

Spring 2022 Alaska Marine Mammal Stranding Newsletter



Marine
Mammal
Stranding
Network

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Reminders:

New Examiner Guide, Level A, and Human Interaction forms can be found [here](#)

24-hour stranding hotline:
1-877-925-7773



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Spring 2022 AMMSN Newsletter



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By:
Mandy Keogh

Greetings from the Stranding Coordinator

As we enter spring and summer seasons we expect to receive more reports of stranded or distressed marine mammals. The first priority continues to be to follow all local guidance including community closures, shelter in place, or other local restrictions if you consider responding to a stranding and feel free to reach out to me at any time. And a friendly reminder that we are using the new stranding forms and examiner guide. You can download the examiner guide and [new level A and human interaction forms](#).

Share the Shore: Harbor Seal Pups
 May 02, 2022
 These pups—often seen alone onshore—are not abandoned.
 Feature Story | Alaska



Premature harbor seal pup born with lanugo (natal fur) in Haines, Alaska. NOAA Permit 16786.

Seal Pupping Season Begins!
 NOAA's Alaska Region has already received reports that harbor seal pups have arrived! Pupping season is typically between May and July, but each year a few pups arrive earlier. During the pupping and nursing season, mother harbor seals will leave their pups on shore for extended periods of time while they hunt and forage. These pups are usually not abandoned, but just resting.

[Link to web story here](#)

It is seal pupping season and as a reminder to the public we will once again do outreach asking people to leave seal pups on the beach and to report to the stranding hotline if the pup seems in distress or abandoned. We have started running radio and newspaper ads once again this year as well as additional outreach, including the recent web story to the left. So far in 2022, we have received confirmed reports of four dead stranded harbor seal pups, and one ringed seal pup that needed to be relocated. We have also received reports of harbor seal pups resting on shore.

Annual Stranding Meeting



The Alaska Marine Mammal Stranding Network met virtually March 1-3, 2022. There were 25 presentations over the three morning sessions providing updates on strandings and the two ongoing Unusual Mortality Events in Alaska. The meeting also included three extended sessions on Cook Inlet beluga: Species in the Spotlight, Oil Spill Response and Planning in Alaska, and Pinniped Entanglement and Marine Debris.

A big thank you to everyone who presented and attended the meeting!



2021 Stranding Summary

In 2021, we received 254 confirmed reports of stranded marine mammals which is similar to the 258 confirmed reports in 2020. The first stranding of 2021 occurred on January 8th and was a killer whale calf that the Sun’aq Tribe of Kodiak necropsied. December 28th was the last stranding of the year with a Steller sea lion being reported on Baranof Island. As in previous years, the peak of stranding reports occurred between June and September (Fig 1). Confirmed stranding reports were fairly consistent across geographic regions, with the most reports occurring in the Arctic region (Fig 2). Table 1 and 2 summarizes the strandings by species and condition code.

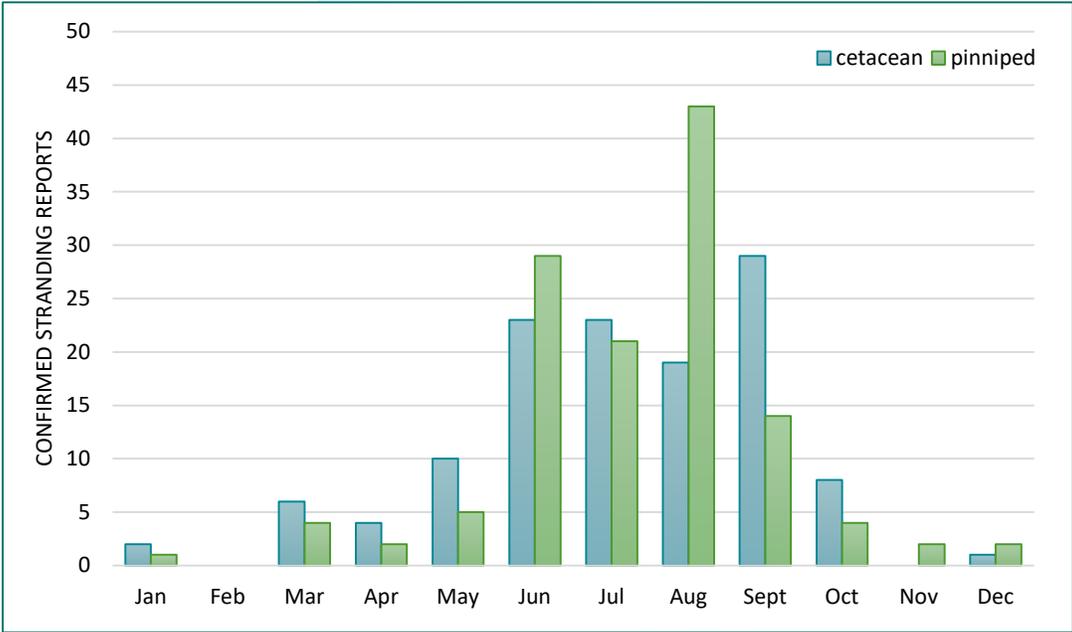


Fig 1. Confirmed stranding reports in 2021 by month for cetacean and pinnipeds.

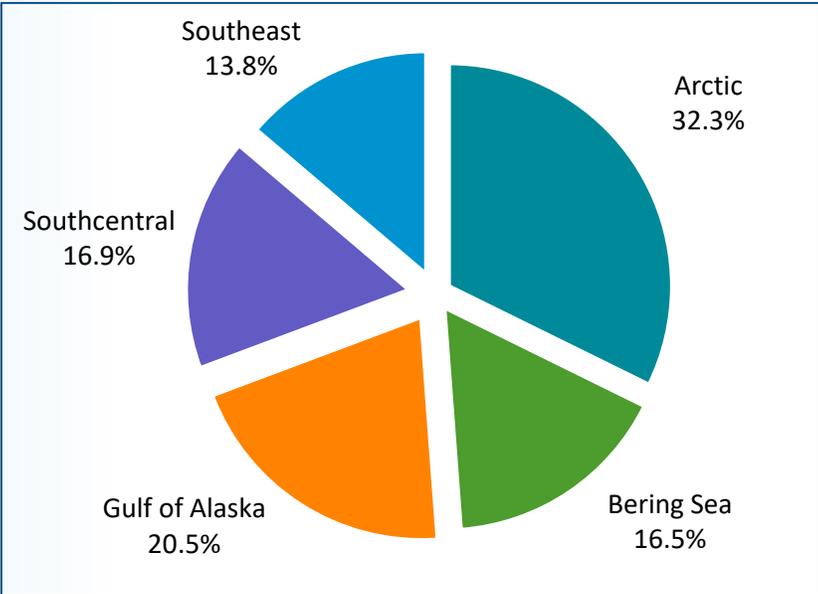


Fig 2. Proportion of confirmed stranding reports in 2021 by geographic region.

