whales. *Ecology and evolution*, 7(1), pp.92-106.

7 NMFS 2019. “US Atlantic and Gulf of Mexico Marine Mammal Stock Assessments – 2019” U.S. Dep. Commer., NOAA Tech. Memo. NMFS-NE-264.

A Species in Severe Decline: North Atlantic Right Whales

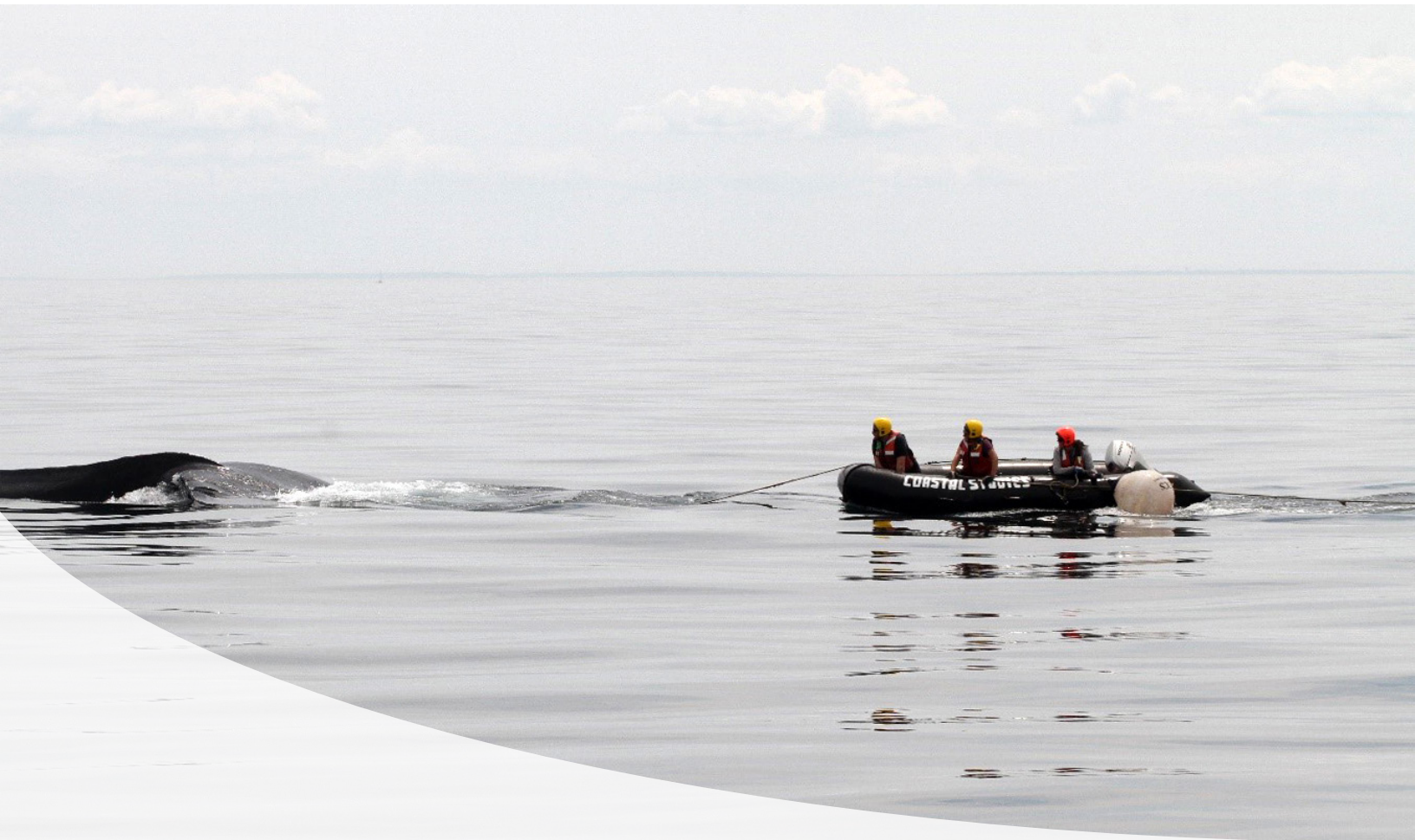
The North Atlantic right whale, a NOAA Fisheries’ “Species in the Spotlight,” is one of the world’s most endangered large whale species, with fewer than 350 individuals remaining and fewer than 70 breeding females. The loss of any one individual could have negative impacts on an already endangered population where deaths are outpacing births. Since 2017, North Atlantic right whales have experienced an ongoing UME, and as of the end of 2021, 98 individual right whales (34 confirmed dead, 26 seriously injured, 38 sublethally injured or ill) were included in the UME for the 5-year period (2017–2021). Entanglement in fishing gear and vessel strikes are the leading causes of serious injuries and mortalities. NOAA Fisheries and our partners are collaborating to conserve and recover the North Atlantic right whale population. The UME continued past 2021; for more information on the current status of the North Atlantic right whale UME, please visit:

