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Resources

A “stranding” occurs when a marine mammal is either:

- Dead, whether found on the beach or floating in the water;
- Alive, on a beach, but unable to return to the water;
- Alive, on a beach, and in need of apparent medical attention; or
- Alive, in the water, and unable to return to its natural habitat without assistance.

Additional Information

For additional details, please refer to the *2018 Marine Mammal Strandings Overview: United States*.

All images were taken prior to the COVID-19 pandemic.

Photo (top): Live-stranded minke whale in Wellfleet, Massachusetts. Photo: International Fund for Animal Welfare.



2018 Marine Mammal Strandings Overview: Greater Atlantic Region

The U.S. Marine Mammal Stranding Response Network is comprised of more than 120 organizations that provide first response capabilities for cetaceans (whales, dolphins, and porpoises) and pinnipeds (seals, and sea lions) that are sick, injured, in distress, in peril, or dead. These responses are authorized and overseen by NOAA Fisheries’ Marine Mammal Health and Stranding Response Program under the Marine Mammal Protection Act.

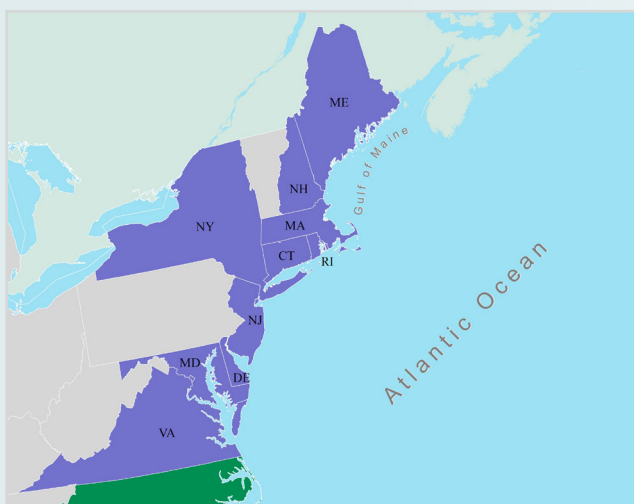


Figure GAR-1: NOAA Fisheries Greater Atlantic Region (GAR).

Greater Atlantic Region

The NOAA Fisheries Greater Atlantic Region includes 10 coastal states from Virginia to Maine (Figure GAR-1). This region encompasses approximately 17,433 miles¹ of coastline in the Northwest Atlantic, and includes large bodies of water such as the Gulf of Maine. The region contains several large major cities (New York and Boston), busy ports and high traffic areas, in addition to a well visited coastline. The 2,633 confirmed marine mammal strandings in the Greater Atlantic Region in 2018 is higher than its 12-year (2006–2017) average ($n=1,207 \pm 258$).

1 <https://coast.noaa.gov/data/docs/states/shorelines.pdf>

What Types of Marine Mammals Strand in the Greater Atlantic Region?

More than 30 different species of marine mammals can be found in the waters of New England and the Mid-Atlantic states, with the majority of stranding reports involving pinnipeds (Figure GAR-2). Common pinniped species include the harbor (*Phoca vitulina*) and gray (*Halichoerus grypus*) seal (Table GAR-1 and Figure GAR-3). Arctic species, such as the harp (*Pagophilus groenlandicus*) and hooded (*Cystophora cristata*) seal, also strand within the region during certain times of the year. Small cetacean species such as the Atlantic white-sided dolphin (*Lagenorhynchus acutus*), common bottlenose dolphin (*Tursiops truncatus*), short-beaked common dolphin (*Delphinus delphis*), harbor porpoise (*Phocoena phocoena*), beaked whales (*Ziphiidae* spp.), and pilot whales (*Globicephala melas* spp.) are also known to strand (Figure GAR-3). Toothed whales and small cetaceans are highly social species and are at risk of mass stranding. Mass stranding response is a large component of the regional response efforts conducted by the Stranding Network, particularly on Cape Cod—a hot spot for mass stranding events. The region also has many large whale species including blue (*Balaenoptera musculus*), fin (*Balaenoptera physalus*), sei (*Balaenoptera borealis*), right (*Eubalaena glacialis*), humpback (*Megaptera novaeangliae*), minke (*Balaenoptera acutorostrata*), and sperm (*Physeter macrocephalus*) whales.