Table 1. Summary of confirmed stranding reports in 2021 for cetaceans by species and initial condition code.

	Alive	Fresh Dead	Mod Decomp	Adv Decomp	Mummified / skeleton	Unknown	Total
Beluga	1	1	2	3	1		8
Cook Inlet beluga		2	3	3	1	1	10
Killer whale	1	2		1	2		6
Harbor porpoise		4	2	1			7
Beaked whale			1				1
Pacific white sided dolphin				1	1		2
Unknown porpoise						1	1
Sperm whale			1				1
Unknown small cetacean				2		1	3
<i>Odontocete Totals</i>	2	9	9	11	5	3	39
minke whale	1		1				2
humpback whale	4*	4	7	7	1	2	21
Bowhead whale		1	7	1		2	11
fin whale			1	2			3
gray whale		1	4	18		1	24
Unknown baleen whale			1	4	3	7	15
<i>Mysticete Total</i>	1	6	21	32	4	12	76
<i>Cetacean Totals</i>	3	15	30	43	9	15	115

*As of September 2021, live entangled, in water large cetaceans require level A and human interaction forms to be completed. See the [2024 Examiner Guide](#) for information about this change.

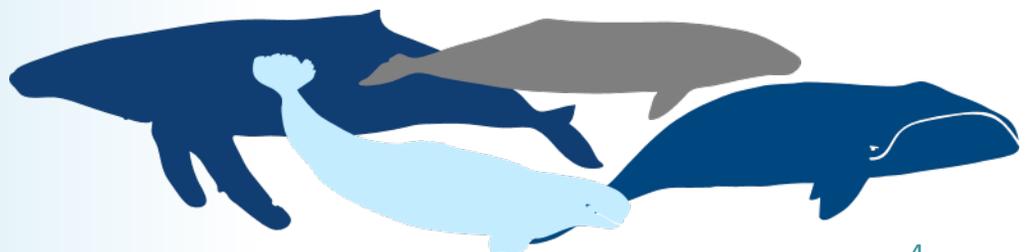
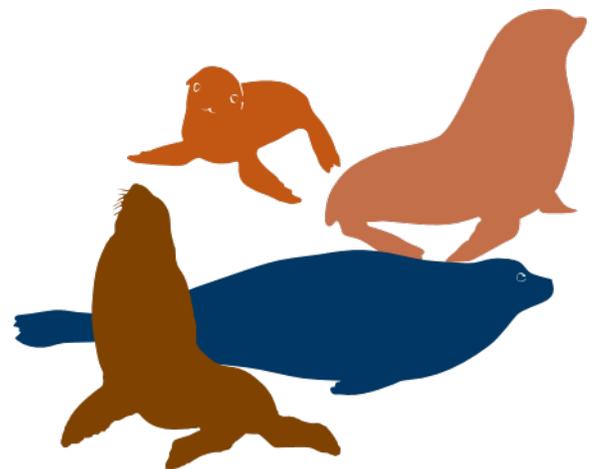


Table 2. Summary of confirmed stranding reports in 2021 for pinnipeds by species and initial condition code.

	Alive	Fresh Dead	Mod Decomp	Adv Decomp	Mummified / skeleton	Unknown	Total
Bearded seal		2	4	5			11
Harbor seal	11	6	4	7		1	29
Ringed seal	1	2	9	9	1		22
Spotted seal	1		2	2	1	11	17
Unknown ice seal				5			5
<i>Phocid Totals</i>	13	10	19	28	2	12	84
Steller sea lion	1	9	10		2	1	23
Northern fur seal	8*	2			1		3
<i>Otarrid Totals</i>	9	11	10	0	3	1	26
Unknown pinniped				2		5	7
<i>Pinniped Totals</i>	14	21	29	30	5	18	117

*live northern fur seals were disentangled by Ecosystem Conservation Office of the Aleut Community of St. Paul and/or NOAA Fisheries.





Entanglements

In 2021, we received 42 confirmed pinniped entanglement reports (19 Steller sea lion; 23 northern fur seals) which is more than the confirmed reports in 2020 (9 Steller sea lion; 6 northern fur seals). The majority of entanglement reports occurred between June and September (Fig 3). So far in 2022, we have already received confirmed entanglement reports for six Steller sea lions and one harbor seal.

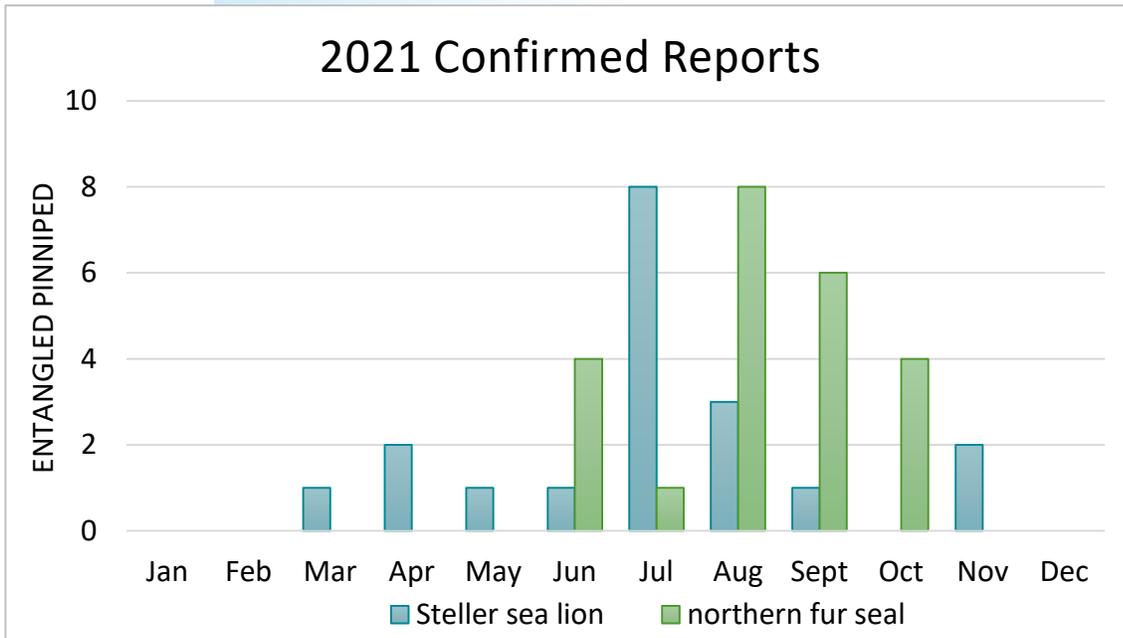


Fig 3. Confirmed pinniped entanglement reports by species and month.