<https://www.fisheries.noaa.gov/national/marine-life-distress/2017-2022-north-atlantic-right-whale-unusual-mortality-event>

Sperm whale (n=2 in 2 Regions)



In 2021, two sperm whales were confirmed entangled; one near the Gulf of Alaska and one near Jensen Beach, Florida. Sperm whales have one of the widest global distributions of any marine mammal species and tend to favor the deep ocean. While the number of confirmed entangled sperm whales in 2021 is greater than the historic average, this is not completely surprising. Sperm whales hunt for food during deep dives that routinely reach depths of 2,000 feet and can remain submerged for over an hour. Because sperm whales are deep and long divers, locating and documenting an entangled sperm whale can be more challenging than other species that surface more regularly.



Responders from the Center for Coastal Studies respond to an entangled humpback whale on June 9, 2021. Credit: Center for Coastal Studies; NOAA Permit No. 18786.

Reported Locations of Confirmed Entangled Whales

In 2021, large whale entanglements were first reported and confirmed off the coast of 13 states. Seventy percent of all confirmed live whale entanglements were observed and reported off the coast of three states: 24.3 percent off the coast of Massachusetts (n=17), 24.3 percent off the coast of Alaska (n=17), and 21.4 percent off the coast of California (n=15). The initial reports of confirmed entanglements off the coast of Massachusetts were concentrated along Cape Cod and Cape Cod Bay (Figure 2). In Alaska, most initial reports of confirmed cases were reported in southeast Alaska. Many confirmed cases off the coast of California were first observed off the coast of southern California, specifically the Southern California Bight.

The location where an entangled whale is reported may be either close to where the entanglement occurred, or it may be far from the origin of the entanglement in both space and time. Whales have been documented carrying entangling gear thousands of kilometers and for many months, even years. These data also show how ocean users (e.g., whale watchers, scientific researchers) in particular geographic areas may help whales coast-wide, as the high number of observed and confirmed entanglement cases from these spots can be used to identify impacts from a much larger area as the entangling gear is identified and matched to a different geographic region.