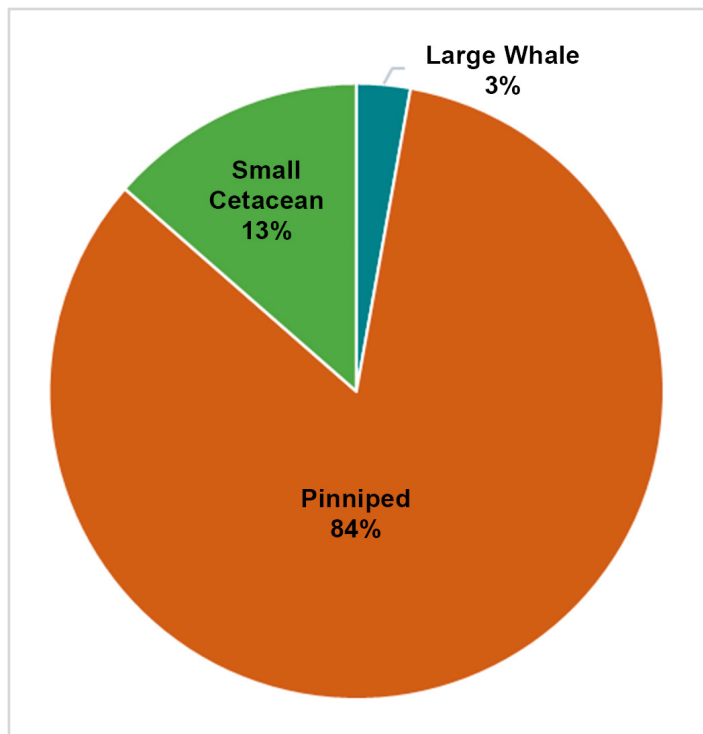


Figure GAR-2: Greater Atlantic Region marine mammal strandings, 2018 (n=2,633, including n=10 unknown cetaceans not shown).

Table GAR-1: Five most frequently stranded marine mammal species in the Greater Atlantic Region, 2018.

Species	Confirmed Stranding Reports 2018	12-Year Average \pm Standard Deviation ² (2006-2017)
Harbor Seal	1,391	390 + 128
Gray Seal	603	177 + 63
Common Bottlenose Dolphin	160	161 + 177
Short-beaked Common Dolphin	83	125 + 90
Harp Seal	73	119 + 65

