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.

For additional details, please refer to the 2019 Marine Mammal Strandings Overview: United States.

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

Photo (top): A stranded harbor seal pup rescued in Maine was transported to Massachusetts for rehabilitation in a multi-agency effort by College of the Atlantic, Seacoast Science Center, and National Marine Life Center. Photo: Seacoast Science Center.

2019 Marine Mammal Strandings Overview: Greater Atlantic Region

The U.S. Marine Mammal Stranding Response Network comprises 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.

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 miles of coastline in the Northwest Atlantic, and includes large bodies of water such as the Gulf of Maine. The region contains several major cities with busy ports and high vessel traffic areas, in addition to a well-visited coastline. The 2,112 total confirmed marine mammal strandings in the Greater Atlantic Region in 2019 is higher than its 13-year (2006–2018) average (n=1,317 ± 466).

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

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 gray (*Halichoerus grypus*) and harbor (*Phoca vitulina*) 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 common bottlenose dolphin (*Tursiops truncatus*), short-beaked common dolphin (*Delphinus delphis*), harbor porpoise (*Phocoena phocoena*), and Atlantic white-sided dolphin (*Lagenorhynchus acutus*) are also known to strand (Figure GAR-3).

Some species of toothed whales and small cetaceans are highly social 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 humpback (*Megaptera novaeangliae*), minke (*Balaenoptera acutorostrata*), fin (*Balaenoptera physalus*), sei (*Balaenoptera borealis*), right (*Eubalaena glacialis*), and sperm (*Physeter macrocephalus*) whales.

![Figure GAR-2: Greater Atlantic Region marine mammal strandings, 2019 (n=2,112, including n=14 unknown cetaceans not shown).](image)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Gray Seal</td>
<td>568</td>
<td>209 ± 133</td>
</tr>
<tr>
<td>Harbor Seal</td>
<td>484</td>
<td>467 ± 304</td>
</tr>
<tr>
<td>Harp Seal</td>
<td>397</td>
<td>116 ± 64</td>
</tr>
<tr>
<td>Common Bottlenose Dolphin</td>
<td>153</td>
<td>160 ± 169</td>
</tr>
<tr>
<td>Short-beaked Common Dolphin</td>
<td>135</td>
<td>122 ± 86</td>
</tr>
</tbody>
</table>

![Figure GAR-3: Greater Atlantic Region marine mammal strandings, by species, 2019 (n=2,112). Pinniped (n=1,530), small cetacean (n=506), large whale (n=62), and unknown cetacean (n=14, not shown).](image)

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 Whale\(^3\) (*Eubalaena glacialis*)

North Atlantic right whales are a critically endangered species and one of NOAA Fisheries’ “Species in the Spotlight.” In the spring and 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 individuals\(^4\) remaining and fewer than 100 breeding females as of 2019 (for more updated information please see [Pace 2021](https://www.fisheries.noaa.gov/species/north-atlantic-right-whale)). In 2017, NOAA Fisheries declared an Unusual Mortality Event (UME) after several deaths were documented in the United States and Canada. In 2019, the UME was still ongoing and an additional 10 dead stranded whales and 1 seriously injured\(^5\) individual were documented. At the end of 2019, 38 individual right whales (30 confirmed dead, 8 seriously injured) were included in the UME for the 3-year period 2017–2019. The UME continued past 2019; for more information on the current status of the North Atlantic right whale UME, please visit:


Photo (right): The carcass of a North Atlantic right whale, later identified as “Snake Eyes,” was seen floating off Long Island, New York in September 2019. Prior to his death, he was last seen in early August, 2019, severely entangled in the Gulf of St. Lawrence, Canada. Photo: Atlantic Marine Conservation Society.

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3 Species illustrations throughout this report 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](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 2019?

Although marine mammals stranded year-round in the Greater Atlantic Region, stranding events were more frequent in the early spring and summer (Figure GAR-4). In general, there is a large influx of marine mammals off the coast during this time, as the Gulf of Maine and the Bay of Fundy provide spring feeding grounds for many resident and migratory species. In 2019, harp seal strandings occurred in January through May when the species was seasonally present, and peaked in February and March. This species, and others such as hooded seals (collectively termed ice seals), migrate from Canada and Greenland to New England waters, and have sometimes ventured further south to southern states. Small cetaceans such as the harbor porpoise also saw elevated stranding numbers in March. Compared to pinnipeds and small cetaceans, large whales stranded in much fewer numbers and stranded more frequently in the late summer and early fall.
Are Marine Mammals in the Greater Atlantic Region Stranding Alive or Dead?