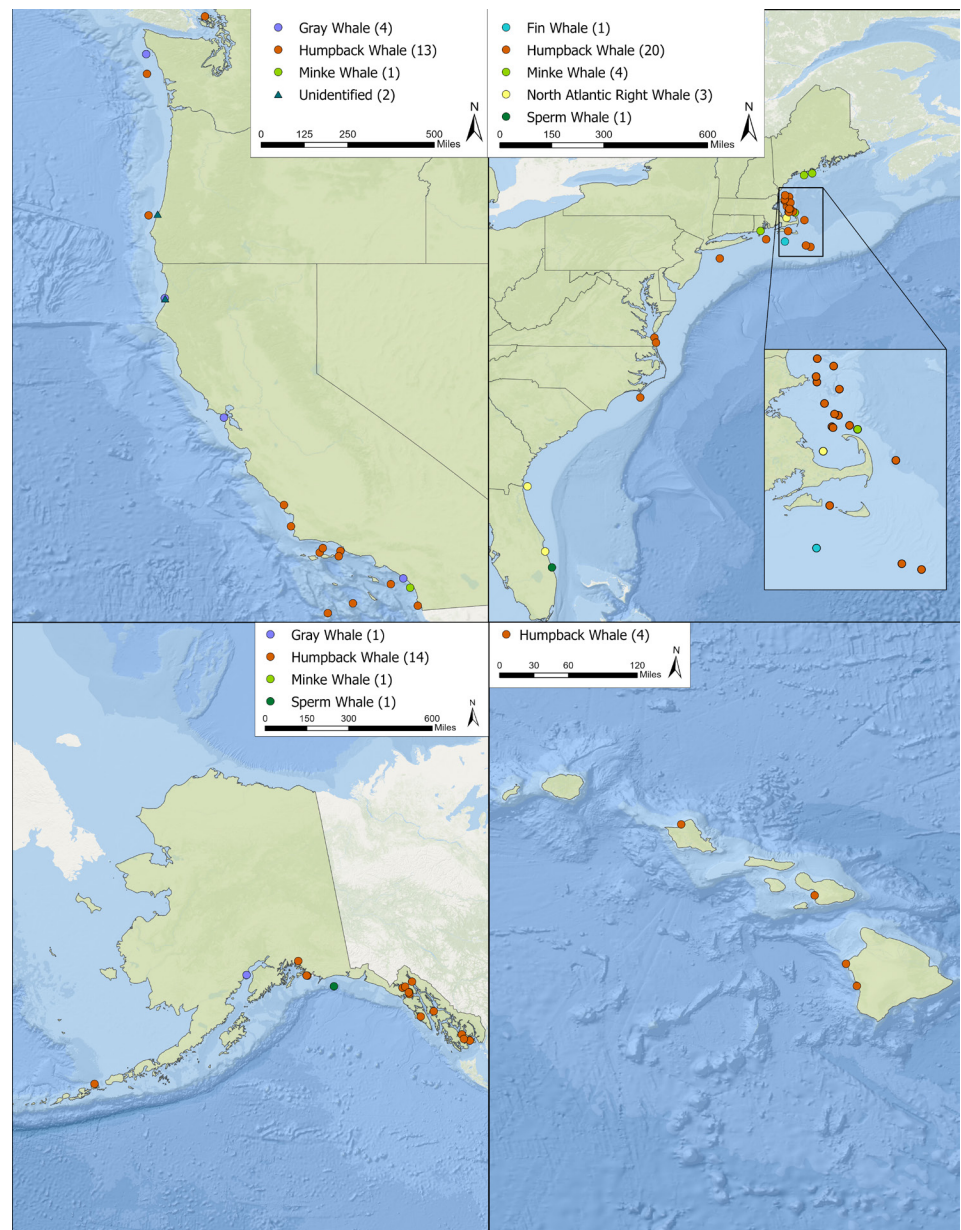


Figure 2. The locations of all confirmed live and dead large whale entanglements in U.S. waters in 2021. Note that whales may be reported either near or far from where the entanglement occurred, as they have been known to travel great distances while entangled. No large whale entanglements were confirmed in the U.S. Caribbean or Pacific Island Territories in 2021.

Sources of Entanglements

NOAA Fisheries continues to further enhance the investigation of sources of entanglements. By identifying the source of entangling fishing gear, NOAA Fisheries can work with fishermen and coastal communities to identify areas, fisheries, and gear configurations that are more likely to result in whale entanglements. These data can help NOAA Fisheries better understand the threat of entanglement in order to mitigate the risk to, and its impacts on, whales and fishermen alike. Fifty one percent (n=36) of confirmed live and dead large whale entanglement cases in 2021 involved commercial or recreational fishing gear (e.g., buoys with identifiable marks, traps, nets, and monofilament line). The remaining cases in 2021 involved line that could not be directly attributed to a fishery or other source (i.e., no clear evidence of traps, nets, buoys without identification, or other gear with a known source). Although various marine industries introduce gear into the ocean (e.g., ropes, lines, nets, chains, and cables), one of the most common sources of line is commercial and recreational fishing. Therefore, it is likely some of the cases involving only line that could not be identified to a specific source were related to fishing activities.