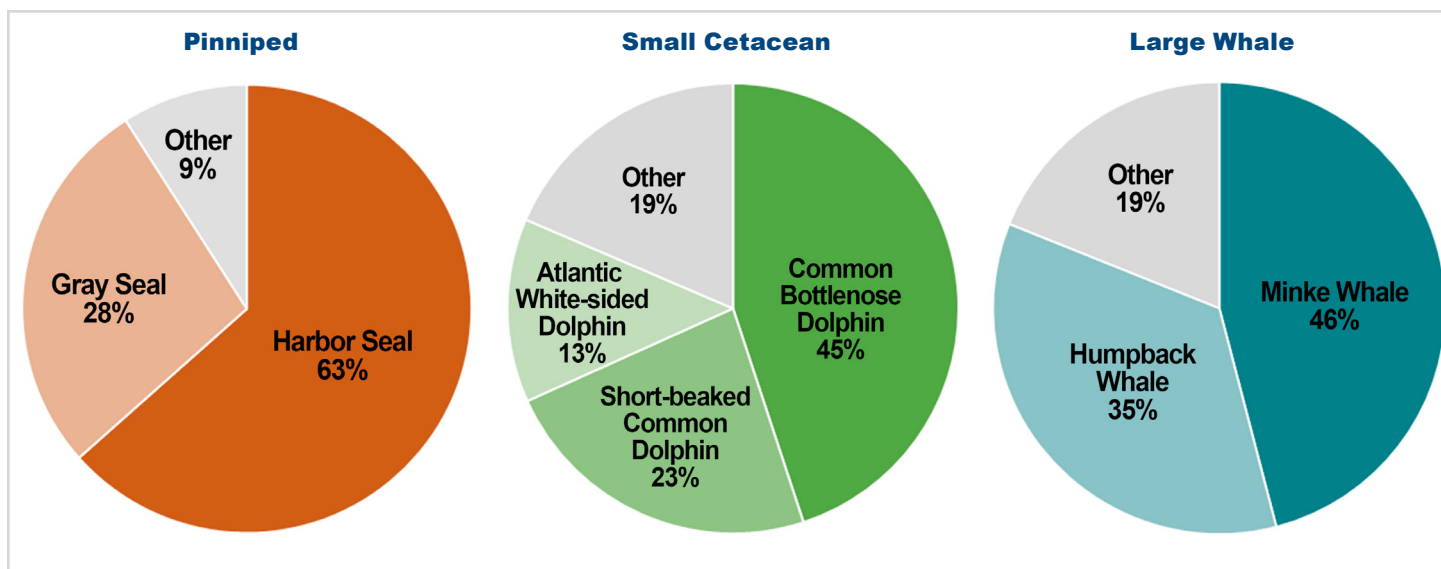


Figure GAR-3: Greater Atlantic Region marine mammal strandings, by species, 2018 (n=2,633). Pinniped (n=2,193), small cetacean (n=356), large whale (n=74), and unknown cetacean (n=10, not shown).

2 A standard deviation is a measure used to quantify the amount of variation within a set of values.

Species in the Spotlight



North Atlantic Right Whale³ (*Eubalaena glacialis*)

North Atlantic right whales are a critically endangered species and one of NOAA Fisheries' "Species in the Spotlight." In the spring, summer, and into the fall, many of these whales can be found in waters off New England and further north into Canadian waters, where they feed and mate. Each fall, some individuals migrate along the East Coast of North America to calving grounds off the southeastern United States. The population has been in decline since 2010, with fewer than 350 individuals⁴ remaining and fewer than 100 breeding females. In 2017, NOAA Fisheries declared an Unusual Mortality Event (UME) after several deaths were documented in the United States and Canada. **In 2018, the UME was still ongoing and three dead and five seriously injured⁵ whales were additionally documented. At the end of 2018, 27 individual right whales (20 confirmed dead, 7 seriously injured) were included in the UME for the two-year period (2017 and 2018 combined).** The UME continued past 2018; 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/2017-2021-north-atlantic-right-whale-unusual-mortality-event>



Photo (above): A carcass of an endangered North Atlantic right whale floating off Martha's Vineyard, Massachusetts. Photo: Courtesy of the general public, forwarded by the United States Coast Guard.

³ All species illustrations are not to scale relative to each other.

⁴ For the most recent estimates, please see: <https://www.fisheries.noaa.gov/species/north-atlantic-right-whale>.

⁵ The MMPA requires NOAA Fisheries to distinguish between injuries to marine mammals that are serious and those that are non-serious. Serious injury determination is a detailed assessment process that uses data, such as body condition and parameters of the human-caused injury, collected from living whales to determine an individual whale's prognosis for survival. A serious injury designation indicates a whale is likely to die from those injuries (although it was alive at its last sighting).

When Did Marine Mammals in the Greater Atlantic Region Strand in 2018?

Although marine mammals stranded year-round in the Greater Atlantic Region, stranding events were more frequent in the spring and summer months (Figure GAR-4). The spike in pinniped strandings beginning in July 2018 can be attributed to the Northeast Pinniped Unusual Mortality Event (UME) which saw elevated strandings of harbor and gray seals across Maine, New Hampshire, and Massachusetts. In general, there is a large influx of marine mammals off the coast during the spring and summer months, as the Gulf of Maine and the Bay of Fundy provide spring feeding grounds for many resident and migratory species. In winter months, ice seals such as harp and hooded seals migrate from Canada and Greenland to New England waters, and have sometimes ventured further to southern states.

