Stranding Photo of the 2013: A humpback whale carcass awaits the stranding response team in the shallows near Kake, Alaska.

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Greetings from the Coordinator

Greetings Alaska Stranding Network!

Hope everyone is staying warm and dry across the state as winter takes hold. We look forward to seeing everyone at the 2014 annual meeting, which will be hosted by the Alaska SeaLife Center in Seward April 2-4. Under ASLC’s Prescott Grant, we are excited that this year’s focus will be on oil spill coordination and response, a critical aspect of preparedness for the stranding network.

In the meantime, here are a few items I’d like to bring to your attention:

• **Government shutdown**
  NMFS would like to recognize Dr. Kathy Burek at Alaska Veterinary Pathology Services for serving as our stranding hotline point of contact during the October government shutdown. After assuring her that it was likely to be quiet (lesson learned: one should never do this), she had her hands full with calls on a beaked whale on St. Lawrence, a Cook Inlet beluga, a humpback whale in Southeast, and a vessel fuel spill in Haines. **Thank you Kathy for taking on the extra workload to facilitate response during these events!** Thanks also to the many other stranding network organizations and community members in Alaska who responded to these events, including the Alaska SeaLife Center, Gay Sheffield, Jan Straley, hunters from St. Lawrence Island, and Frances Gulland from the Marine Mammal Center.

• **Unusual Events**
  Several complicated, unusual and/or remote events this year demanded more from the stranding network than usual. The response to a gillnet entangled humpback whale which lasted 14 days during Aug-Sept in Southeast AK was an extraordinary example of coordination, problem-solving and resourcefulness as teams attempted to remove gear from this animal. See pgs. 8-9 for more info. Beach-cast beaked whales in both Valdez and St. Lawrence were also noteworthy. A humpback necropsy in Kake in Sept. would not have been possible without assistance provided by the Kake Tribe. During this event, a local science class was able to visit the whale and talk with the necropsy team to learn more about marine mammal health. See pg. 10 for the story. Recently, two killer whale carcasses in Port Moller were sampled on behalf of the stranding network by locals Dennis and Teresa Tinker when logistics proved too challenging to get a vet on site. Thanks to all who contributed to these efforts!

• **Steller sea lion updates**
  On November 4, 2013, NOAA Fisheries found that the eastern distinct population segment (eDPS) of Steller sea lion had recovered sufficiently to be removed from the list of threatened species under the Endangered Species Act.
Greetings from the Coordinator, Cont.

This is the first species NOAA has delisted due to recovery since the eastern North Pacific gray whale was taken off the list of threatened and endangered species in 1994. The best available scientific information indicates that the Steller sea lion eDPS has increased from ~ 18,040 animals in 1979 to ~ 70,174 in 2010. The population continues to be protected under the Marine Mammal Protection Act.

With the delisting, stranding response to eDPS Steller sea lions (east of Cape Suckling) now falls under the authority of existing Stranding Agreements rather than under the national Marine Mammal Health and Stranding Response Permit #132-1905. Whereas in the past, network members have sought NOAA’s approval on a case by case basis for stranding response to eDPS Steller sea lions, that additional step will no longer be necessary for Alaska Stranding Agreement holders. However, the Stranding Agreement does not have a provision for entanglement response at this time, so that authority will still need to occur under #132-1905, as will any response to the western DPS of Steller sea lion. Further guidance will be issued by the end of the year as to where NMFS expects wDPS animals may be encountered in the range of the former eDPS.

• Pinniped Entanglement PSA
Check out the new 30-second PSA from the Pinniped Entanglement Group, a collaborative effort between the Alaska Department of Fish and Game, NOAA Fisheries, the Aleut Community of St. Paul, and other members concerned about wildlife entanglements in marine debris. The goal of the PSA is to reach an Alaska state-wide audience of all ages to raise awareness of the harmful effects of marine debris to marine wildlife and humans. This project, combining ADF&G's established "Loose the Loop" outreach campaign with NOAA's Marine Debris Program message "Marine Debris is Everyone's Problem", is now posted on Vimeo at http://vimeo.com/73167184. Please share widely!

Thank you for your continued efforts to respond to stranded marine mammals in Alaska.

Happy Holidays!