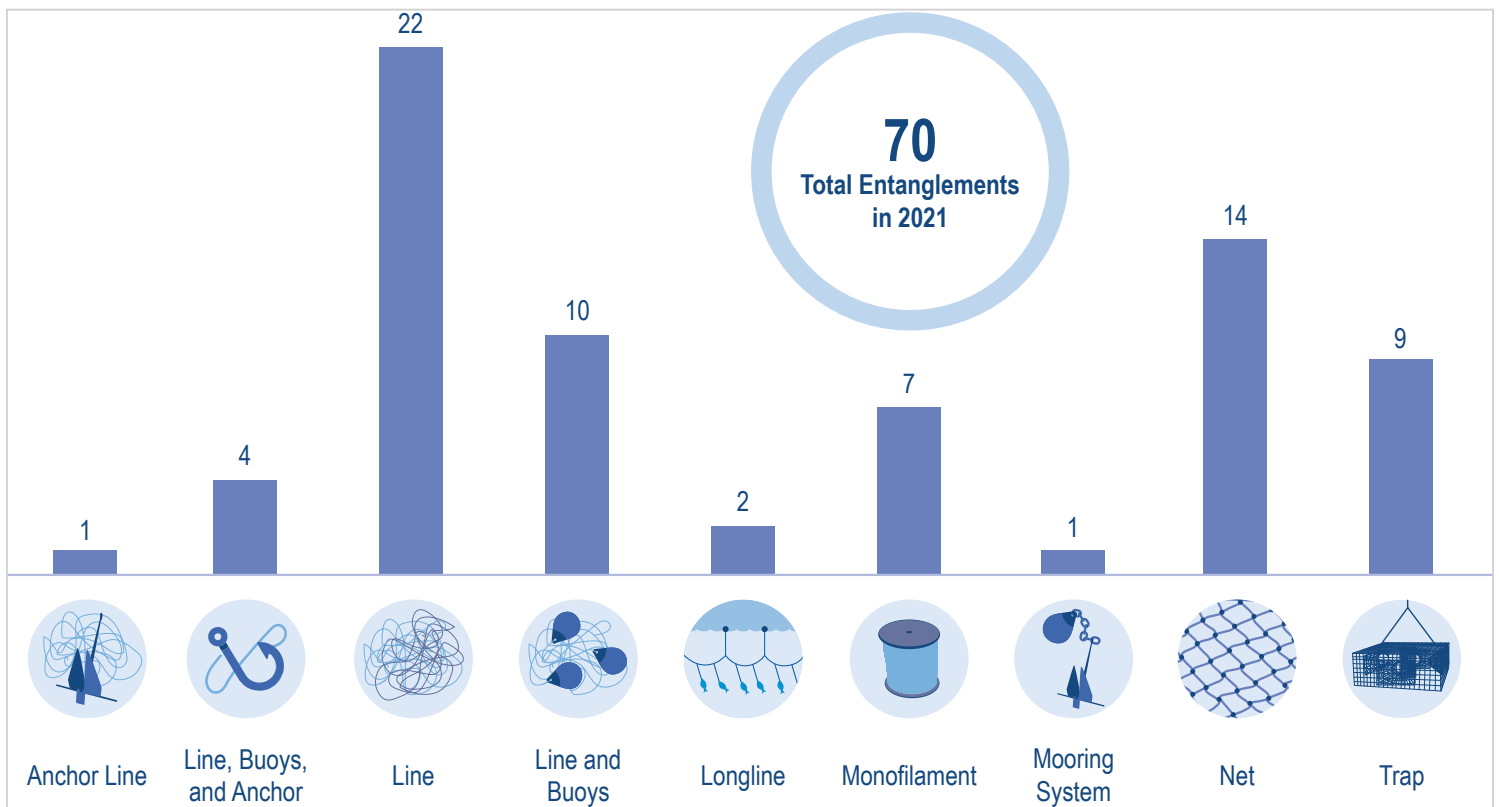


Figure 3. The number of different entanglements by type.



An entangled humpback whale first observed off Santa Barbara, California on August 28, 2021. While entanglements may appear straightforward when viewed from the surface, they are often complex and involve many wraps that are not easily removed without specialized equipment. This whale has both brown kelp and green line on its fluke. The brown kelp will fall off quickly, but the green line will likely stay on the whale without intervention. Credit: Newport Coastal Adventures Whale Watch; NOAA Permit No. 18786.

Responder Levels

Responders are categorized into five levels, based on training and expertise:

Level 1 and 2 responders are trained to assess entangled large whales and may be asked to assist in entanglement response activities by tracking and documenting entangled whales from a distance.

Level 3 responders closely approach entangled whales for visual health assessments, and may attach tracking devices (tags) to entangling gear so entangled whales can be followed and quickly located.