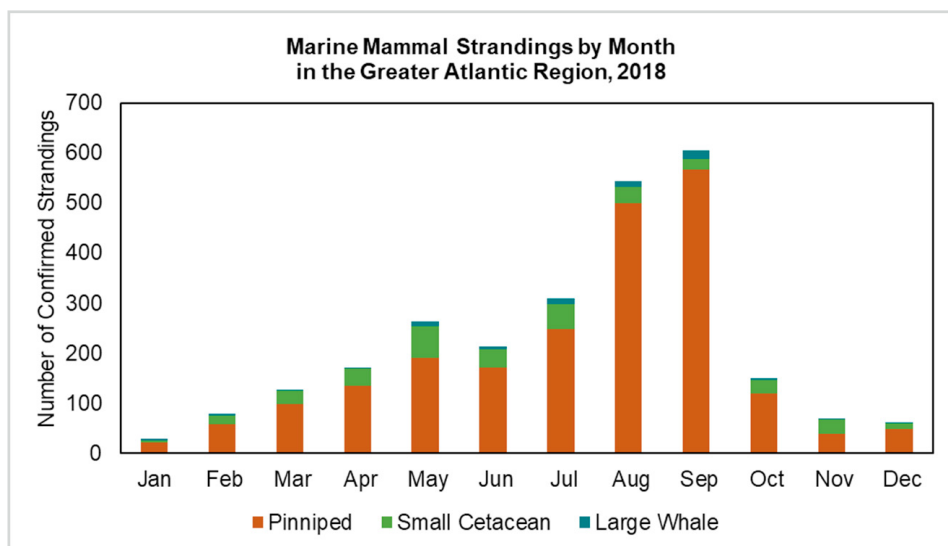


Figure GAR-4: Seasonality of marine mammal strandings in the Greater Atlantic Region, 2018.

Are Marine Mammals in the Greater Atlantic Region Stranding Alive or Dead?

In 2018, a large proportion (74 percent) of the strandings reported to the network in the Greater Atlantic Region involved dead animals (Figure GAR-5). The Stranding Network tries to gather as much information as they can from examining carcasses and live-stranded animals to better understand the species involved, as well as any population threats or pressures they may be facing. Necropsies provide tissues to help investigate diseases and parasites and provide critical life history information. Stranding response also allows the network to document any human interaction cases such as vessel collisions, entanglements, and fishery interactions. Based on the recommendations of authorized veterinarians or professionals, some live animals were transported to rehabilitation facilities; others were poor candidates for rehabilitation and either died on their own or were euthanized. Of the 143 animals transferred to rehabilitation facilities in 2018 (pinniped=143), 64 percent (n=92) were released.

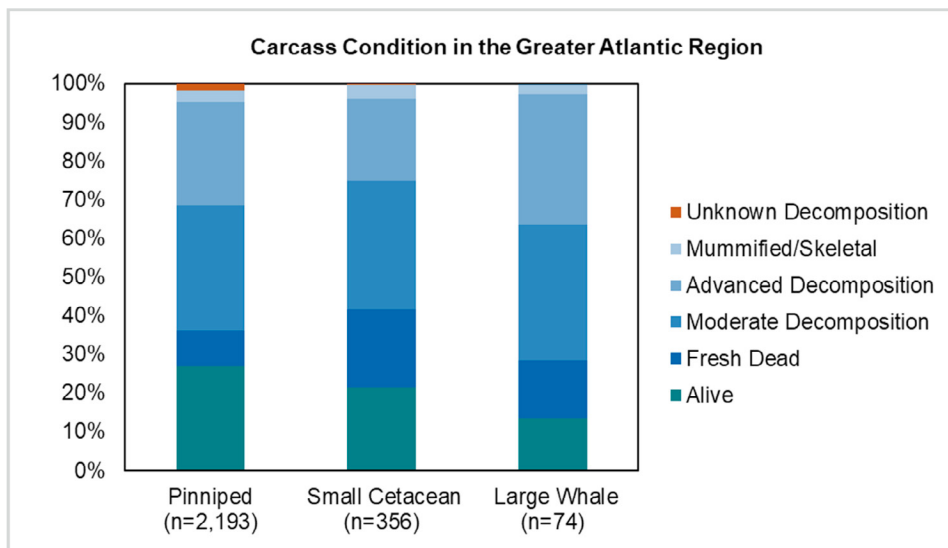


Figure GAR-5: The condition of stranded marine mammals on initial observation in the Greater Atlantic Region, 2018.

What Types of Unusual Mortality Events Were Occurring in the Greater Atlantic Region?

