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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.

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): The release of Hawaiian monk seal R333, following successful treatment and rehabilitation. R333 was accidentally hooked off Ka’ena Point, O’ahu in July 2019. Photo: Pacific Islands Fisheries Science Center.



2019 Marine Mammal Strandings Overview: Pacific Islands 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.

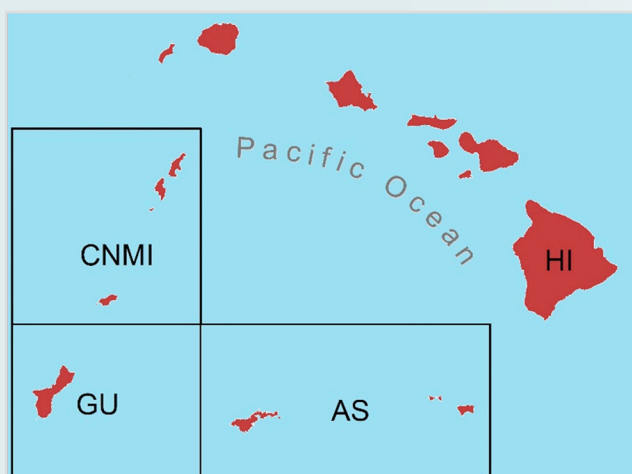


Figure PIR-1: Map of NOAA Fisheries Pacific Islands Region (PIR) including Hawaii (HI), American Samoa (AS), Guam (GU), and the Commonwealth of the Northern Mariana Islands (CNMI). Not pictured: the Pacific Remote Island Areas of Kingman Reef; Howland, Baker, Jarvis, and Wake islands; and Johnston and Palmyra atolls.

Pacific Islands Region

The NOAA Fisheries Pacific Islands Region encompasses approximately 1,494 miles¹ of coastline around the Main Hawaiian Islands, Northwestern Hawaiian Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands (Figure PIR-1). The region covers areas frequented by beachgoers (Main Hawaiian Islands), but also contains some very remote areas (Northwestern Hawaiian Islands). The 65 total confirmed marine mammal strandings in the Pacific Islands Region in 2019 is slightly higher than its 13-year. (2006–2018) average ($n=44 \pm 12$).

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

What Types of Marine Mammals Strand in the Pacific Islands Region?

At least 18 different species of marine mammals can be found in the waters of Hawaii, with the majority of stranding reports involving Hawaiian monk seals (*Neomonachus schauinslandi*), which are the only species of pinniped endemic to the Hawaiian archipelago (Figure PIR-2 and Table PIR-1). The Hawaiian monk seal is one of the most endangered species of seal in the world, with a population of around 1,400 individuals (about 300 in the Main Hawaiian Islands and 1,100 in the Northwestern Hawaiian Islands). In 2019, all pinniped strandings reported in the NOAA Fisheries Pacific Islands Region were Hawaiian monk seals (although pinnipeds from the mainland United States have been known to strand in Hawaii, such events are rare). Small cetacean species such as the pygmy killer whale (*Feresa attenuata*), spinner dolphin (*Stenella longirostris*), false killer whale (*Pseudorca crassidens*), and Cuvier's beaked whale (*Ziphius cavirostris*) also stranded in 2019 (Table PIR-1). Large whale species such as humpback (*Megaptera novaeangliae*), sperm (*Physeter macrocephalus*), and fin (*Balaenoptera physalus*) whales frequent the jurisdictional waters of the Pacific Islands Region; however, large whale strandings are relatively rare in the region, with only six large whale strandings documented in 2019 (Table PIR-1 and Figure PIR-3).

