

Alaska Region Marine Mammal Stranding Network

Winter 2012 NEWSLETTER

Stranding Photo of the Summer: An entanglement response team makes an approach towards a severely entangled gray whale near Petersburg in August, as the Alaska Marine Highway Ferry, The Matanuska, passes nearby. The team removed the 50 pounds of gillnet webbing and over 200 pounds of bull kelp that the animal had been towing.



Photo credit: Barry Bracken (Petersburg Marine Mammal Center). Petersburg, August 2011.

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In this issue:

Page 2

2011 Summary

Page 3

Case Study: Ice Seals

Page 4

Case Study: Nushagak
Orcas

Page 5

SeaLife Center Update

Page 6

Network Happenings:
Alaska to Antarctica

Page 7

Network Happenings:
WhaleFest

Page 8

Network Happenings: Oil
Preparedness

Page 9

Gearing up for 2012

Page 10

Shorezone Release

Page 11

Announcements

Page 12-13

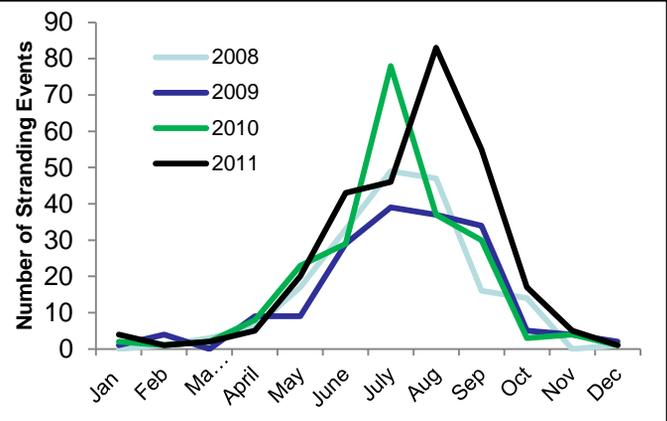
Recent Stranding and
Health Articles

Looking Back... 2011 Stranding Recap

Kaili Jackson, NMFS

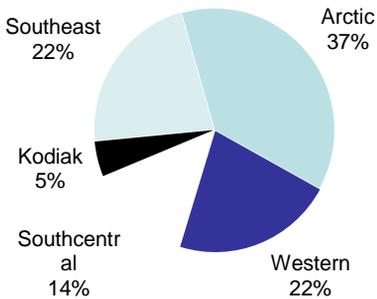
The 2011 stranding season was a fast and furious one. NMFS received 284 stranding reports, smashing last years record of 220. At least 300 animals were involved in these reported events. In southeast Alaska, we began the year with some mysterious pinniped mortalities in and around Skagway, historically an area with minimal stranding reports. Sitka was another hotspot- with 3 whales stranding in the sound in the first few months of the year, 2 gray whales and an orca. Re-articulation of the orca skeleton is currently underway and plans are in place for a local display.

As usual, the season picked up during the summer months. In addition to several necropsy responses, the Alaska SeaLife Center successfully rehabilitated and released 11 harbor seals (see page 5). Statewide, 127 animals were initially observed alive, while 173 were first seen dead. There were over 18 large whales observed with entanglements; 3 of which were successfully released by our trained network members and 7 of which were partially or completely released by fishermen on site.