PE2021_13



PE2021_33



The NMFS Large Whale Entanglement Response Program received 23 confirmed cetacean entanglement reports in 2021. These reports include several entangled cetaceans reported by observers or self-reported by fishers as part of the Marine Mammal Authorization Program. Humpback whales were the most commonly observed entangled cetacean in Alaska in 2021 ($n = 14$), followed by killer whales ($n = 4$). We received confirmed reports of one of each of the following species in 2021: beluga, minke, harbor porpoise, sperm whale, and gray whale. We received one unconfirmed report of an entangled fin whale as well. While these numbers are "final" at this point, we could receive after-the-fact reports for 2021 entanglements in the future.

Most of these reports were gathered and submitted by the Stranding and Large Whale Entanglement Response Network, or members of the public who were familiar with the stranding hotline. Thanks to everyone who contributed information and/or who conducted outreach to make the stranding hotline number more widely known and available.

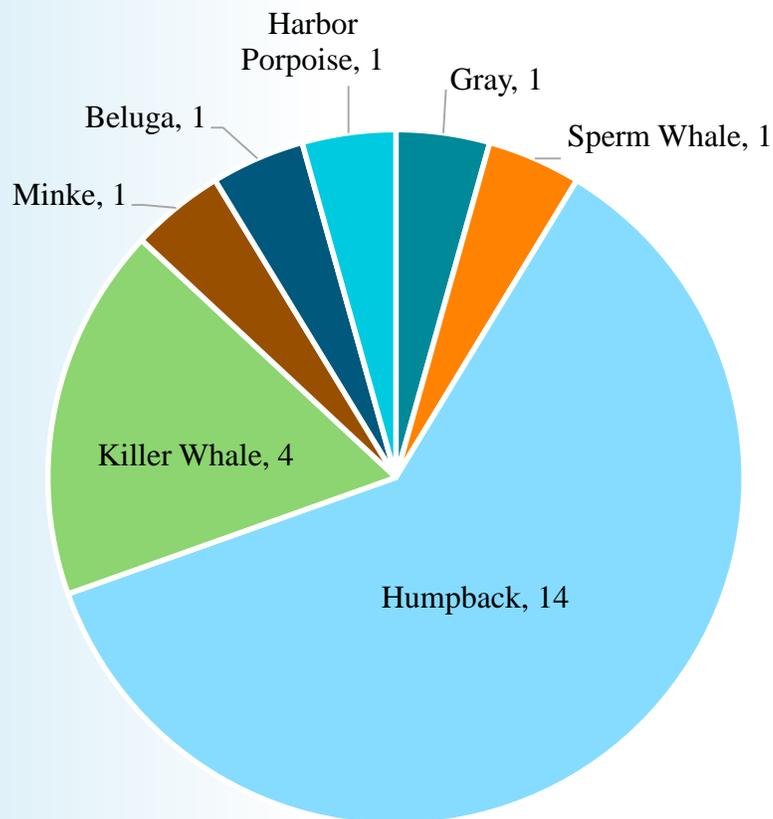


Fig 4. Confirmed cetacean entanglement reports by species.

Highlight your efforts by submitting photos of stranding responses for use in outreach to: mmhsrp.images@noaa.gov

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By:
Kate Savage

Gray Whale UME Update

Since January of 2019 elevated numbers of eastern North Pacific gray whale (*Eschrichtius robustus*) mortalities have been documented along the west coast of North America, from Mexico to Alaska. A UME was formally declared in May of 2019 and continued through 2020 and 2021. As of June 1, 2022 there have been 578 gray whale strandings associated with the UME. Preliminary findings in 2022 indicate that the UME is still in effect (Tables 1 and 2). While the abundance of single gray whales in Mexican waters was greater than has been observed in recent years, the number of cow-calf pairs was lower. Further, surveys revealed that many of the single whales were in poor body condition. U.S. abundance and cow-calf data from 2022 is still undergoing analysis by the Southwest Fisheries Science Center, with new abundance estimates expected in early summer and cow-calf estimates later in the summer.

Table 1. Gray whale stranding reports by year and country, as of 6/1/2022.

Country	2019	2020	2021	2022
Canada	11	5	5	0
U.S.	122	79	54	23
Mexico	83	88	55	53
Total	216	172	114	76

Table 2. Gray whale strandings in the U.S. by year and state, as of 6/11/2022.

U.S. State	2019	2020	2021	2022
Alaska	48	45	23	2
Washington	34	13	9	10
Oregon	6	3	3	2
California	34	18	19	9
Total	122	79	54	22

Learn more about the [2022 Gray Whale Research Report for Laguna San Ignacio and Bahía Magdalena, B.C.S., México](#)

While reports from Mexico are complete for 2022 and incoming west coast reports are slowing down, reports from Alaska are just beginning. So far in 2022, we have had reports of four stranded gray whale in Alaska, the first report was an emaciated adult male that stranded on May in Kodiak (2022034).





Left: Initial stranding of emaciated Kodiak gray whale (2022034) on May 15.



Right: Sun'aq Tribe of Kodiak Stranding Network members wait to see if the whale will remain on shore to secure the carcass on May 15.

Fortunately, the beach was accessible and the AVPS team from Anchorage as well as Kodiak Sun'aq Tribe of Kodiak Stranding Network members were able to get on site quickly for a full necropsy on May 16. Gross findings were consistent with a whale in very poor body condition, including an empty stomach, sparse intestinal contents and atrophy of blubber and muscle. Other results are pending.



Above: The stranded Kodiak gray whale mid-necropsy during a break for the rising tide.