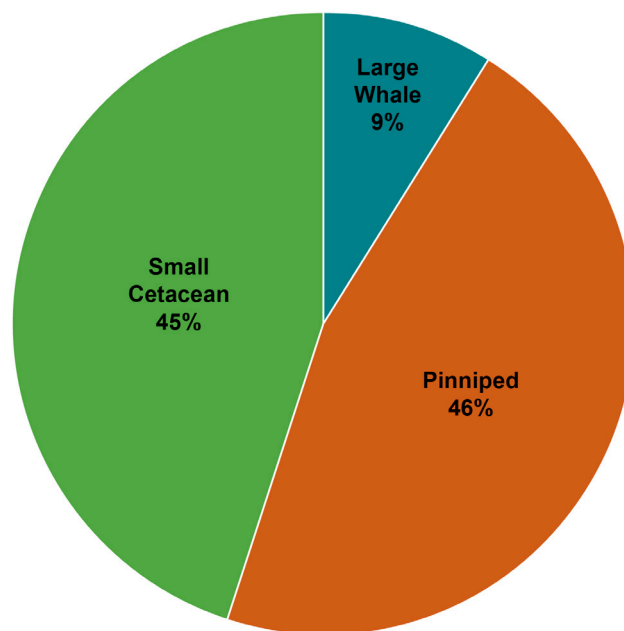


Figure PIR-2: Pacific Islands Region marine mammal strandings, 2019 (n=65).

Table PIR-1: The most frequently stranded marine mammal species in the Pacific Islands Region, 2019.

Species	Confirmed Stranding Reports 2019	13-Year Average \pm Standard Deviation ² (2006-2018)
Hawaiian Monk Seal	30	22 \pm 10
Pygmy Killer Whale ³	13	1 \pm 0
Spinner Dolphin	4	3 \pm 2
False Killer Whale	2	1 \pm 0
Cuvier's Beaked Whale	2	2 \pm 1
Humpback Whale	2	7 \pm 6
Sperm Whale	2	2 \pm 2



Photo (left): Hawaiian monk seal "RK58," a prematurely weaned pup, was brought to Ke Kai Ola following a "pup switch" with another mom-pup pair on the same beach. RK58 was released on Kauai in February 2019. Photo: The Marine Mammal Center.

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

³ This species was involved in a mass stranding event on the Hawaiian island of Maui.