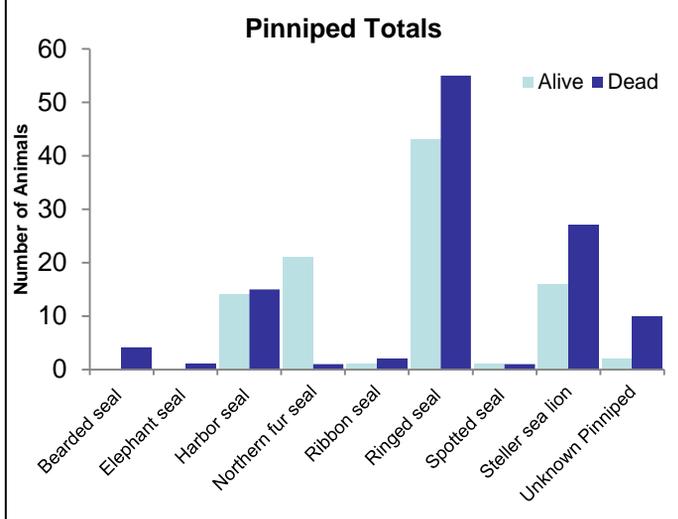
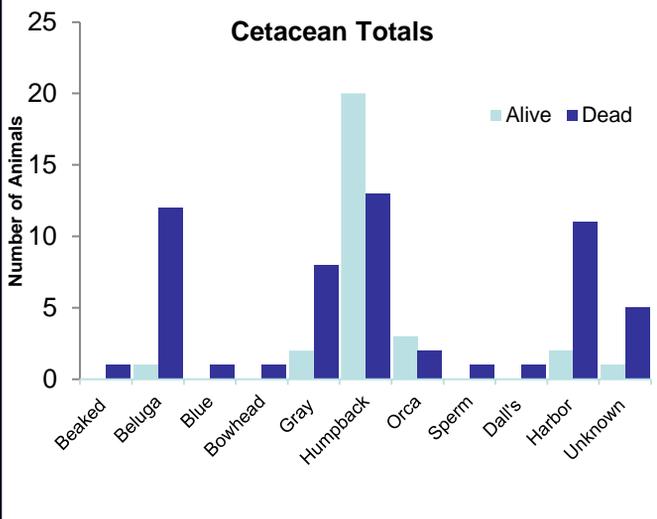
Monthly trend of stranding events, 2008-2011

Statewide Stranding Distribution



Distribution of stranding reports by area.

Our busy season did not end in September as it usually does. First, it was brought to the attention of NMFS that an unusually high number of ringed seal mortalities were being observed on the North Slope, which instigated a full blown investigation and an eventual Unusual Mortality Event declaration (see page 3). For clarification, while there have been over 150 sick seals observed and reported. Not all are captured here, however, as subsistence harvested cases are archived separately. Just a few short weeks later, NMFS was made aware that three killer whales appeared 'trapped' upstream in the Nushagak River with their condition declining in fresh water. Subsequently, carcasses were discovered and vets were dispatched for necropsy (see page 4). December finally offered some relief with only one event reported in the final month of the year--a humpback whale carcass on Unimak Is. The area remoteness and weather conditions prevented response.



2011-12 Northern Pinniped Unusual Mortality Event Update on Investigation and Findings

Aleria Jensen, NMFS

The Alaska Stranding Network has been heavily involved in the investigation of diseased ice seals and walrus since late summer/early fall 2011. Much effort has been expended both in the field and in the lab to recover carcasses, obtain samples, and conduct necropsies. Despite testing in numerous US and Canadian laboratories, preliminary findings have not yet revealed a definitive cause in this Arctic disease outbreak.

Tests for common known viral pathogens (poxvirus, herpesvirus, papillomavirus, morbillivirus, calicivirus) have been negative thus far, though there is ongoing effort to do exploratory evaluation using viral discovery methods. Much work is also underway on bacterial and fungal testing. Additional testing planned or now underway includes evaluation of harmful algal bloom-associated biotoxins, chemical contaminants and radionuclides, as well as evaluation of the overall health status of individuals including nutrition and endocrine assessments.

In December, the Working Group on Marine Mammal Unusual Mortality Events (WGMMUME) recommended that the National Marine Fisheries Service and the U.S. Fish and Wildlife Service declare this Arctic disease event a multi-species Unusual Mortality Event (UME). A UME is defined under the Marine Mammal Protection Act as "a stranding that is unexpected; involves a significant die-off of any marine mammal population; and demands immediate response." From 1991-2012, there have been 55 formally recognized UMEs in the U.S.

