









WHO AM I? See page 10

# Central Puget Sound Marine Mammal Stranding Network

Serving Whidbey & Camano Islands (Island County), Skagit, and North Snohomish Counties

### Spring 2011 Newsletter

Greetings to the CPS Marine Mammal Stranding Network Volunteers!

Here is another newsletter full of fun photos, information on our activities for the past months, fascinating stories on marine mammals from around the world, and forthcoming events. You'll find reports on -

> Stranding responses Level A investigations Necropsies

And links to articles on an unusual whale stranding, satellite tagging, hybrid porpoise necropsy, a hybrid minke whale, harbor porpoise strandings, Whale Poop, Marine Mammals and gun shots, the Prescott Grant 10 year report -and MUCH much more.

> Also, see upcoming Events—Save the Date(s) On pages 10 and 11



**Reminder**— please send in your volunteer hours—from November 2010 to June 2011 — to Susan at <u>susan@orcanetwork.org</u>

We have have **LOTS** of CPSMMSN brochures & seal pup rack cards, and bumper stickers will be arriving soon. Let us know if you need any.

To report stranded marine mammals, please CALL: 1-866-ORCANET, or 360-678-3765

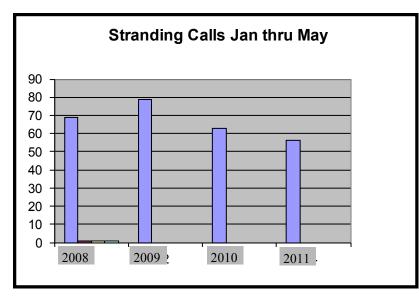
or email: Orca Network

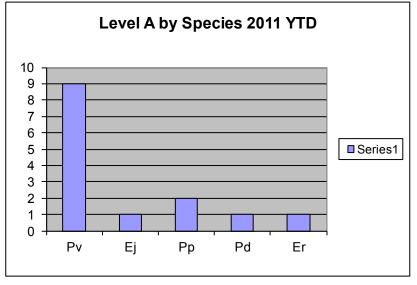
http://www.orcanetwork.org/strandings.html

From this website you may also print off seal pup and other marine mammal warning signs to post on beaches

### Incoming Stranding Calls for January through May, 2011

The chart below shows the number of reports of stranded marine mammals from January 1 through May 31, for 2008 through 2011. This year there has been a drop in reported animals as the 56 calls included several duplicates - for a dead seal at busy City Beach in Oak Harbor and for a floating/moving gray whale carcass. This latter appears to have been the gray whale necropsied at South Whidbey State Park on April 10th. Calls of a floating carcass started in mid-May near Lake Hancock, past Bon Air, over to Port Angeles, then headed toward Cattle Pass and ended in late May after it made landfall on Vancouver Island.





Key:

- Pv Phoco vitulina Harbor seal
- Ej Eumetopias jubatus Steller sea lion
- Pp Phocoena phocoena Harbor porpoise
- Pd Phocenoides dalli Dall's porpoise
- Er Eschrichtius robustus gray whale

### Level A Investigations

So far this year we have prepared 14 level A reports, the majority (64%) for harbor seals.

Two of the seals were stranded on Camano Island, the rest of the animals on Whidbey, from Dugualla Bay, to City Beach and West Beach in Oak Harbor, to Greenbank and Fort Casey in Central Whidbey to South Whidbey State Park, Mutiny Bay, Sunlight Beach and Scatchet Head in South Whidbey.

Pretty much spread out all over.

### Recent Necropsy Results—unusual findings

On New Year's Day, the necropsy on an adult female harbor porpoise revealed severe disseminated cryptococcosis in the lungs. (Crypto is a fungus that can gain entry into the body mainly through inhalation, thereby settling in the lungs.) She was also carrying a 5 oz, 8" fetus. Further examination of the tissues from the fetus will determine if there was transplacental transmission of the disease. (Dr. Norman is preparing a paper on the index case of this phenomenon discovered about a year ago in another mom-calf pair.)



Necropsy of a less than one year old harbor porpoise calf showed some calcified nodules beneath the blubber layer. It also had numerous tubercles along the edge of the dorsal fin. (If you have seen pictures of a humpback flipper, those bumps are called tubercles).

The carcass of an extremely emaciated 125 lb juvenile Steller sea lion was collected from Mutiny Bay. It had no blubber layer.