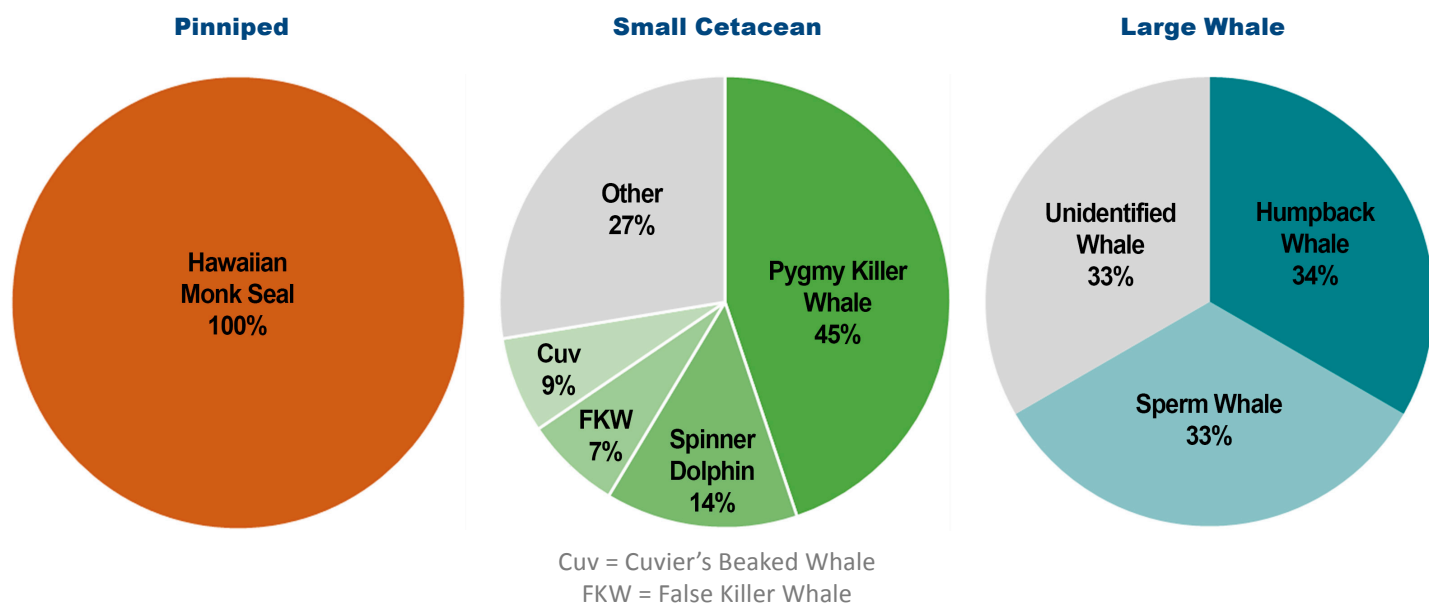


Figure PIR-3: Pacific Islands Region marine mammal strandings, by species, 2019 (n=65). Pinniped (n=30), small cetacean (n=29), and large whale (n=6).

Species in the Spotlight



Hawaiian Monk Seal (*Neomonachus schauinslandi*)

Hawaiian monk seals are a critically endangered species and one of NOAA Fisheries' "Species in the Spotlight." Found throughout the Hawaiian archipelago, they are commonly seen in the Main Hawaiian Islands, Northwestern Hawaiian Islands, and sometimes as far away as Johnston Atoll, nearly 1,000 miles southwest of Hawaii. Following a decline of the Hawaiian monk seal population over several decades, the population has grown at an average rate of about 2 percent per year since 2013, thanks to dedicated management and recovery efforts. Despite this progress, Hawaiian monk seals still face many threats, including fisheries interactions; entanglement in marine debris or derelict fishing gear, intentional harm by humans (including harassment), disease and contaminants (particularly toxoplasmosis), and male seal aggression toward females. **In 2019, 30 Hawaiian monk seals were reported stranded to the National Stranding Network.** For more information on the Species in the Spotlight initiative, please visit:

<https://www.fisheries.noaa.gov/national/endangered-species-conservation/species-spotlight-action-plan-accomplishments>