Since the species impacted by the Alaska UME include ice seals under the jurisdiction of (NMFS) and walrus under the jurisdiction of (FWS), both agencies are working together in close partnership to help oversee the investigation. The agencies have jointly appointed Dr. Raphaela Stimmelmayer, from the North Slope Borough, to be the UME On-site Coordinator and lead the investigation. Each agency has also assigned an Off-site Coordinator to serve a communication and coordination role as the investigation moves forward (Joel Garlich-Miller, USFWS, and Aleria Jensen, NMFS). Dr. Stephen Raverty will serve as the liaison to the WGMMUME.



Arctic UME Workshop, Alaska Marine Science Symposium, January 18, 2012. Photo courtesy of Dr. Carrie Goertz, Alaska SeaLife Center

A workshop held at the Alaska Marine Science Symposium in mid-January generated strategies for moving forward with the UME investigation. The workshop was well-attended by a wide variety of involved and concerned parties, including Tribal leaders, hunters, scientists, veterinarians, managers, and diagnosticians. The meeting was extremely productive as a forum for information exchange, as well as developing next steps for field protocols, diagnostics, and communications. An investigative team has been established involving national and international specialists from numerous laboratories, agencies and institutions. As it has been to date, the work ahead will continue to be a highly collaborative effort.

Since this is the first UME involving subsistence species in coastal Alaskan communities, both NMFS and USFWS will continue to prioritize concerns about the food safety dimensions of this outbreak. The agencies have been working closely with the State of Alaska Division of Public Health to assess potential risk and distribute general precautionary guidelines around handling and consumption in the absence of a known pathogen. Throughout this event, hunters have been encouraged to use traditional and customary practices when dealing with healthy and/or sick seals. **At present, there is no evidence that consuming animals involved in this disease event has caused any human illness.**

Few cases have been reported in Alaska since the end of November. Chukotka hunters have also reported no sightings or harvest of sick and/or hairless seals during the months of December 2011 and January 2012.

For more background on this event, see:

<http://www.fakr.noaa.gov/protectedresources/seals/ice/diseased/default.htm>

http://alaska.fws.gov/fisheries/mmm/walrus/disease_investigation.htm

Case Study: Nushagak Orcas

By Kate Savage, NMFS

On October 6, 2011, members of NMFS Regional Stranding Network received a report of three killer whales, two adults and a juvenile, moving along various stretches of the Nushagak River east of Dillingham (see Fig. 1). By the time NMFS received the call, the whales had

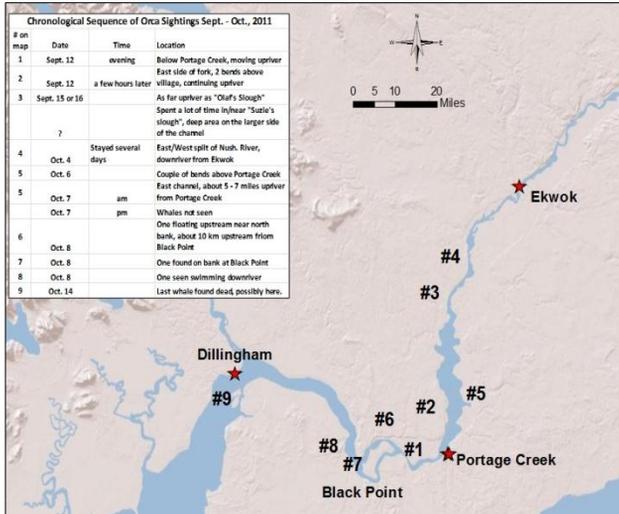


Figure 1: Map of orca sighting on the river.

been in the river for almost 3 weeks and were currently located several miles above Portage Creek and appeared to be physically distressed (see fig. 2). Aerial surveys were initiated to track the whales movements in the river and plans made to elicit help from the communities along the river to try and herd the animals back to the marine environment.

Unfortunately, the whales were last seen alive together on the morning of October 7. On October 8, two of the whales were found dead and the third was noted swimming downriver. Plans were then shifted to accessing the carcasses as quickly as possible for necropsies.