In 2019, the majority (64 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 as well as live-stranded animals to better understand the species involved and 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 2019 (pinniped=143), 52 percent (n=75) were released.

Figure GAR-5: The condition of stranded marine mammals on initial observation in the Greater Atlantic Region, 2019.

Photo (above): Students from College of the Atlantic recover a minke whale carcass found floating off Mount Desert Island. Photo: College of the Atlantic/Allied Whale.
What Types of Unusual Mortality Events Were Occurring in the Greater Atlantic Region?

There were four ongoing Unusual Mortality Events (UMEs) in the Greater Atlantic Region in 2019:

### Northeast Pinniped UME

<table>
<thead>
<tr>
<th>Species</th>
<th>First Declared</th>
<th>Status in 2019</th>
<th>Number of new cases in 2019</th>
<th>Total number of cases (2018–2019)</th>
<th>Primary Cause and Findings</th>
<th>Locations of Cases</th>
<th>Protected Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harbor Seal</td>
<td>2018</td>
<td>Ongoing</td>
<td>1,117</td>
<td>2,533</td>
<td>Infectious disease (harbor and gray seals); undetermined (harp seals). Based on tests conducted, the main pathogen found in the harbor and gray seals was phocine distemper virus (a type of morbillivirus)</td>
<td>U.S. Atlantic Ocean, Maine—New Jersey</td>
<td>None of these pinniped species are listed as threatened or endangered under the Endangered Species Act</td>
</tr>
<tr>
<td>Gray Seal</td>
<td></td>
<td>Ongoing</td>
<td>117</td>
<td>2,533</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Harp Seal</td>
<td></td>
<td>Ongoing</td>
<td>22</td>
<td>79</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Atlantic Minke Whale UME

<table>
<thead>
<tr>
<th>First Declared</th>
<th>Status in 2019</th>
<th>Number of new cases in 2019</th>
<th>Total number of cases (2017 – 2019)</th>
<th>Primary Causes and Findings</th>
<th>Locations of Cases</th>
<th>Protected Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Although not officially declared until 2018, elevated minke whale strandings began in 2017</td>
<td>Ongoing</td>
<td>22</td>
<td>79</td>
<td>Human interaction (entanglement) and infectious disease. Some examined animals had suspected or confirmed evidence of human interaction (entanglement), while others had findings of suspected or confirmed infectious disease</td>
<td>U.S. Atlantic Ocean</td>
<td>Not listed as threatened or endangered under the Endangered Species Act</td>
</tr>
</tbody>
</table>

First Declared: 2018

Status in 2019: Ongoing

Number of new cases in 2019: 22

Total number of cases (2017 – 2019): 79

Primary Causes and Findings: Human interaction (entanglement) and infectious disease. Some examined animals had suspected or confirmed evidence of human interaction (entanglement), while others 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
These UMEs are largely responsible for the 2019 stranding rate being elevated in the Greater Atlantic Region compared to its historical baseline. More information about UMEs is available at:


**North Atlantic Right Whale UME**

First Declared: 2017  
**Status in 2019:** Ongoing  
**Number of new cases in 2019:** 11 (10 dead and 1 seriously injured)  
**Total number of cases (2017 – 2019):** 38 (30 dead and 8 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 2019:** Ongoing  
**Number of new cases in 2019:** 27  
**Total number of cases (2016 – 2019):** 112  
**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

**Photo (left):** Stranding Network responders use heavy equipment to roll a humpback whale carcass out of the surf zone for further examination. Photo: Virginia Aquarium.
What Can Members of the Public Do?

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)

Photos or videos (note that regulations apply to certain species and areas) 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 and analyzed from the NOAA Fisheries National Marine Mammal Stranding Database, and have been verified. Any duplicate events, and entries of entangled large whales, were removed from the analyses. All data and information described within this report are correct as of May 3, 2021 (when the data query of the National Stranding Database was performed). All photographs were taken under Stranding Agreement, MMPA Section 109(h) authority, or NOAA Fisheries research permits.