Marine Mammal Strandings by Month in the Pacific Islands Region, 2019

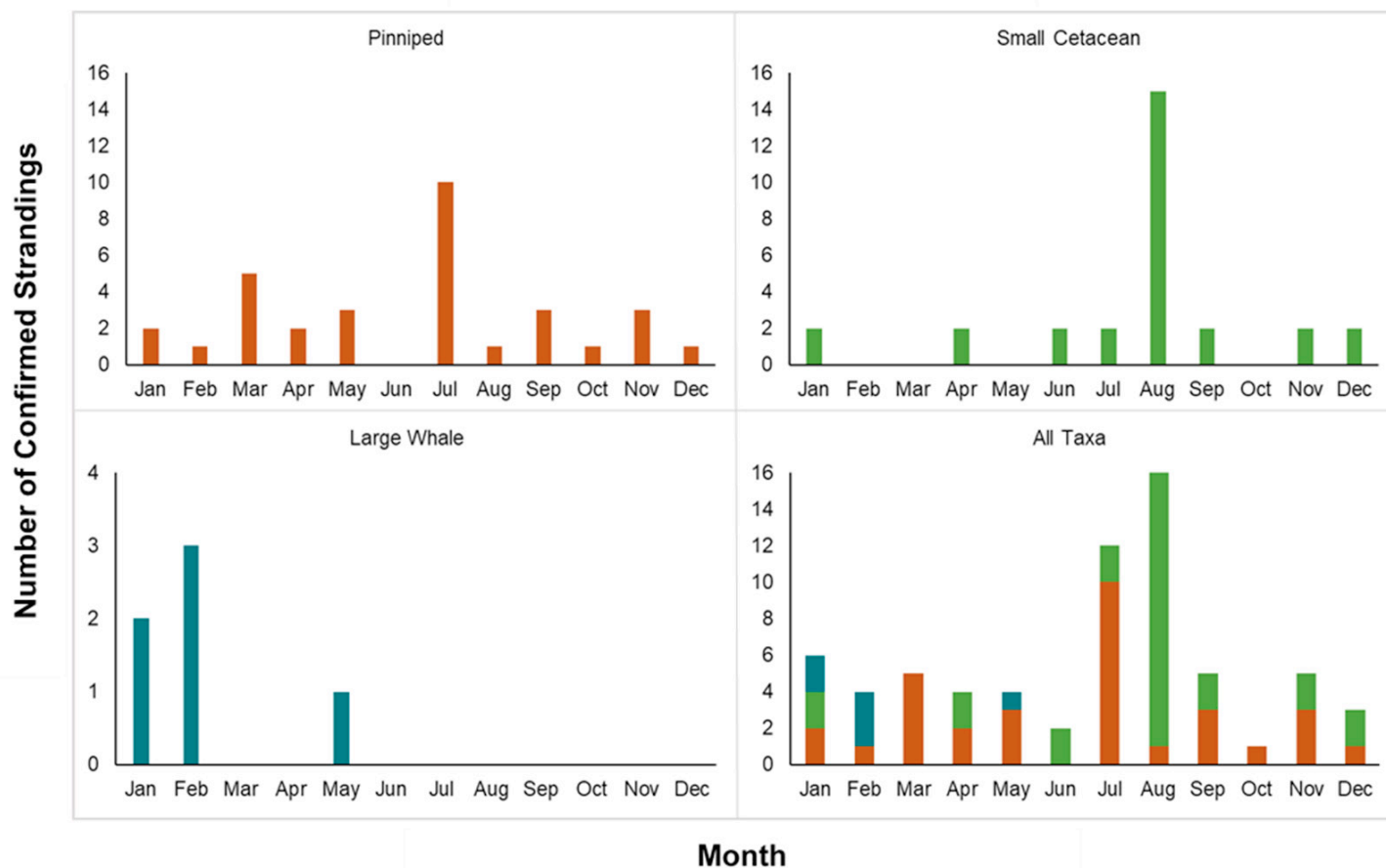


Figure PIR-4: Seasonality of marine mammal strandings in the Pacific Islands Region, 2019. Note: Scale on the Y-axis varies relative to the number of confirmed strandings for each taxon.

When Did Marine Mammals in the Pacific Islands Region Strand in 2019?

Hawaiian monk seals stranded year-round in the Pacific Islands Region. The small spike of pinniped strandings in July is likely reflective of research cruises conducted around the Northwestern Hawaiian Islands during that period, when Hawaiian monk seals suffering from malnutrition were rescued and brought into rehabilitation facilities (Figure PIR-4). The spike of small cetacean strandings in August can be attributed, in part, to a mass stranding of 11 pygmy killer whales in Ma'alaea Bay on the Hawaiian island of Maui. The Stranding Network also responded to two spinner dolphins, one striped dolphin, and one pantropical spotted dolphin (*Stenella attenuata*) in August (not associated with the mass stranding). Large whales are routinely present in the winter months, and therefore have a greater tendency to strand during that time. Humpback whales migrate to Hawaii waters in the winter months to breed and calve, so their strandings occurred between January and May before they returned to their summer feeding grounds in Alaska.

Are Marine Mammals in the Pacific Islands Region Stranding Alive or Dead?

In 2019, 72 percent of pinnipeds and 49 percent of cetaceans reported stranded to the Pacific Islands Region Marine Mammal Response Network involved live animals (Figure PIR-5), including a live-stranded humpback whale. The high percentage of live-stranded small cetaceans in 2019 can be attributed to a mass stranding of 11 pygmy killer whales in Ma'alaea Bay. Many of the live-stranded Hawaiian monk seals were animals accidentally hooked by fishing gear. Interactions with fishing gear pose a serious danger to the seals, especially if the hooks are ingested. Based on the recommendations of authorized professionals or veterinarians, some live seals were transported to Ke Kai Ola—the hospital and rehabilitation facility dedicated to Hawaiian monk seals administered by The Marine Mammal Center. Of the animals transferred to either the facilities at Ke Kai Ola on the Big Island or to the NOAA lab on Oahu in 2019 (n=9), 89 percent (n=8) were released; all were released back into the islands and regions from where they were initially rescued. The network tries to gather as much information as they can from examining carcasses and live-stranded animals to better understand the marine mammal species, as well as any population threats or pressures they may be facing.