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Alaska SeaLife Center Update

By:

Savannah Costner

and Halley Werner

Animal Care Specialists

The Alaska SeaLife Center's Wildlife Response Program had an early start to the summer stranding season when two elephant seals found their way to the beaches of Seward. The first, a yearling male, was spotted on a snowy beach on March 11th with a few healing wounds and showing signs of a catastrophic molt. He returned to the water, but showed up again two days later - this time in a parking lot right behind the SeaLife Center! We cordoned off the area and allowed him the time needed to rest as he went through the molt process. Unfortunately, at midnight on March 17th he seemed to lose his bearings and made his way across the street, to lodge himself in a downtown business courtyard. With the help of the Seward Police Department we were able to assist him to a nearby boat ramp, where he quickly swam off.



Just two days later, on March 19th, we were shocked when a second yearling elephant seal was found resting on the Seward Harbor boat ramp. This seal was tagged with a green roto-tag. Through mutual contacts with the researchers who tagged her, we learned that she was born at the Año Nuevo State Park in Pescadero, California last spring. She was presenting with more concerning symptoms than the male seal from a week before, including bloat and lethargy. She returned to the water with the incoming tide, but not for long. In the following days, she was spotted repeatedly next to the US Coast Guard float in the harbor. On March 21st, we were able to rescue the 147 kilogram yearling and bring her back to the Center.





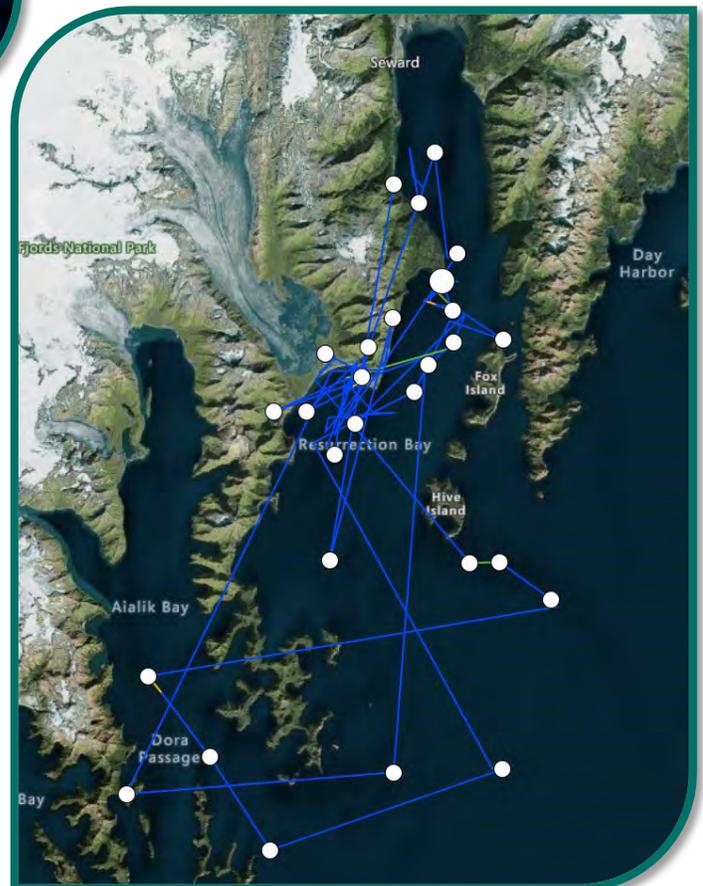
During her stay with us, her bloat subsided (likely caused by a parasite load), her activity increased, and she received a clean bill of health from our veterinarians. She was released at Lowell Point on March 24th.

Though ASLC has no current patients on site, we are all anxiously awaiting to see what the rest of the stranding season has in store for us. While we prepare for the summer season, it's a fun reminder to look back on last year's success stories.

Check out the satellite tag maps of two of our patients released last year!



Left shows the satellite tracking of Ravioli, who was released in Naknek on October 6, 2021. Her last satellite transmission was on November 4th near Akun Island.



Gemelli was released at Lowell Point Beach on October 10, 2021. Her movements were tracked until January 10, 2022 with the last transmission coming from Caine's Head and the mouth of Resurrection Bay.



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Learn more about [northern elephant seals](#)

So far in 2022, we have received reports of four yearling northern elephant seals hauled out on Alaskan beaches. Two seals were discussed in the update by the Alaska SeaLife Center. A third northern elephant seal was observed in King Cove in March (Fig 1) and did not require any intervention and was therefore not a considered stranded.

Elephant Seals in Alaska



Fig 1. Northern elephant seal on March 20th in King Cove.



Fig 2. Sign near northern elephant seal hauled out on April 17th in Chiniak Bay, Kodiak.

The fourth northern elephant seal was in Kodiak and had numerous injuries and was also undergoing a molt. After consultation with veterinarians it was determined that transport to the Alaska SeaLife Center, the only facility authorized for rehabilitation in Alaska, was logistically not feasible and the transportation itself may further compromise the seal.

We worked with Dr. Michelle Oakley, Sun'aq Tribe of Kodiak, and NOAA Office of Law Enforcement to administer antibiotics, anti-inflammatory and pain medicines. Signs were placed near the seal (Fig 2) and initially the seal showed improvement in some of the injuries. Unfortunately, the seal was forced off the beach twice, once by human activities and a second time by harassing birds. On April 27th the seal hauled out again in a quitter section of the beach. However, the seals body condition had deteriorated and the seal died overnight before stranding responders could evaluate the seals condition and behavior. The high tides moved the carcass preventing a post mortem examination.

We received 13 confirmed stranded northern elephant seals in Alaska between 2000 and 2021 (Table 1). This does not include sightings of northern elephant seals that are free swimming or hauled out and not in need of medical attention, such as the northern elephant seal observed in King Cove.

Table 1. Summary of the 13 confirmed stranding reports of northern elephant seals in Alaska between 2000 and 2021.

NMFS ID	Date of initial observation	Condition	Location
2019014	May 5, 2019	Alive	Seward
2019285	August 8, 2019	Fresh dead	Chiniak Bay
2013089	July 15, 2013	Advanced decomposition	St. Paul
2011004	Jan 23, 2011	Moderate decomposition	Unalaska
2010068	December 11, 2010	Fresh dead	Unalaska
2007017	May 19, 2007	Alive	Valdez
2007025	April 14, 2007	Alive	Seward
2006009	April 25, 2006	Alive	Kenai
2006014	May 5, 2006	Fresh dead	Sitka
2005118	Sept 2, 2005	Dead, condition unknown	Anchor Point, Lower Cook Inlet
2004096	Jan 25, 2004	Alive	Seward
2003001	Jan 9, 2003	Moderate decomposition	Niemann Pen.
2001037	July 15, 2001	Alive	Port Lions



Above a fresh dead northern elephant seal in Sitka (2019014).