Aleria
Here is a sneak peak at some preliminary totals for 2013- keep in mind several reports have not yet been finalized and more events are likely to be reported before the year is through. To date, we’ve had 180 events (involving 18 different species) reported in Alaska. For comparison purposes, NMFS received 255 reports in 2012 and 290 reports in 2011. Stay tuned for the finalized summary in early 2014. Alaska stranding summaries can be found at http://alaskafisheries.noaa.gov/protectedresources/strandings.htm

Twelve animals have been reported entangled in 2013. Two of those were humpback whales reported to be at least partially disentangled. Five animals died as a result of the entanglement.
The 2013 season was a full year of around-the-clock care in the ASLC stranding department. The year began with a young otter in our care since her arrival in August, 2012. The otter, later named Katmai, was transported to Vancouver Aquarium at the end of March. The rehab team had a quick three weeks to rest up and prepare for the upcoming season. On April 14th, a one day old sea otter pup was admitted from Tutka Bay. June 1st brought in a young male otter from Kodiak. Once they were both stable and medically cleared, the two pups were introduced to each other and moved to the I.Sea.U where visitors could observe their daily care. A third otter came to ASLC in September, also too young to care for herself. All three are now stable and, since they cannot be released due to the hands-on upbringing required of otters, ready to be placed. They are being cared for at the Alaska SeaLife Center until placement, which is to be determined.

Harbor seals typically make up the majority of our patient load in the Stranding and Rehabilitation Department. This season brought six live harbor seal pups through our doors. Four were released later in the season near their stranding sites – in Homer and Naknek. A 3-4 month old ringed seal was also admitted this summer.

July 24th presented the biggest surprise of the season. A one week old fur seal pup was found in Sand Point, on a doorstep in a cardboard box. The pup was underweight and hundreds of miles away from the nearest rookery. He was admitted to ASLC later that night. Although he still looks small, he has more than doubled in weight. He is on the path to being weaned, and we are waiting to hear where he will be placed.

Our team responded to more than 40 birds and 23 live marine mammal reports this year – including two separate entangled otters that our volunteer network in Homer released successfully. Our rehab and veterinary staff took part in a variety of field necropsies, including a pair of beaked whales, an orca and a beluga.

Finally, some of you might have noticed someone is missing at ASLC this year. Tim Lebling, our Stranding Coordinator since the start of the program in 1998, has moved to the east coast to begin a new chapter of his life. This stranding season, my fifth with the Alaska SeaLife Center’s program, welcomed me as the Stranding Supervisor. As I settle into my new role, I would like to express how grateful I am for the Stranding Network, all of its members and our partnering agencies for their patience and guidance. I look forward to many more unusual years (as they are all truly unique) leading the rehab team and working with all of you.
Sample Request: Harbor Porpoise DNA

Although harbor porpoise are found throughout the coastlines of Alaska, little is known about their population structure. An understanding of population structure is important to understanding the status of harbor porpoise and interpreting trends in abundance. Off California, Oregon and Washington, numerous discrete populations were found using a combination of genetic data and gaps in their distribution. Unfortunately, a larger sample size of harbor porpoise tissue than is currently available in Alaska is needed to do similar genetic work. Any tissue samples would be very helpful.

This harbor porpoise was stranded and sampled in Kotzebue in 2013.

Please contact Kelly Robertson with any questions about collecting tissue, preservation or shipping. Skin tissues collected from stranded animals can be preserved in DMSO and shipped to Kelly Robertson at:

Kelly Robertson  
Protected Resources Division  
Southwest Fisheries Science Center  
NOAA Fisheries  
8901 La Jolla Shores Drive  
La Jolla, CA 92037  
Kelly.Robertson@noaa.gov
This is an update of the sighting history of an entangled Cook Inlet beluga whale, R3846 “Ropey”. The entangled whale was first seen May 2010 in the Susitna River Delta, Cook Inlet, Alaska. This whale was not seen before 2010, although the Cook Inlet Beluga Whale Photo-id Project began in 2005. Identification was confirmed by matching scars on the whale’s body that are visible in the photo-processing program, although they are not obvious in the photos in this update. The level A form was filled out and submitted to NMFS on May 26, 2010. NMFS and other Cook Inlet beluga researchers have been updated about re-sightings of this whale throughout the 2010-2013 field seasons.