Level 4 responders use tools to cut and remove entangling gear. Level 4 responders can perform these activities on all whale species except North Atlantic right whales, as disentangling this species is particularly dangerous.

Level 5 responder duties are similar to Level 4. Responders may remove entangling gear from all species of whales, and have additional training and experience in responding to North Atlantic right whales.

The National Large Whale Entanglement Response Network

NOAA Fisheries coordinates the [National Entanglement Response Network](#), which is composed of five regional networks (Figure 4): Greater Atlantic (Maine to Virginia), Southeast (North Carolina to Texas and the Caribbean), West Coast (Washington to California), Alaska, and Pacific Islands (Hawai'i, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands). Network members represent a wide range of non-profit, academic, industry, and government organizations, with significant experience gained from trainings and responses. All large whale entanglement response operations on ESA-listed species are conducted under the authority of the MMPA/ESA Scientific Research and Enhancement Permit (No. 18786) issued to [NOAA Fisheries' Marine Mammal Health and Stranding Response Program](#). The trained professional expert responders who are authorized to closely approach whales are listed as Co-Investigators under the permit. Responders are categorized into five levels, based on their training and expertise:

Table 3. Number of authorized Level 3, 4, and 5 entanglement responders in 2021.

Location	Level 3	Level 4	Level 5
Atlantic Coast	30	7	8
Pacific Coast	41	13	1
Total	71	20	9

In general, Level 1 and 2 responders are fishermen, boaters, and other ocean users who are trained to recognize entangled whales and assess the situation. There are several training opportunities to familiarize ocean users with assessing and reporting entangled large whales, including a web-based course⁸ that has been developed in a partnership between NOAA and The Nature Conservancy. However, completion of this course alone does not provide a qualification as a Network member. Level 3, 4, and 5 responders are experienced ocean users—typically biologists, whale watch captains, and stranding Network members—who are authorized under the MMHSRP permit to conduct entanglement response activities after submitting documentation of their training and experience. Nationwide, 100 people were authorized as Level 3, 4, or 5 responders in 2021, and were widely distributed geographically (Figure 4). Large whales are the largest animals on Earth, and disentangling them is inherently dangerous. NOAA supports the Network by providing tools, training, protocols, funding, and oversight across the country to ensure that these activities are conducted in a manner that emphasizes and prioritizes human and animal safety.

⁸ Links to the web-based courses can be found in the [“What Members of the Public Can Do”](#) section of this report.