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Case Definition: Killer Whale Predation as a Cause of Death in Gray Whales – *The Finale*

By:
Kate Savage

It’s been a little over a year since we started working on the case definition describing killer whale predation as a cause of death (COD) in gray whales. Countless emails, multiple discussions, further research and many, many edits later, we are happily now in the final stages.

The process has been fairly straightforward (see Fall 2021 newsletter). We collected information on killer whale predatory behavior and, most importantly, evidence of that behavior through a literature review and discussion with killer whale researchers/experts. We found that the lesions most often associated with killer whale predation in gray whales and other large whale species include:

1. Missing tongue/jaw
2. Blubber and skin peeled
3. Semi-lunar bite wounds with variable amounts of tissue missing (tissue defects)
4. Broken bones and/or contusions
5. Tooth impressions or “rake marks”

We categorized the 5 lesions according to the following characteristics:

Mortality – is the lesion likely to cause death? This characteristic is self-evident with the focus of the Case Definition being COD.

Observability – is the lesion externally visible? Full necropsies are the exception rather than the rule, so lesions should be evident on superficial exam or in photos.

Specificity – is the lesion specific to killer whale predation? Differentials, or alternate conditions causing the lesion, could result in uncertainty.

LESION		MORTAL?	OBSERVABLE?	SPECIFIC?
1. Missing tongue/jaw	PRIMARY LESIONS	✓✓	✓	✓✓
2. Peeled blubber and skin		✓	✓	✓
3. Bite wounds/tissue defects		✓	✓	✓
4. Fractured bones/contusions	ANCILLARY LESIONS	✓	✗	✗
5. Rake marks		✗	✓	✓✓



Based on these characteristics, we were able to assign a level of certainty to each of the lesions. If a lesion was thought to be caused by killer whale predation, either alone or in conjunction with other lesions, then the likelihood of killer whale predation as the COD was assigned as confirmed, probable, suspected, improbable or could not be determined (CBD). However, a number of considerations exist which can influence the accuracy of evaluation and assignment of certainty.

- In order to assign killer whale predation as a COD, the primary lesion must be lethal.
- Advanced decomposition was a differential (or alternative) for two of the primary lesions (missing tongue/jaw, peeled blubber/skin) and may hamper the evaluation of all lesions. Lesions must be discernable from advanced decomposition and/or scavenging. An example of a metric may be that, other than the area of lesion, the structural integrity of the integument and skeleton remain preserved.
- A necropsy by a skilled prosector, or at least a hands-on exam, should be performed whenever possible.
- Absent an exam, photographs of sufficient quality and view of the carcass are vital. Factors to consider include focus, resolution, whether the carcass is buried or floating too deeply in the water etc.
- The level of certainty regarding the classification of the likelihood of killer whale predation as COD may be strengthened if additional information is available, such as documented presence of killer whales in the area or bite wound characteristics matching those of killer whales.
- A pursued whale may live strand, either in an attempt to evade killer whales and/or due to injuries associated with the predation event. In these cases, rake marks and/or contusions, broken bones, and internal hemorrhage may be the only indication of killer predation.

Based on the considerations listed above, lesions observed either during a necropsy or in photos can be assigned one of five levels of certainty relative to the likelihood of killer whale predation.



1. Confirmed cases

- a. Killer whales are observed attacking a live gray whale and the carcass is positively identified.



Fig 1 and 2. These 2015 photos of killer whales attacking a humpback whale and the carcass later identified illustrate a confirmed case.

2. Probable cases

- a. A dead gray whale is observed with missing tongue and/or jaw; **or**
b. A dead gray whale is observed with at least two of the following lesions:



- peeled blubber and skin;
- semi-lunar bite wounds/chunks of fresh tissue missing;
- fractured bones/contusions;
- and/or non-healed rake mark.

Fig 3. The tongue and part of the jaw are missing in this carcass, indicative of probable killer whale predation. The structural integrity of the rest of the carcass is intact, so advanced decomposition can be ruled out as a differential.



3. Suspected cases

- a. A dead gray whale is observed with evidence of:
 - a. semi-lunar bite wounds/chunks of fresh tissue missing; **or**
 - b. only peeled blubber and skin.
 - c. likely primary lesions, but quality of imagery, view of carcass or other factors prohibit certainty (Fig 4).



Fig 4. In this carcass, the tongue and jaw look like they may be missing, but the lack of image focus precludes certainty.

4. Improbable cases

- a. None of the criteria for confirmed, probable, or suspected are met.



Fig 5. The finding of “improbable” requires a sufficient view of the carcass to rule out lesions associated with predation. The maxim in these cases should be, “absence of evidence does not mean evidence of absence”. In this case, a necropsy was performed and killer whale predation ruled out.



Fig 6. The tongue and lower jaw are missing and skin and blubber peeled in this carcass, but the presence of parallel, linear impressions along the ventral abdomen may indicate propeller strike.

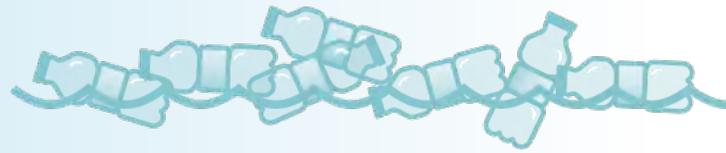
5. CBD cases

- a. Advanced decomposition, scavenging and/or photographic quality do not impair accurate evaluation; however other factors preclude assessment or lead to uncertainty (Fig 6).
- b. Advanced decomposition, scavenging and/or photographic quality impair accurate evaluation.



Fig 7a-c. Examples of decomposition, scavenging and poor image quality that may hamper evaluation.

The criteria above were the product of extensive vetting. Four marine mammal biologists independently reviewed all photos of AKR gray whale strandings from 2016 - 2021 (a total of 167 reports with 1 to over 50 photos per report), then compared and discussed individual results, protocols, what did and didn't work etc., and the Case Definition was modified accordingly. With the finished product in hand, we are now working on defining next steps which are likely to include a broader application, such as gray whale reports from other regions to other large whale strandings wherever in Alaska to the evaluation of killer whale predation in other Alaskan large whale species.