On October 11 a team of four veterinarians and two assistants, including Dr. Kathy Burek (AK Veterinary Pathology Services), Dr. Judy St. Leger (Sea World), Dr. Rachel Dziuba (Bridge Veterinary Service), Dr. Kate Savage (NMFS), Katie Royer (AVPS) and Robert Walton (ASLC), flew to Dillingham to glean some insight into possible causes of death. The community of Dillingham, lead by Kim Williams, was extremely helpful in towing one of carcasses, an adult female pregnant with a near-term fetus, to a city dock where the team was able to complete the necropsy that evening. The following day, the team flew up to Black Point and completed the necropsy on the second carcass, an adult male. Several days later, a report that the third whale was found stranded was received, but aerial surveys were not able to verify the report.



Figure 2: Skin pathology possibly associated with fresh water.

The cause of death was not apparent on gross examination, although stomach contents were minimal and there did not appear to be any indications of human interaction. Ancillary investigations are pending histological review. Killer whales have been reported swimming in the river in the past, although not as high up the river for such a long period of time. The reason these animals continued up river and then stayed in the area is unknown. Marine mammals tend to fare poorly when in a freshwater environment for extended periods of time and this may have contributed to the death of these animals.

The necropsy team would like to extend a heartfelt thanks to:
Paul Leidberg, Tevis Underwood and Patrick Walsh of the USFWS Togiak National Wildlife Refuge
Kimberly Williams of Nunamta Aulukestai
The Dillingham Police Department and all other community members that offered their help and hospitality.

Alaska SeaLife Center Yearly Review

Tim Lebling,
ASLC Stranding Coordinator

The year, 2011, was another eventful and successful year for the Alaska SeaLife Center and the Stranding Program. Our biggest news for the Center was the acceptance of membership to the American Zoo and Aquarium Association (AZA). This new era for the center will allow us to collaborate with facilities nationwide and will open up new funding opportunities. This membership would not have been possible without the efforts and long hours of documentation by many staff members and the administration. In October, the ASLC President and CEO, Dr. Ian Dutton, announced his resignation and his position is currently being filled by Tara Riemer Jones, PhD. A search is currently underway for a new President/CEO.



This rock makes the perfect pillow for a snoozing Napa.

The stranding season was, as usual, dynamic and entertaining. The ASLC responded to 30 NOAA Fisheries Service regulated marine mammals, representing nine different species. The ASLC Stranding Program successfully rehabilitated and released 11 harbor seals. All animals were released in the same location or region in which they stranded. Satellite tags were attached to five of the harbor seals. Satellite tag data is routinely updated on our website. One rehabilitated ringed seal was deemed non-releasable and is awaiting transfer to a permanent facility. We responded to eight USFWS regulated marine mammals, which were all northern sea otters. The ASLC admitted two sea otters, consulted and gave veterinary

authorization to euthanize one sea otter in Sitka, observed and left two sea otters at site, responded to three DOA sea otters which were either sent to ASLC or USFWS for necropsy.

One sea otter, EL1108, aka "Corky," was released on January 2nd in Homer with flipper tags attached to his hind flippers to track his progress. Sea otter responses were received from Homer, Kenai, Sitka, Adak and Seward. The ASLC fielded over fifty reports from the Homer Stranding Network on stranded sea otters. USFWS was the primary responder on a majority of these cases with the support of the ASLC Volunteer Homer Stranding Network. ASLC Veterinarians and staff assisted or preformed necropsies on a number of large whales including a beaked whale in Homer, a Dall's porpoise in Anchorage, as well as a number of Steller sea lions and sea otters. The Alaska SeaLife Center responded to and admitted 41 birds representing 19 different species.

The National Marine Fisheries Service, U.S. Fish and Wildlife Service, and the Alaska SeaLife Center proudly announce our 7th Annual Alaska Marine Mammal Stranding Network meeting scheduled for Tuesday, February 28th, through Thursday, March 1st, 2011 at the Alaska SeaLife Center in Seward. We look forward to this meeting to continue our collaborative efforts as individuals, organizations and agencies to improve and expand the Alaska Marine Mammal Stranding Network and appreciate your attendance. We would like to acknowledge the NMFS John H. Prescott Grant program for providing funds once again to make this meeting possible. RSVP to Tim Lebling or Cyndi Boyett.