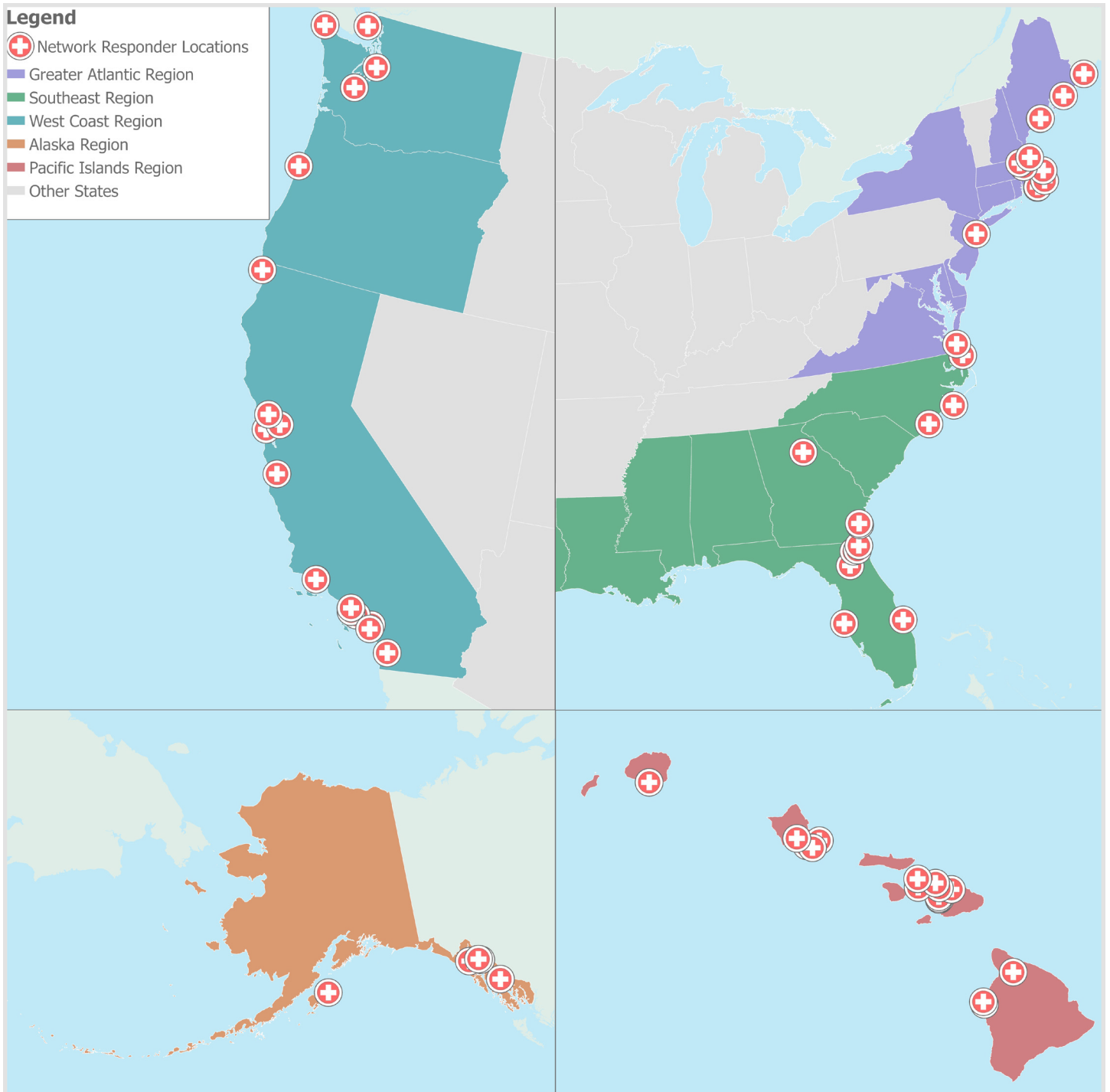


Figure 4. The locations of all Level 3, 4, and 5 responders in the Large Whale Entanglement Response Network in 2021. Note that multiple responders may be based at the same location.

Rescue Operations to Disentangle Large Whales

Entangled large whales are always considered to be in distress and may be facing a life-threatening situation, as entanglements can interfere with swimming, feeding, breathing, or other vital functions. Severe entanglements cause suffering and serious injuries, and can eventually lead to a painful death.⁹ Response operations are conducted not only for humane and welfare reasons to provide relief to individually entangled animals, but also to provide an important opportunity to collect information that may reduce the risk of future entanglements, which ultimately aids in the conservation and management of the species. This is particularly important for species that are listed as threatened or endangered under the ESA because each individual contributes to population recovery. Although the majority of rescues in 2021 involved species with populations that are not listed as threatened or endangered, the experiences and lessons learned by Network members are invaluable. Response to those cases helped Network members maintain and hone their skills so future responses to endangered species, like North Atlantic right whales, can be conducted as skillfully and safely as possible. Therefore, disentangling all large whale species, regardless of their ESA status, will ultimately have a positive impact on the conservation of threatened and endangered species.

While 67 entangled whales were initially reported alive, three died before the Network could mount a response. The Network mounted a minimum of 21 responses to the remaining 64 confirmed reports of entangled, free-swimming or anchored whales, which resulted in the full or partial disentangling of 11 individual animals (Figure 5). Unfortunately, one whale that was partially disentangled, a [North Atlantic right whale](#) (#3920, also known as “Cottontail”), was later found dead (the 34th North Atlantic right whale to have been confirmed dead during the ongoing UME). Similarly, a [minke whale in Alaska](#) became entangled in a mooring line and, after dragging the boat and anchor for a half mile, seemed to have self-released. However, the whale was found dead days later. These cases highlight that even when entanglements are fully or partially removed from whales, the whale may be too debilitated to recover from its injuries.