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The Ocean Guardian School Program in Alaska

*Alaska schools are focusing on reducing marine debris and the 6 R's -
Rethink | Refuse | Reduce | Reuse | Rot | Recycle*

By:
Jamie Musbach
Sea Grant Fellow

Thunder Mountain High School started the Ocean Guardian School Program during the 2018 - 2019 school year and has accomplished many stewardship projects since that time. This school year, they created an Ocean Guardian School Program club and started a school-wide recycling program. They plan to work with the school board and district to make recycling Juneau wide. They also have plans to clean up two local beaches this spring.

Sayéik Gastineau Community School started the Ocean Guardian School Program during the 2018 - 2019 school year and has already markedly decreased their waste by replacing plastic ware with real cutlery in their lunchroom and implementing a school-wide recycling program. Students also created educational posters to hang around the school to encourage people to 'Lose the Loop' by cutting the loops on disposable masks to prevent animal entanglements. This year they focused on composting to further decrease their environmental footprint. So far students have composted over 2,954 pounds of food waste.

Montessori Borealis is in its first year as an Ocean Guardian School. Students completed a waste audit this fall and will complete another this spring to identify ways they can continue to improve their 6R project pathway. Students continue to compost on campus and grow plants in their school garden. They just completed a beach cleanup where they collected over 35 pounds of plastic from the intertidal zone at a local beach.



Pictured above (left) Montessori students collect marine debris from a local beach on a sunny day in Juneau (right) Montessori 7th and 8th graders work on organizing, counting, and weighing the different types of marine debris they collected.

Floyd Dryden Middle School is a first year Ocean Guardian School. After completing a waste audit this fall, students found a new home for their food waste with a local chicken farm. Seventh graders recently completed a beach cleanup at Auke Recreation Area. This spring they plan to complete a water quality unit where they will survey two streams that run through their campus. Students will measure water chemistry, identify macroinvertebrates, and pick up trash at both stream sites.



Dimond High School is a first year Ocean Guardian School. Students started off this school year by collecting 107 pounds of debris from their school campus. They are now preparing for a field trip to Whittier to complete a remote beach clean-up. A local engineer, who focuses on turning ocean plastic into building materials, will be presenting to the students and attending the field trip. Students have also begun a recycling program at school. Last but not least, students got their creative juices flowing and created art for a contest with the theme 'Dimond Ocean Guardians'. The winning art now adorns t-shirts made out of recycled plastic, reusable bags and water bottles.



Pictured above (left) is the Dimond High student who won the water bottle art contest with their “trash octopus” design. They are also wearing the winning t-shirt design that one of their classmates created. On the right, two students are taking plastic and aluminum recycling out to the recycling trailer.

Ocean Guardian schools from both Juneau and Anchorage have joined the newly formed Pacific Exchange Network (PEN). PEN was created by a group of Ocean Guardian School Program coordinators from Alaska, American Samoa, Hawai'i, and Guam. PEN's purpose is to provide opportunities for student collaboration across the Pacific as well as presentations on STEM topics by local and indigenous scientists. Alaskan schools have participated in presentations from all over the Pacific and have entered videos that they made for the Hawai'i Film Festival.

Alaska also hosted their own presenter, Marissa Mercurieff. Marissa gave a presentation titled People of the Seal: Speaking for our Species. Marissa's talk focused on how indigenous people can speak up for the survival of culturally important species focusing on Northern fur seals in her home, St. Paul. There were 124 attendees at the webinar, most were students from and Alaska, American Samoa, Hawai'i, Guam and Palau.

The application [Ocean Guardian School Application | Office of National Marine Sanctuaries](#) to apply to be an Ocean Guardian School for the 2022-2023 school year recently closed (June 1). To learn more, please visit [Ocean Guardian School | Office of National Marine Sanctuaries](#) or contact Kim Raum-Suryan at kim.raum-suryan@noaa.gov or Jamie Musbach at Jamie.musbach@noaa.gov.



Photo credit: Joe Bakker, NMFS 2021013



Large Whale Entanglement Training

Since 2003 NOAA Fisheries Protected Resources Division in Alaska has worked with the Hawaiian Islands Humpback Whale National Marine Sanctuary (sanctuary) towards shared large whale entanglement response readiness and garnering information to reduce a broad-based threat. Entanglement is a major threat to many marine animals, including large whales. It also poses risks to fisheries and humans in general. Starting in 2005 NOAA Fisheries invited Ed Lyman, who in part acts as a Regional Large Whale Entanglement Response Coordinator with the sanctuary and works closely with and under NOAA Fisheries Marine Mammal Health and Stranding Response Program (MMHSRP), to lend-a-hand in Alaska as part of a work detail. Since then, Ed has conducted or co-conducted more than 115 trainings on large whale entanglement response for 18 communities from Dutch Harbor to Ketchikan, Alaska to assist with response readiness. As a result, over 60 large whales have been freed by trained, experienced, and well-equipped network teams under NOAA's MMHSRP. Ed has also assisted with outreach to help promote stewardship, and research that increased our understanding of the threat and the risks it poses. Considering the connectivity that humpback whales provide between Alaska and Hawaii regions and the considerable concern that entanglement poses to humpback whales and humans alike, the detail's joint efforts have garnered a wealth of information towards mitigating a broad-based risk.



Training participants from the 2005 large whale entanglement response training in Gustavus, AK (Glacier Bay)

This season, the partnership has already conducted response trainings in Metlakatla and Juneau, with additional trainings scheduled for Glacier Bay and Cordova (Prince William Sound). As of June 3, two reports of entangled whales have been received in 2022. A multi-team effort was mounted to the most recent, approximately 35 miles south of Juneau. However, and unfortunately, the entangled adult humpback whale, was not relocated and to date has not been resighted. Ed will also be conducting community outreach talks and helping with a Webstory on large whale entanglement response training efforts.



Ed Lyman reviews the use of telemetry in large whale entanglement response to members of the Response team in Metlakatla, AK (Photo credit: Sadie Wright)

As the whales we are tasked with protecting transit the North Pacific, and risks, like entanglement, have global flukeprints, the sharing of expertise and knowledge, and the combined efforts of two broad communities (Alaska and Hawaii) are extremely valuable towards mitigating this threat.