Corky, the Sea Otter

From Alaska to Antarctica: Adventures in Marine Mammal Science

Stranding Network Member, Rachel K. Bergartt, DVM



In the Fall of 2011, I was privileged to travel to the Antarctic to serve as the Alaska SeaLife Center's Field Services Veterinarian for the NSF funded project Thermoregulation in free-living Weddell Seals. This is a collaborative project between the Alaska SeaLife Center, Oregon State University and the University of Colorado. All 7 members of our team met at McMurdo Station, Antarctica to begin our 7 week long field season together, thankfully conducted during the austral summer. My role in the project as the veterinarian allowed me to be responsible for participating in health assessments and conducting anesthesia. Anesthesia is necessary for this project not due to surgical pain, but to allow the scientists to safely attach their data recorders. All scientific monitors (which include but were not limited to heat flux sensors, depth and swimspeed recorders, VHF and satellite tags) were attached to the animal's fur via epoxy. While Weddell Seals are traditionally thought of as docile compared to other pinnipeds, they wouldn't exactly hold still for the precision attachment of the data recorders needed - hence my role in conducting anesthesia. And don't worry - even though we did successfully retrieve 85% of the data recorders attached to the seals, the data recorders we weren't able to retrieve would fall off on their own in a few weeks when the animal molted. Since we have just completed our first field season, I don't have much in the way of conclusions from our data, except to say that the project is innovative, relevant and that Antarctica is astounding. For more information on my adventure and the project, please visit my blog site at bridgevet.wordpress.com. Enjoy!



All photos taken under NMFS Permit
15748 and AEA 2012-003

WhaleFest 2011

by Kaili Jackson, NMFS

Another WhaleFest has come and gone, and as usual, was saturated with members of the Alaska Marine Mammal Stranding Network.

Science in the Schools

The Science in Schools Program is a program led by network member, Steve Lewis. Steve goes into classrooms of students of all ages up to two weeks before WhaleFest weekend to lay the groundwork for the program by prepping students with background information on the work of various scientists. These same scientists will then arrive the week before WhaleFest to start spending time in the local classrooms with hands-on activities relevant to their current work.

For example, network responder, Reid Brewer had 200 squid shipped to Sitka for students to dive into. Also, Dr. Shannon Atkinson spent time with students both in dry and wet labs. Mt. Edgecumbe High School students had the opportunity to enjoy demonstration necropsies on stranded California sea lions provided by the Marine Mammal Center. Stacey Golden's 8th graders got to visit the killer whale skeleton



8th graders admire orca vertebrae at the SSSC.



Students take advantage of the octopus on display.



Mt. Edgecumbe High School students inspect a dead California sea lion for a potential cause of death.

(see page 4) at the Sitka Sound Science Center (SSSC) and then received a visit from Network Asst. Coordinator, Kaili Jackson to learn about marine mammal strandings in Sitka Sound.

WhaleFest Symposium

The WhaleFest Symposium is a 3-day weekend event during which 12 speakers are invited to present their latest work with the marine environment. Stranding Agreement holder, Chris Gabriele, presented whale and vessel collision data in hopes of creating a better understanding of what causes these incidents and how to prevent them. Network responder, Bree Witteveen, talked about the cool tools and techniques used to determine

cetacean foraging habits around Kodiak Island. Network responder, Reid Brewer, crashed the whale party with OctoFest and demonstrated that giving octopus tattoos doesn't just make them look cool, it helps to study population dynamics as well.



Reid Brewer enlightening symposium attendees

If you are interested in learning more about WhaleFest or participating next year, check out their website at <http://www.sitkawhalefest.org>.

See you next year!

Oil Preparedness

Kailli Jackson, NMFS
Sadie Wright, NMFS

Nationally, there has been a heightened awareness to the potential for oil spill disasters and the Alaska Stranding Network recognizes the need for preparedness should an event involving Alaskan marine mammals take place.