One of the 21 whales that received a Network response shed their gear prior to Network intervention. In addition, 11 other whales were documented to have shed the entangling gear on their own, and therefore, did not receive a Network response. The Network mobilized a response for an additional nine live whales reported to regional entanglement hotlines, but were unsuccessful in locating those animals. One of the nine animals was later confirmed dead, and the outcome of the remaining eight cases is not known; they may have remained entangled, died, or shed the entangling gear. The Network was unable to mount a response in the remaining 27 cases due to the location of the report (e.g., the whale was too far offshore to mount an effective response), the conditions (i.e., reports received late in the day or during bad weather), or local COVID-19 pandemic safety restrictions.

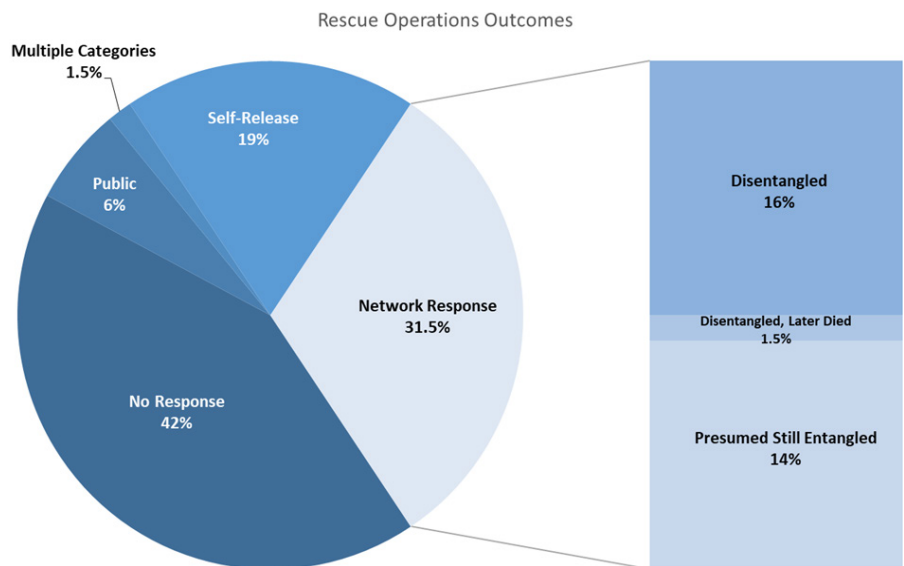


Figure 5. The known outcomes of all 64 free-swimming entangled large whales that were confirmed entangled in 2021 and did not die before a response could be mounted. North Atlantic right whale #3560 (also known as “Snow Cone”) is included in multiple categories, as a member of the public removed a minimal amount of gear and the Network removed a substantial amount of gear.

⁹ Moore, M.J. and Van der Hoop, J.M., 2012. The painful side of trap and fixed net fisheries: chronic entanglement of large whales. *Journal of Marine Sciences*.



An entangled North Atlantic right whale, Snow Cone (known individual #3560), and her calf. Snow Cone was first documented as entangled in Cape Cod Bay, Massachusetts, in March 2021. She was then documented with a calf during an aerial survey on December 2, 2021, near Cumberland Island, Georgia. Credit: Georgia Department of Natural Resources; NOAA Permit No. 20556.

Five cases involved unauthorized members of the public attempting to disentangle large whales.¹⁰ While likely well-intentioned, these responses needlessly put members of the public and the whale at risk of serious injury or death. In one high-profile case involving an entangled [North Atlantic right whale mother with a calf](#) (#3560, also known as “Snow Cone”), a member of the public put themselves in unnecessary danger to remove only a small amount of gear from the whale. Another case from Alaska further highlights the danger that untrained and unauthorized members of the public put themselves in when they take matters into their own hands. A fisherman in Alaska accidentally caught a gray whale in his net, and attempted to free the whale on his own without asking the large whale entanglement Network for assistance. The fisherman said that the whale looked calm when he tried to cut his net off the animal, but it suddenly reacted and seriously injured his hand. The fisherman had to leave the scene immediately without removing all of his gear so that he could go to the local emergency room. The whale, and remaining gear, have not been resighted. These cases highlight that disentangling large whales is dangerous. Additionally, as seen in these two cases, responses by untrained members of the public typically do not free the animal from the lethal part of the entanglement (i.e., only some gear is removed), and reduce the chances of experienced Network response. Cutting off trailing gear and buoys, which is typically what the public is able to do, makes it harder to relocate and disentangle the animal. Additionally, experienced disentanglement teams prioritize the order in which specific cuts should be made to increase the likelihood of all gear being removed. Finally, Network members are properly trained on the types of data that should be collected from entangled whales and have specialized equipment such as underwater cameras for documentation. These data are often not recorded properly by members of the public, which may hamper efforts to effectively address the threat of entanglement to large whales. Therefore, NOAA Fisheries and our partners urge the public to contact their regional entanglement hotlines to alert trained and equipped members of the Network if they encounter an entangled whale instead of taking matters into their own hands.