Training participants from NOAA Fisheries Auke Bay Laboratories familiarize themselves with large whale entanglement response tools and procedures (Photo credit: John Moran)



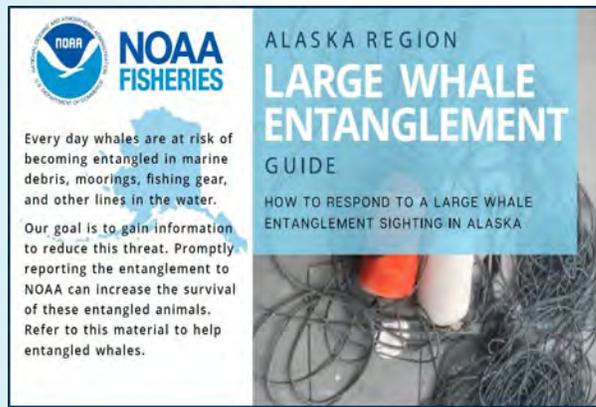
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Recent Stranding Publications and Outreach

- Chenoweth EM, J Houston, K Burek Huntington, JM Straley. 2022. A Virtual Necropsy: Applications of 3D Scanning for Marine Mammal Pathology and Education. *Animals* 12:527
- Goertz, CEC, K Woodie, B Long, L Hartman, E Gaglione, D Christen, T Clauss, J Flower, A Tuttle, C Richard, T Romano, T Schmitt, E Otjen, S Osborn, S Aibel, T Binder, W Van Bonn, M Castellote, TA Mooney, S Dennison-Gibby, K Burek-Huntington, and TK Rowles (2021). Stranded Beluga (*Delphinapterus leucas*) Calf Response and Care, Case Reports. *Polar Research*. 40: <http://dx.doi.org/10.33265/polar.v40.5514>
- Goertz, CEC, K Woodie, B Long, L Hartman, E Gaglione, D Christen, T Clauss, J Flower, A Tuttle, C Richard, T Romano, T Schmitt, E Otjen, S Osborn, S Aibel, T Binder, W Van Bonn, M Castellote, TA Mooney, S Dennison-Gibby, K Burek-Huntington, and TK Rowles. (2021). Stranded Beluga (*Delphinapterus leucas*) Calf Response and Care, Case Reports. *Polar Research*. 40: <http://dx.doi.org/10.33265/polar.v40.5514>
- Savage, KN, KA Burek-Huntington, SK Wright, AL Bryan, G Sheffield, P Tuomi, R Stimmelmayer, MA Delaney, M Webber, W and Walker. (2021). Stejneger's Beaked Whale Strandings in Alaska, 1995 – 2019. *Marine Mammal Science*. 37(3) 843-869. DOI <https://doi.org/10.1111/mms.12780>
- Burek-Huntington, K.A., Rouse, N., Nielsen, O., Romero, C. and Shelden, K.E.W., 2021. False-positive polyomavirus infection in a stranded, pregnant Cook Inlet beluga whale (*Delphinapterus leucas*).
- McGuire, T.L., Shelden, K.E., Himes Boor, G.K., Stephens, A.D., McClung, J.R., Garner, C., Goertz, C.E., Burek-Huntington, K.A., O'Corry-Crowe, G. and Wright, B., 2021. Patterns of mortality in endangered Cook Inlet beluga whales: Insights from pairing a long-term photo-identification study with stranding records. *Marine Mammal Science*, 37(2), pp.492-511.



The new Large whale entanglement outreach card (right) folds to fit in your wallet



NOAA FISHERIES ALASKA REGION
LARGE WHALE ENTANGLEMENT GUIDE
 HOW TO RESPOND TO A LARGE WHALE ENTANGLEMENT SIGHTING IN ALASKA

Every day whales are at risk of becoming entangled in marine debris, moorings, fishing gear, and other lines in the water.

Our goal is to gain information to reduce this threat. Promptly reporting the entanglement to NOAA can increase the survival of these entangled animals. Refer to this material to help entangled whales.



Photo by S. Teerlink/NOAA/Permit #18786 04

WHAT TO DO

- 1 CALL (877) 925-7773**
 Notify a NOAA official by calling the hotline.
- 2 RECORD**
 Maintain a safe distance of at least 100 yards away. If possible, take photos of the head, fluke, and dorsal fin.
- 3 WAIT**
 Continue to monitor the animal until guidance is received from a NOAA official. Safe entanglement response requires training.

Call US Coast Guard Channel 16 if you are without cell service



COMMON LARGE WHALES OF ALASKA

- HUMPBACK**
 Long paddle-shaped pectoral fins. Small, but prominent dorsal fin.
- BELUGA**
 Adults are white, calves are gray. Bulbous head.
- KILLER WHALE**
 Black & white. Prominent, tall dorsal fin.
- BOWHEAD**
 Black, with no dorsal fin. Arctic range.
- GRAY WHALE**
 Speckled, light gray. Short broad pectoral fins.
- SPERM WHALE**
 Square-shaped head. Wrinkled & gray. Narrow lower jaw with teeth.

DETAILS TO REPORT

- WHALE SPECIES
- DATE & TIME
- LOCATION (LAT/LONG)
- CONDITION OF ANIMAL
- DESCRIPTION OF ENTANGLING GEAR
- DIRECTION WHALE IS HEADING

BECOME A LEVEL 1 FIRST RESPONDER FOR LARGE WHALE ENTANGLEMENTS

SCAN ME



The Pinniped Entanglement Group (PEG), that many of you are already members of, has several new updates. In the past couple of months, our very first PEG website went live!

<https://pinnipedentanglementgroup.org/>

NOAA Fisheries also wrote a nice story about PEG in March of 2022, which you can read here: <https://www.fisheries.noaa.gov/feature-story/pinniped-entanglement-group-brings-together-worldwide-initiative> and Jamie Musbach (NOAA Sea Grant Fellow) created a story map about PEG:

<https://storymaps.arcgis.com/stories/85c5c30692de4c10b93c9efc83e4ce70>

If anyone is interested in learning more or joining PEG, please contact Kim Raum-Suryan at kim.raum-suryan@noaa.gov. Thank you!