In September 2011, NMFS organized a HAZWOPER training in Juneau conducted by Focus Wildlife of Anacortes, WA. (who also trained the NW Region Stranding Network). Juneau stranding response team members joined The Alaska SeaLife Center staff and others across the state in obtaining this certification. HAZWOPER Certification is required to be a first responder during an oil spill event.



Volunteers demonstrate handling "oiled birds" during HAZWOPER training in Juneau. Our response teams are no strangers to being suited up and taped, head to toe!

Here are some examples of additional preparation occurring statewide.

- NMFS Protected Resources staff participated in an oil spill drill hosted by BP in Valdez. The spill was designed to be similar to an Exxon Valdez oil spill, and the drill included over 200 people from State and Federal agencies, BP, oil spill response contractors, and the community working together to mimic the coordination necessary in responding to a big spill.
- NMFS Protected Resources staff also participated in a USFWS-hosted training in Anchorage to determine what actions are required by NMFS in oil spills of various sizes, and to strengthen collaboration and communication among government agencies and the responsible party.
- NMFS National Guidelines for responding to oil spills are currently being revised and are due to be finalized this summer (2012). Alaska's Wildlife Protection Guidelines are also being revised to include current information and maintain consistency with the National Guidelines. Oil spill response and preparedness is currently making major advances in response to lessons learned from the Deepwater Horizon Gulf Oil Spill.

NOAA and partners complete epic Southeast Alaska ShoreZone coastal mapping project

Julie Speegle
NOAA Fisheries Alaska Region

Check out this new, free on-line tool now available to the public. For our purposes in the Stranding Network, this means we have the ability to examine coastlines where cases are reported for safety issues re retrieval/landing/beaching, and to evaluate potential sites for carcass towing and necropsy.



Coronation Island showing rocky, very exposed shoreline.

People around the world can now get an eagle's-eye view of all of Southeast Alaska's shoreline without leaving home, now that the award-winning ShoreZone project has been completed for the entire coastline from Dixon Entrance to Yakutat.

About 30,000 kilometers (19,000 miles) of coastal habitat was mapped during the project—a milestone equivalent to surveying the entire Pacific coastline of Washington, Oregon, and California, twice. The habitat mapping effort followed ShoreZone protocols that have been applied throughout



Island archipelago near Sitka with canopy kelps in the foreground



A small delta in Southeast Alaska.

British Columbia, Washington, Oregon and the remainder of the Gulf of Alaska. The 30,000 km of Southeast Alaska data has been added to the larger statewide ShoreZone dataset. The project also marks the first time Southeast Alaska's entire coast has been mapped at the lowest tides of each year.

The Alexander Archipelago of Alaska's panhandle is known for its myriad of well over 1,000 islands and represents almost 40 percent of Alaska's coastline. Imagery and data from the project—including over one million video captures and 178,000 high-resolution photographs—are all available online at NOAA Fisheries' Alaska Regional Office website: <http://alaskafisheries.noaa.gov/shorezone/>

The Southeast Alaska ShoreZone initiative received the Coastal America Spirit Award in 2009 in recognition of an "outstanding partnership." Supporting agencies and partners include: NOAA Fisheries Alaska Regional Office and Auke Bay Laboratories, The Nature Conservancy, USDA Forest Service, Alaska Department of Natural Resources, Alaska Department of Fish and Game, Southeast Alaska Petroleum Response Organization (SEAPRO), Ocean Fund (Carnival Cruises), Coastal & Ocean Resources Inc., and Archipelago Marine Research Ltd.

For more information, contact:

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Credit all photos:
**Alaska ShoreZone
Program**

Gearing Up for 2012.....

Stranding Reports to Date

If 2012 is anything like last year, we had better brace ourselves for a fast and furious stranding season that just never ends! Fortunately, we are off to a slow start with only five animals reported so far this year. Most recently, a Steller sea lion pup covered in a layer of ice was collected in Homer and shipped to Dr. Kathy Burek for necropsy.

During the third week of January, a harbor seal pup was reported to have been caught in a trap that had been set on dock. The seal jumped into the water and drowned. The carcass was collected by NMFS Enforcement and is currently pending necropsy.