Susan and Howie retrieved a severely scavenged yearling harbor seal from Greenbank. It was a rehab animal that had been tagged by the Vancouver Aquarium.

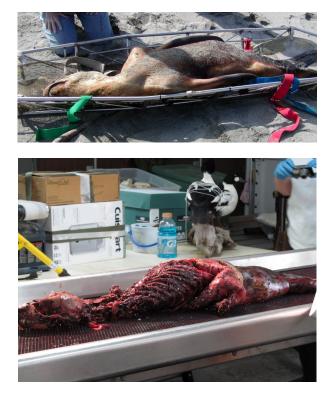




Mary Jo Adams holds up the ID for this porpoise



Well it was New Year's Day! Dr. Stephanie Norman, Howard Garrett and Susan Berta enjoy some bubbly after the necropsy.



### Recent Necropsy Results—unusual findings (cont'd)

In mid-April, South Whidbey State Park reported a gray whale carcass on the beach. The Cascadia Research Collective team, Matt Klope and a few of our stranding network volunteers responded to do the necropsy on this 42 foot, 15,000 lb (estimate) adult female. Scars on her ovaries indicated that she had produced several calves. The baleen was collected for educational purposes and the carcass was left on site.

In mid May, we began to get several calls about a dead floating whale – first near Lake Hancock, then Bon Air, then Port Angeles, then heading across the Straits of San de Fuca, and eventually from Vancouver Island where it finally made landfall about 10 days later.



Matt and McKenna went back to the site in late May and collected the second strip of baleen that had fallen out of the mouth, but found absolutely no sign of the carcass. From photos of the carcass from Vancouver, it does appear that it is "our" whale. It is amazing that a carcass, after being opened up for necropsy, was able to float that far and not sink someplace along the way.



None of these necropsies, including that of an adult female Dalls porpoise, revealed any significant findings nor was cause of death determined. However, all these animals had empty stomachs. Being perfectly capable of feeding themselves, why they hadn't eaten for awhile and had become so emaciated, is a mystery. Perhaps analysis of the tissues collected will reveal some underlying cause(s).

Sandy Dubpernell



#### **Dalls Porpoise**

Dr. Rickman and Dr. Norman sampling tissues with Matt Klope flensing the skeleton which was then frozen for educational purposes.



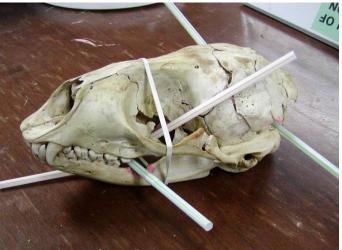
### Why Are Marine Mammals Shot? You Tell Me...

In the past several years of examining skulls from seals and sea lions, we have noted at least a dozen instances of gunshot wounds to the head.

Dr. Bill Van Bonn, of the Marine Mammal Center in California, who has seen many more gunshot animals than we have, puts it this way: "It is a terrible thing to shoot any creature for no good reason. But, what many don't realize, is that these strong and resilient marine mammals don't always die as a result. Instead, they suffer needlessly and terribly –sometimes drowning at sea, or suffer a slow and painful death either from infection and/or starvation, since often they can no longer dive, catch or eat food."

If you see anyone shooting, or harassing a marine mammal in any way, please call us, or report the incident directly to NOAA Enforcement, **1-800-853-1964**. Get a photo, or license plate number, or any kind of evidence you can, but remember, we are not in the enforcement business, so be subtle and safe.

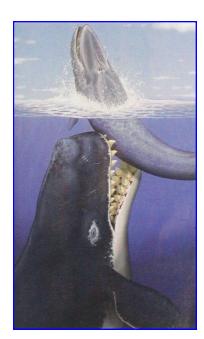




No blood here, just trajectories. This seal most likely was shot on land to have 4 bullets in the head. A huge thank-you to Caroline Spehar for reconstructing this skull.

### Moby Dick Meets Jaws

A vertebrate paleontologist, Olivier Lambert, from the National Museum of Natural History in Paris, and his colleagues, uncovered a mandible and partial skull of an extinct hypercarniverous sperm whale in Peru. Estimated to have lived 12-13 million years ago, they named it *Leviathan melvillei*, inspired by Melville's "Moby Dick". The whale's longest tooth is about 36cm long, including the root. That is approximately 14", 40% longer than those of present day sperm whales. Estimated length of the whale itself is between 13.5 and 17.5 meters, slightly smaller than today's large males. Having the largest predatory teeth ever discovered, they believe this carnivore fed on medium sized baleen whales.