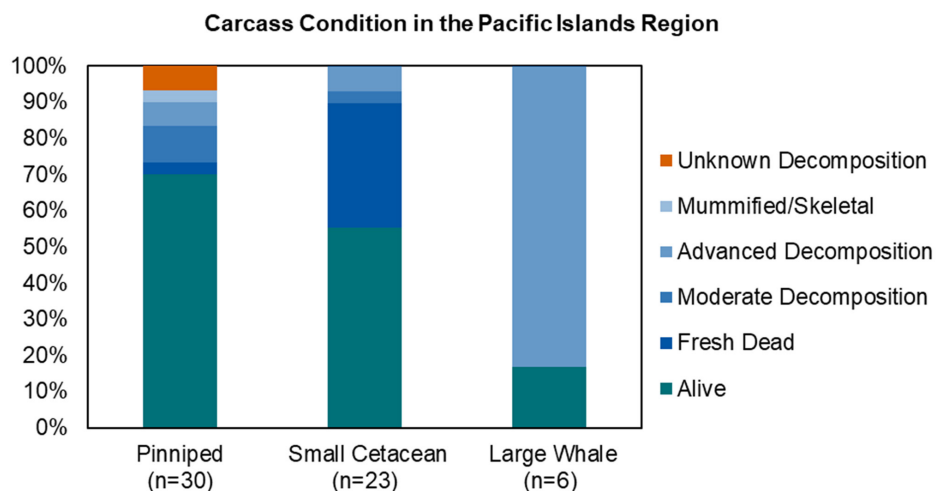


Figure PIR-5: The condition of stranded marine mammals on initial observation in the Pacific Islands Region, 2019.



Photo (left): The return of Hawaiian monk seal RK24 to the wild after the Stranding Network intervened to assess a potential hook entanglement. Photo: Pacific Islands Fisheries Science Center.

What Types of Unusual Mortality Events Were Occurring in the Pacific Islands Region?

Unusual Mortality Events (UMEs) in the Pacific Islands Region are relatively rare, and there were no new or open UME investigations underway in 2019. More information about UMEs is available at:

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



A Collaborative Effort: A Mass Stranding on Maui

On August 29, 2019, 11 pygmy killer whales stranded in Ma'alea Bay on the Hawaiian island of Maui. A stranding event of this size is a relatively rare occurrence in the Pacific Islands Region. Of the 11 individuals to strand, one stranded dead, six were refloated, and the remaining four animals were euthanized given their poor prognosis. The decision to euthanize an animal is never approached lightly and all other options are considered with veterinary professionals prior to making a decision. Although necropsies (animal autopsies) of the dead whales revealed underlying health conditions (e.g., pneumonia, lung abnormalities, enlarged lymph nodes, and infection), the cause of the mass stranding remains unclear. Weeks later, several pygmy killer whales were observed milling close to the site of the August mass stranding event; however, photo identification confirmed that these individuals were different from those refloated as part of this mass stranding.

Response to a mass stranding event is often physically and logistically challenging. In the case of this effort, several NOAA Fisheries-approved local responders collaboratively came together for these whales, including the University of Hawaii Health and Stranding Laboratory, the Hawaii Department of Land and Natural Resources: Division of Conservation and Resources Enforcement and Division of Aquatic Resources, Maui County Ocean Safety, the Pacific Whale Foundation, the Maui Police Department, in addition to NOAA Fisheries staff and trained volunteers. Hawaiian cultural practitioners were also present during the stranding event and conducted cultural protocol.



Photo (above): A mass stranding of pygmy killer whales in Ma'alea Bay, Maui. Photo: Cindy and Jeff Kern.

What Can Members of the Public Do?



Hawaiian monk seal 'Eleu eats live fish and interacts with enrichment devices during rehabilitation at Ke Kai Ola —the hospital and rehabilitation facility dedicated to Hawaiian monk seals. Photo: Sheila Latta/The Marine Mammal Center.



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Pacific Islands 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 Pacific Islands Regional 24/7 hotline.

Hotline: (888) 256-9840

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.

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

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.