On January 12, a gray whale became entangled in active cod pot gear near Unimak Pass. The fishing vessel was able to use a knife to cut the whale free of the gear. Prior to that, a harbor seal was reported dead on a beach north of Thorne Bay, on Prince of Wales Island. The animal had extensive bird scavenging, but appeared to be a potential struck-and-loss candidate, though no bullet was recovered.

And finally, the *First Stranding of the Year Award* goes to.... A dead sea lion observed on January 2, just off the road system in Juneau. The animal appeared fairly decomposed and was not secured before the next tide.



(Above) Steller sea lion carcass reported near Juneau.

(Left) Frozen Steller sea lion picked up in Homer and collected for necropsy.

Alaska Stranding Meeting- 2012

The National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service (USFWS), and the Alaska SeaLife Center (ASLC) proudly announce our 7th Annual Alaska Marine Mammal Stranding Network meeting scheduled for Tuesday February 28th through March 1st, 2011 at the Alaska SeaLife Center in Seward.

RSVP to Tim Lebling or Cyndi Boyett

Tim Lebling, ASLC (907-224-6399) tim_lebling@alaskasealife.org
Cyndi Boyett, ASLC (907-224-6890) Cyndi_boyett@alaskasealife.org



Announcements

Welcome Aboard!

The Alaska Marine Mammal Stranding Network would like to welcome newest member, The Chichagof Conservation Council! Based out of Tenakee, CCC will be playing a much needed role and filling a gap in the center of Southeast Alaska.

Following members' involvement in several stranding events in Tenakee Inlet, the Chichagof Conservation Council (CCC) has applied for membership in the Alaska Stranding Network. Working closely with the Tenakee Volunteer Fire Department (TVFD), CCC volunteers have already assisted with Stellar sea lion, harbor porpoise, and humpback whale necropsies and disentanglements.

Initially organized around Tongass National Forest management issues during the pulp mill era, CCC has a strong interest in all facets of Chichagof Island life both terrestrial and marine. A registered 501c-3 non-profit organization, CCC has sponsored numerous local projects ranging from hazardous waste disposal to monitoring freshwater stream temperatures.

CCC cooperation with the TVFD during stranding events is mutually beneficial. NOAA support for rescue boat operations permits more TVFD training opportunities than would otherwise be possible, while use of TVFD equipment increases marine mammal response options.

Sea Lion Video Online

ADF&G's Prescott funded Steller sea lion entanglement awareness video was recently uploaded to YouTube.com and can now be found by doing a search for "sea lion entanglements."

<http://www.youtube.com/watch?v=6dy2kepJvOM>



Hollywood Film Release: Big Miracle

Based on the true story of an Alaskan stranding, the film "Big Miracle" is in theaters now. NOAA marine mammal biologist, Dave Withrow, participated in the actual event that occurred almost 25 years ago. Check out the link below to read the interview with Dave and to view photos of the event.

www.nmfs.noaa.gov

Stranding Articles

Casoff, R.M., K.M. Moore; W.A. McLellan; S.G. Barco; D.S. Rotstein; M.J. Moore. (2011) Lethal entanglement in baleen whales. *Disease of Aquatic Organisms* 2011 96:175-185

Chaloupka et al. (2008) Cause-specific temporal and spacial trends in green sea turtle strandings in the Hawaiian Archipelago (1982-2003). *Marine Biology* 154:887-898.

Cook, P.; C. Reichmuth and F. Gulland (2010). Rapid behavioral diagnosis of domoic acid toxicosis in California sea lion. *Biology Letters, Animal Behavior*; Published online

Costello, M.J. and C.S. Baker. (2011) Who eats sea meat? Expanding human consumption of marine mammals. *BIOLOGICAL CONSERVATION* 144(12):2745-2746. Editorial

Davison, N.J.; L. L. Perrett; R. J. Law; C. E. Dawson; E. J. Stubberfield; R. J. Monies; R. Deaville and P. D. Jepson. Infection with *Brucella ceti* and high levels of polychlorinated biphenyls in bottlenose dolphins (*Tursiops truncatus*) stranded in south-west England. *Veterinary Record* 2011;169:14 Published Online First: 15 June 2011

Denuncio, P.; R. Bastida; M. Dassis; G. Giardino; M. Gerpe and D. Rodriguez. (2011) Plastic ingestion in Franciscana dolphins, *Pontoporia blainvillei* (Gervais and d'Orbigny, 1844), from Argentina. *MARINE POLLUTION BULLETIN* 62(8):1836-1841.