For more information on why you should let qualified experts respond to entangled whales, please visit: <https://www.fisheries.noaa.gov/feature-story/let-qualified-experts-respond-entangled-whales>.

¹⁰ Section 101(d) of the MMPA allows “Good Samaritans” to assist entangled marine mammals under special conditions. However, since the ESA does not have a comparable provision, the “Good Samaritan Exemption” does not apply to ESA-listed species of large whales. Thus, only responders authorized under MMPA/ESA Permit No. should attempt rescues of ESA-listed species. Due to human safety concerns including serious injury and death, we further recommend that only professionally trained responders attempt whale disentanglements, even if legal under the MMPA.

Only trained and permitted responders should attempt to disentangle or closely approach an entangled large whale.

Photo or Video Documentation

Photos or videos of the whale (from a safe and legal distance of at least 100 yards, **unless greater restrictions apply**) provide key information to entanglement responders. **Only trained and permitted responders should attempt to disentangle or closely approach an entangled large whale.** Whales are unpredictable and attempting to remove an entanglement is extremely dangerous. Entanglement response in the U.S. should only be conducted by members of the Network who have been trained and authorized by NOAA Fisheries.

What Members of the Public Can Do

The Network relies on reports of entangled whales from the public. If you encounter a whale that may be entangled, please contact your local network immediately via the 24/7 regional hotline or contact the U.S. Coast Guard on VHF CH-16.

Regional Entanglement Hotlines

Region	Phone Number
Maine through Virginia	1-866-755-6622
North Carolina through Texas and the Caribbean	1-877-942-5343
California, Oregon, and Washington	1-877-SOS-WHAlE (1-877-767-9425)
Alaska	1-877-925-7773
Hawai'i	1-888-256-9840

Information Needed When Reporting

When reporting an entangled whale, please include the following information:

- 1. Location of the animal.**
- 2. A detailed description of the entangling gear or debris.**
- 3. Where the entanglement is located on the animal.**
- 4. The direction and speed the whale is traveling, and whether it is solitary or with other whales.**
- 5. The behavior of the whale.**
- 6. Species of the whale, if known.**
- 7. The approximate size and condition of the whale.**
- 8. Photos and videos, if taken.**



An entangled subadult humpback whale that was documented off Maui, Hawai'i on March 9, 2021. The orange patches on the whale's skin indicate that the whale is in poor health, possibly as a result of the stress from the entanglement. Credit: NOAA; Permit # 18786.

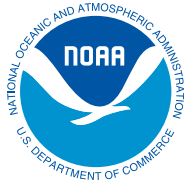
Regional Level 1 Responder Courses

If you are interested in learning more about the Network, our [free web-based Level 1 Responder course](#) is available to the public. This course, which was developed in a partnership between NOAA and The Nature Conservancy, will familiarize you with assessing and reporting entangled large whales. Completion of this course alone does not provide qualification as a Network member.

Additional References

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- Van der Hoop, Julie, Peter Corkeron, and Michael Moore. "[Entanglement is a costly life-history stage in large whales.](#)" *Ecology and evolution* 7.1 (2017): 92-106.
- [Global Entanglement Response Network.](#)

Marine Mammal Health and Stranding Response Program
Marine Mammal and Sea Turtle Conservation Division
Office of Protected Resources



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An entangled North Atlantic right whale, Snow Cone (known individual #3560). Snow Cone was first documented as entangled in Cape Cod Bay, Massachusetts, in March 2021. She was later documented with a calf in December 2021. Credit: Georgia DNR; NOAA Permit No. 18786.



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