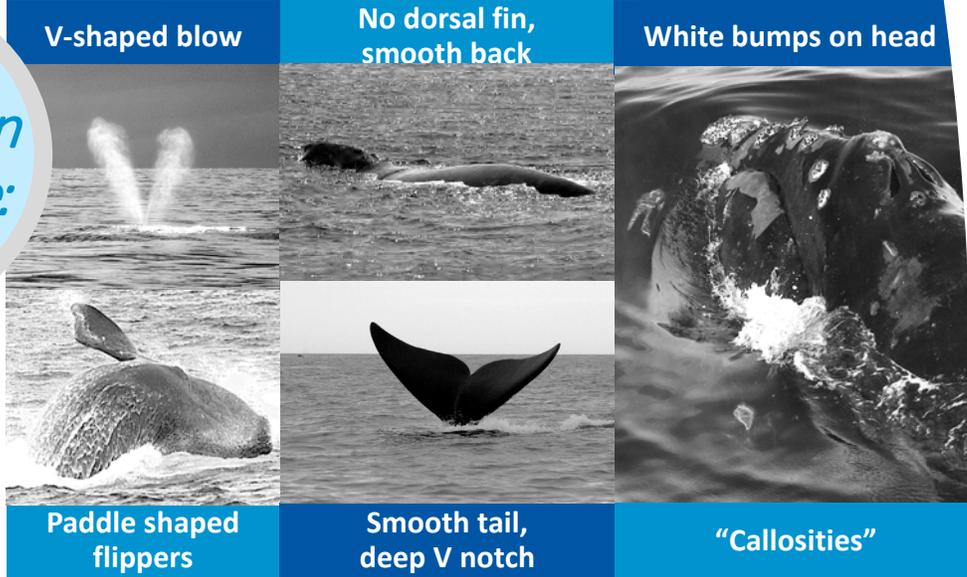
North Pacific Right Whales

Critically Endangered
Only ~30 left!

*Slow down
if you see:*

Reduce speed!

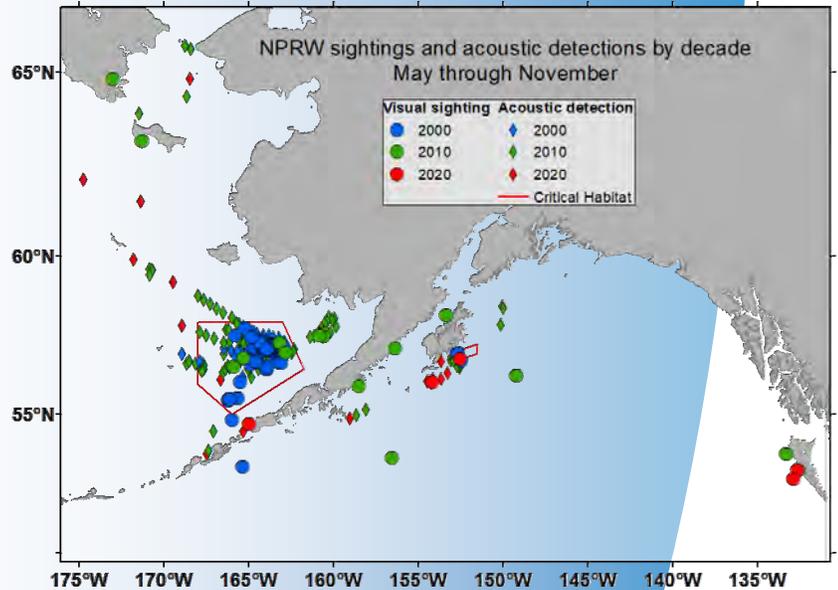
Right whales are slow moving. Reduce speed to <10 knots, and stay at least 500 yards away.



Found in Alaska waters

- Bering Sea & Gulf of Alaska
- May through November
- Frequently seen with humpback and fin whales
- 45-60 ft long

For more info, scan the QR code!



IMMEDIATELY REPORT RIGHT WHALE SIGHTINGS: NP.RW@noaa.gov

Report it

Every sighting is important!

Report location (lat/long), date, time, and number of animals, along with contact info.

Photograph it

Identifying individuals is critical!

Take photos of the side of the head, tail, or visible scars, from a safe distance.



NOAA FISHERIES



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Check out NOAA's [Alaska Oil Spill Response Guidance website](#)

Recent fuel spills near Sitka and on Saint Paul Island have a number of folks asking about oil spill response training. A 24-hour HAZWOPER training is often required to participate in oil spill response. As a reminder, the NMFS Stranding Program hosted a virtual HAZWOPER-24 hour training led by ASLC this past winter. If there is enough interest, we could potentially do that again. Please contact Mandy (mandy.keogh@noaa.gov) if you and others at your organization are interested. In addition, a foundational knowledge of the Incident Command System is helpful and sometimes necessary or required when operating as part of an organized spill response. There are free courses available online that meet these requirements. A few recommended online courses available through FEMA include:

- ICS 100: Introduction to the Incident Command System: <https://training.fema.gov/is/courseoverview.aspx?code=IS-100.c>
- ICS 700B: Introduction to the National Incident Management System: <https://training.fema.gov/is/courseoverview.aspx?code=IS-700.b>
- ICS 200: Basic Incident Command System for Initial Response (ICS 100 and ICS 700B are pre-reqs): <https://training.fema.gov/is/courseoverview.aspx?code=IS-200.c>

Although these online trainings are a bit dry, they teach us a helpful language and protocols that can be used to structure emergency responses and more efficiently and effectively respond to impacted wildlife. Please consider adding these important tools/trainings to your toolbox of expertise.

In May, representatives from three wildlife agencies in Alaska (Alaska Dept. Fish & Game, U.S. Fish & Wildlife Services, and NOAA Fisheries) were in Homer for 2 days of filming with Seed Media and oil spill response organizations. The training video will walk through the Carcass Collection and Documentation Tactic in the [Wildlife Protection Guidelines for Oil Spill Response in Alaska](#) and will be used as part of training for oil spill responders in the event of an oil spill response. A huge thank you to Dr. Heidi Pearson at the University of Alaska Southeast for allowing us to use her marine mammal inflatable models for the filming.



NMFS Stranding Program Contacts

Mandy Keogh

Regional Stranding Coordinator
907-209-0637

Mandy.Keogh@noaa.gov

Barbara Mahoney

Assistant Stranding Coordinator
Parts Transfer Authorizations and
Tracking
907-271-3448

Barbara.Mahoney@noaa.gov

Sadie Wright

Assistant Stranding Coordinator
Large Whale Entanglement Response
Coordinator
907-586-7630

Sadie.Wright@noaa.gov

Kim Raum-Suryan

Pinniped Entanglement Coordinator
907-586-7424

Kim.Raum-Suryan@noaa.gov

Kate Savage, DVM

Health Specialist and Data Manager
907-586-7209

Kate.Savage@noaa.gov

Bonnie Appleyard-Easley

bonnie.easley-appleyard@noaa.gov

Barb Lake

barb.lake@noaa.gov

24-hour stranding hotline:
1-877-925-7773