Fury, C.A. and J.S. Reif. (2012). Incidence of poxvirus-like lesions in two estuarine dolphin populations in Australia: Links to flood events. *Science of The Total Environment* 416: 536-540.

Greig, D.J.; G.M. Ylitalo; E.A. Wheeler; D. Boyd; F.M.D. Gulland; G.K. Yanagida; J.T. Harvey and A.J. Hall. (2011). Geography and stage of development affect persistent organic pollutants in stranded and wild-caught harbor seal pups from central California. *SCIENCE OF THE TOTAL ENVIRONMENT* 409(18):3537-3547.

Harris, K.; S.M. Gende, M.G. Logsdon and T. Klinger. (2011) Spatial pattern analysis of cruise ship-humpback whale interactions in and near Glacier Bay National Park, Alaska. *ENVIRONMENTAL MANAGEMENT* 49(1):44-54. 2011.

Hellier, C.A.; A.K. Hufthammer and T. Lislevand. (2011) Osteological pathology in a humpback (*Megaptera novaeangliae*) and fin (*Balaenoptera physalus*) whale skeleton. *INTERNATIONAL JOURNAL FOR PALEOPATHOLOGY* 1(2):117-120.

Nymo, I.H.; M. Tryland and J. Godfroid. (2011). A review of *Brucella* infection in marine mammals, with special emphasis on *Brucella pinnipedialis* in the hooded seal (*Cystophora cristata*) *Veterinary Research* 2011, 42:93

Stranding Articles, cont...

Peltier, H.; W. Dabin; P. Daniel; O. Van Canneyt; G. Doremus; M. Huon and V. Ridoux. (2012) The significance of stranding data as indicators of cetacean populations at sea: Modelling the drift of cetacean carcasses. ECOLOGICAL INDICATORS 18:278-290.

Pikesley S.K.; M.J. Witt; T. Hardy; J. Loveridge; J. Loveridge; R. Williams and B.J. Godley (2011). Cetacean sightings and strandings: evidence for spatial and temporal trends? Journal of the Marine Biological Association of the UK. Published online: 09 June 2011.

Roess, A.A.; R.S. Levine; L. Barth; B.P. Monroe; D.S. Carroll; I.K. Damon and M.G. Reynolds. (2011). Sealpox virus in marine mammal rehabilitation facilities, North America, 2007-2009. EMERGING INFECTIOUS DISEASES 17(12):2203-2208.

Seguel, M.; E. Paredes; H. Paves; R. Molina; F. Henriquez; F. De Groote and R. Schlatter. (2011). Pathological findings in South American fur seal pups (*Arctocephalus australis gracilis*) found Dead at Guafo Island, Chile. JOURNAL OF COMPARATIVE PATHOLOGY 145(2-3):308-317.

Tonay, A.M.; A. Dede; A.A. Ozturk; D. Ercan and A. Fernandez. (2012) Unusual mass mortality of cetaceans on the coast of the Turkish Western Black Sea in summer 2009. JOURNAL OF THE BLACK SEA/MEDITERRANEAN ENVIRONMENT 18(1):67-75.

THANK YOU again for all your hard work.

Please submit any pending 2011 level As, photos, and necropsy reports to NMFS (Kaili.Jackson@noaa.gov) to maintain good standing in the program and to allow us to stay up to date on events.

Hope you enjoyed this issue...

We continue to plan on releasing AK stranding network news twice a year in this newsletter format. You can expect to see one again during the 2012 summer season. We would like to solicit network input in the form of articles, photos, updates, or any other news for distribution. Please contact Kaili Jackson at Kaili.Jackson@noaa.gov or 907-586-7209 with your ideas or submissions.

Thanks!!