Concerns about disentanglement:
Roped whale always in groups with calves and neonates. No trailing line or loops visible. Whale moves around Upper and Middle Cook Inlet and is hard to predict next encounter.
Case Study: Southeast Alaska Humpback Entanglement

Kaiti Jackson, NMFS
Ed Lyman, HIHWNMS

On August 23, 2013 an adult humpback whale approached and became entangled in a commercially fished gillnet that was under observation by the Alaska Marine Mammal Observation Program. The observers alerted the Petersburg harbormaster, who then notified the local entanglement response team, a trained, well-equipped, and authorized volunteer team of fishers and whale scientists. The team initially worked to disentangle the whale while the fishing vessel was connected to the gear. However, due to concerns over the 23-foot fishing vessel’s safety as it too was caught in the gear (unable to maneuver & drifting towards shore) and deteriorating weather, the decision was made to have the vessel disconnect, and the team continued working on the now mobile animal heading up Frederick Sound. Eventually, due to weather conditions and the animal’s evasive behavior, the decision was made to suspend efforts for the day and a GPS-based satellite tag package was attached. The fisherman later reported missing 36 fathoms of gear.

Over the course of the next two weeks, the whale traveled north from Petersburg through Stephens Passage and north of Juneau into popular whale watching waters. The whale then turned south and traveled down Lynn Canal and Chatham Strait, with the last location being reported near Angoon. During this time, eight separate responses by trained response teams from Petersburg, Juneau, Tenakee and Baranof Warm Springs were made to document and disentangle the whale (individual responses are summarized on the following page).

The 36 fathoms of gear appeared to be hanging below and behind the whale via a single loop around the head near the blowhole. Underwater video footage confirmed no additional wraps around the pectorals or peduncles. A noteworthy observation made by response teams was that this animal did not appear to use its flukes and was sculling its pectoral flippers for propulsion. Video footage suggests that the animal had an injury to the tail, which may have pre-dated the entanglement or perhaps was caused by the entanglement.

In an early response, teams approach whale with an underwater camera with hopes of documenting and assessing the nature of the entanglement.

Trained responders attached poly buoys, in addition to the green telemetry buoy, to the gear already present to slow the whale down for disentanglement efforts.

A close up of the blowhole shows a single wrap of lead line with some lingering gillnet.
Initially, the team was able to remove some of the gillnet, but subsequent attempts were unsuccessful. Due to the continued evasiveness of the animal, the decision was made to remove the telemetry buoy and all buoys, leadline and netting aft of the whale, and stand down. To date the animal has not been re-sighted.

NMFS Marine Mammal Health & Stranding Response Program oversaw and authorized (permit# 932-1905) the effort. The goal of large whale entanglement response is to free whales from life threatening entanglements where possible, but, more importantly, gain information to reduce the threat and keep people safe.

Response Summary:
- **Aug 23**: Animal becomes entangled.
- **Aug 23**: 1st response. For disentanglement. Petersburg team.
- **Aug 24**: 2nd response. For disentanglement. Petersburg team.
- **Aug 28**: 3rd response. For documentation. Petersburg team.
- **Aug 29**: 4th response. For documentation. Petersburg team.
- **Aug 30**: 5th response. For disentanglement. Petersburg team.
- **Aug 31**: 6th response. For documentation. Juneau team.
- **Sept 4**: 7th response. For documentation. Juneau team.
- **Sept 5**: 8th response. For disentanglement. Juneau team.
- **Sept 6**: 9th response. For documentation. Tenakee team.
- **Aug 21**: 1st response. For disentanglement. Petersburg team.
- **Aug 24**: 2nd response. For disentanglement. Juneau team.
- **Aug 28**: 4th response. For documentation. Juneau and Baranof teams.
- **Aug 29**: 5th response. For disentanglement. Juneau team.
- **Aug 30**: 6th response. For disentanglement. Juneau and Baranof teams.
- **Aug 31**: 7th response. For disentanglement. Juneau and Baranof teams.
- **Sept 4**: 8th response. For documentation. Tenakee team.
- **Sept 5**: 9th response. For disentanglement. Juneau, Tenakee and Baranof teams.

Animal tagged for 14 days, covered at least 435 nm for an average speed of 1.26 kts.

**(Response and photography took place under permit number 932-1905.)**
On September 1st, the United States Coast Guard reported a floating whale in Frederick Sound near Kake. Stranding network members tracked the whale through resightings and eventually the whale beached itself on an island just outside of Kake. Kate Savage, stranding network veterinarian and NMFS employee, led a team of responders in a necropsy the following week. Lloyd and Adam Davis of the Kake Tribe were instrumental in facilitating a necropsy by securing the animal and providing transport to the site for the response team. They also brought a local high school science class out to observe the exam and talk to the team about marine mammal health. During the necropsy, the team uncovered extensive bruising and hemorrhaging along the right side of the body and pectoral fin, which appeared to be the result of a ship strike.