Two new Unusual Mortality Events (UMEs) were declared in the Greater Atlantic Region in 2018:

Atlantic Minke Whale UME



First Declared: Although not officially declared until 2018, elevated minke whale strandings began in 2017

Number of new cases in 2018: 30

Total number of cases (2017 and 2018 combined): 57

Primary Causes and Findings: Suspect human interaction (entanglement) and Suspect infectious disease. Some examined animals had suspected or confirmed evidence of human interaction (entanglement), while others have had findings of suspected or confirmed infectious disease

Locations of Cases: U.S. Atlantic Ocean

Protected Status: Not listed as threatened or endangered under the Endangered Species Act

Northeast Pinniped UME



Harbor Seal



Gray Seal

First Declared: 2018

Number of new cases in 2018: ~1,416

Primary Cause and Findings: Infectious disease. Based on tests conducted so far, the main pathogen found in the seals is phocine distemper virus (a type of morbillivirus)

Locations of Cases: U.S. Atlantic Ocean, Maine—New Jersey

Protected Status: Neither pinniped species are listed as threatened or endangered under the Endangered Species Act

More information about UMEs is available at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-unusual-mortality-events>



Photo (left): A harbor seal "Edelman" is released on a beach in Charlestown, Rhode Island following a successful rehabilitation. Photo: Mystic Aquarium.

In 2018, there were also two ongoing (previously declared) large whale UMEs involving humpback whales and North Atlantic right whales.

North Atlantic Right Whale UME



First Declared: 2017

Status in 2018: Ongoing

Number of new cases in 2018: 8 (3 dead and 5 seriously injured)

Total number of cases (2017 and 2018 combined): 27 (20 dead and 7 seriously injured)

Primary Cause(s): Human interaction (vessel strike, entanglement in rope and gear)

Locations of Cases: U.S. and Canadian Atlantic, including the Gulf of St. Lawrence

Protected Status: Listed as endangered under the Endangered Species Act (throughout its range)

Atlantic Humpback Whale UME



First Declared: Although not officially declared until 2017, elevated humpback whale strandings began in 2016

Status in 2018: Ongoing

Number of new cases in 2018: 25

Total number of cases (2016, 2017, and 2018 combined): 28

Primary Cause(s): Suspect human interaction (vessel strike)

Locations of Cases: U.S. Atlantic Ocean

Protected Status: In the U.S Atlantic Ocean, the population is not listed as threatened or endangered under the Endangered Species Act

These UMEs, particularly the Northeast Pinniped UME, are largely responsible for the 2018 stranding rate being elevated in the Greater Atlantic Region compared to its historical baseline. More information about UMEs is available at:

<https://www.fisheries.noaa.gov/national/marine-mammal-protection/marine-mammal-unusual-mortality-events>

Photo (right): Responders from the Marine Education, Research and Rehabilitation Institute examine a humpback whale carcass to determine the cause of death. Photo: Courtesy of Marta Nammack, forwarded by Marine Education, Research and Rehabilitation Institute.



What Can Members of the Public Do?



A rescued harbor seal, "Marmalade," during rehabilitation at the National Aquarium in Baltimore. Photo: Theresa Keil/National Aquarium.

Greater Atlantic Regional 24/7 Hotline

The Marine Mammal Health and Stranding Response Program relies on reports of stranded marine mammals by the public. If you come across a stranded marine mammal, please report it to your Greater Atlantic regional 24/7 hotline.

Hotline: (866) 755-6622

Report a Stranding

When reporting a stranded marine mammal, please include the following information:

- Date
- Location of stranding (including latitude and longitude)
- Number of animals
- Condition of the animal (alive or dead)
- Species (if known)

Only trained and permitted responders should approach or pick up a stranded marine mammal.

Photos or videos (from a safe and legal distance of 100 yards, unless greater restrictions apply) can also provide valuable information to Network responders. Only trained and permitted responders should approach or pick up a stranded marine mammal. You can also download the Dolphin & Whale 911 Stranding App in the Apple Store to help report a stranding.

Get Involved

The National Stranding Network relies on government, private, and public support to conduct its vital work to save animals in distress and understand causes of injuries and mortalities. You can make a difference by contacting your local Stranding Network (list available at: <https://www.fisheries.noaa.gov/report>) to see how you can get involved.

Only confirmed stranding activities involving species under the jurisdiction of NOAA Fisheries (cetaceans and pinnipeds, except walrus) are included in this report. All data were obtained, analyzed, and validated from the NOAA Fisheries National Marine Mammal Stranding Database. Any duplicate events, and entries of entangled large whales, were removed from the following analyses. All data and information described within this report are correct as of September 22, 2020 (when the data query of the National Stranding Database was performed). All photographs were taken under Stranding Agreement, Section 109(h) authority, or NMFS research permits.



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