There were multiple reports of humpback whales floating in southern Southeast Alaska this summer. At least three individual whales were confirmed, while some of the reports were resights of the individual animals. Ultimately, most whales were not resighted or were reported in areas too remote for response. However, a floating humpback carcass in Sitka was responded to by the Sitka Sound Science Center and the Sitka Tribe on August 29, 2013. The animal was in a decomposed state and cause of death could not be determined, though predator bite marks were visible. Once the animal beached on Kruzof Island, Jan Straley and others were able to land and examine the whale further with USCG helicopter transport assistance.

Efforts are being made to reduce interactions between cruise ships and humpback whales in Southeast Alaska through a partnership between NMFS, the National Park Service (NPS) and cruise lines. Several years ago, NPS began mapping whale locations in Glacier Bay and distributing them to visiting cruise ships to raise awareness about whale locations to reduce the risk of ship strike. In 2011, the program expanded to include all of Southeast AK. On a weekly basis between May and September, participating cruise ship captains and crew send in whale sightings to NMFS. NMFS compiles these sightings, then sends back a comprehensive location map for redistribution to all cruise ships. With better knowledge of recent whale locations, ships will be better equipped to be vigilant and take avoidance action where necessary.
Save the Date!

Alaska Marine Mammal Network Annual Meeting
April 2-4, 2014

The Alaska Stranding Network 2014 Meeting is scheduled for April 2nd - April 4th with a focus on Oil Spill Response Preparedness. Attendance will qualify for the annual 8 Hour HAZWOPER Refresher Training. Additionally, for those that have not yet taken HAZWOPER 24, ASLC hopes to offer a pre-conference workshop/activities, in combination with some independent study, to cover required material on Mar 31st - April 1st. Stay tuned for more information.

Pending Reports

Please send any outstanding level As, pictures and reports to Kaili.Jackson@noaa.gov.

Thanks for another successful year!

Looking for necropsy forms and guidelines? Look no more, check out the google group provided by Kathey Burek Huntington and Alaska Veterinary Pathology Services: https://sites.google.com/site/akvetpath/

Here you will find the NEW “Quick and Dirty Field Necropsy Guide for Humpback Whales in Alaska” developed by Frances Gulland from the Marine Mammal Center in Sausalito, CA, during a visit to Alaska this fall in collaboration with Jan Straley, UAS and Kathy Burek, AVPS. This is specifically meant to address those instances where we are limited as a network from performing a full necropsy by weather, tides, lack of personnel, transport constraints, etc. When you have little time or few resources, what are the most important priorities for sampling and diagnostics? Keep a copy with your stranding supplies!

Please look for another AK Marine Mammal Stranding Network Newsletter in spring/summer of 2014. Submissions, comments and suggestions welcome, please send to Kaili.Jackson@noaa.gov
Entanglement of grey seals *Halichoerus grypus* at a haul out site in Cornwall, UK.

Molecular characterization of poxviruses associated with tattoo skin lesions in UK cetaceans.

On how whales avoid decompression sickness and why they sometimes strand.

Plastic ingestion by *harbour* seals (*Phoca vitulina*) in The Netherlands.

Immune activity, body condition and human-associated environmental impacts in a wild marine mammal.

Symmetry: The key to diagnosing propeller strike injuries in sea mammals.

Exploring cetacean stranding pattern in light of variation in at-sea encounter rate and fishing activity: Lessons from time surveys in the south Bay of Biscay (East-Atlantic; France).

*Morbillivirus* infection in cetaceans stranded along the Italian coastline: Pathological, immunohistochemical and biomolecular findings.

Skeletal abnormalities in humpback whales *Megaptera novaeangliae* stranded in the Brazilian breeding ground.

Domoic acid exposure and associated clinical signs and histopathology in Pacific harbor seals (*Phoca vitulina richardii*).

Humpback whales washed ashore in southeastern Brazil from 1981 to 2011: Stranding patterns and microbial pathogens survey.

Sarcoplasmic masses in the skeletal muscle of a stranded pigmy sperm whale (*Kogia breviceps*).

Freezing and thawing of pinniped carcasses results in artefacts that resemble traumatic lesions.

Sarcoplasmic masses in the skeletal muscle of a stranded pigmy sperm whale (*Kogia breviceps*).

Possible causes of a harbour porpoise mass stranding in Danish waters in 2005.