Science News, July 31, 2010 (Sid Perkins)

### Whale Poop Cleans the Environment

"Whale poop is rich in iron so it stimulates the growth of phytoplankton, which then serve as carbon traps that remove some 400,000 estimated tons of carbon from the atmosphere each year".

Sperm whales in the Southern Ocean release over 220,400 tons of carbon when they exhale carbon dioxide, but their loose poopy substance containing some floating squid beaks stimulates the drawdown of almost 441,000 tons of carbon according to a recent publication in the Proceedings of the Royal Society B.

These ocean giants and certain other marine mammals (like seals, sea lions and other whales) may therefore be among the most environmentally beneficial animals on the planet.

Trisha Lavery, Marine Biologist at Flinders University of South Australia, explains how the process works: "It begins with sperm whales feeding on squid, their favorite prey, deep in the ocean. The whales then return to the water's surface to relieve themselves. They do this because they shut down their non-crucial biological functions when they dive. So it is only when they come to the surface to rest that they defecate".

The liquid waste plume showers over the "seed stocks" of aquatic plants on the surface providing nutrients that they can use to grow and reproduce. The whale poop functions as a natural fertilizer. The phytoplankton take up carbon from the ocean trapping it as they grow.

Human activities pump huge amounts of carbon into the atmosphere, something that the present population of 12,000 sperm whales could not offset. However, most whales are only at 1-10 % of their historic population size, so in the past they may have been very much more effective at carbon drawdown. "We must protect whales in order to have healthy, well-functioning marine ecosystems" says Lavery.

Discovery News June 15, 2010. Jennifer Viegas





Speaking of Sperm Whales, here's an interesting article on a sperm whale that beached itself in the North Sea—far away from it's normal food source..

<u>http://www.dailymail.co.uk/news/article-1392744/</u> Stranded-44ft-sperm-whale-dies-washed-Clevelandbeach.html?ito=feeds-newsxml

### There's a lot to be learned from satellite tagging.

In October 2010, a team of scientists from Russia and the United States satellite tagged a western gray whale off Sakhalin Island, Russia. This is the first individual from the Critically Endangered western gray whale population to be tagged and tracked using telemetry. This whale, nicknamed Flex by researchers, has now been successfully tracked for over four months, revealing its long and unexpected migration route. See the full story here -

http://www.iucn.org/wgwap/?7015/Western-gray-whale-makes-unexpected-journey



From the Arctic to the Azores, this Orcinus Orca wasted no time heading to the tropics!

Biologist Cory Matthews knew the chances of spotting killer whales in the Arctic were slim. The odds of getting a satellite tracker onto the sleek predators were even worse.

But Matthews and his colleagues hit the jackpot. Not only did they manage to fit two Arctic killer whales with trackers, but one of them headed off on a remarkable 5,400-kilometre journey.

In just a month, the whale swam from northern Baffin Island, down past Greenland, Labrador and Newfoundland, and headed for the Azores in the mid-Atlantic.. Read the full story here: http://www.canada.com/technology/

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 story.html#ixzz1OR7bwiyB





### A "pregnant" Hybrid Porpoise washes up on San Juan Island —

A pregnant Dall's/harbor porpoise hybrid stranded at South Beach a few weeks ago and the necropsy was performed at the University of Washington Friday Harbor Labs. With a developed fetus, this is likely the first evidence we have that hydbrid porpoise can successfully.Below is a link to the necropsy photos—warning—NOT for the faint of heart!

http://adamcu.com/hybrid-porpoise-necropsy-warning-gory-photos

### New Hybrid Whale Discovered in Arctic

Antarctic minke whales are mating with Arctic cousins, DNA shows.

http://news.nationalgeographic.com/news/2011/01/110125-whales-hybrids-antarctica-arcticscience-animals/

# Interesting new information on Orcas caching their food supply (gray whale calves).

http://www.petethomasoutdoors.com/2011/01/study-shows-orcas-kill-one-third-of-gray-whalecalves-.html

### **Research Project**

The Mingan Island Cetacean Study group based in Mingan, Quebec, operates a Blue Whale research trip to the Azores each year during spring. This year's trip was held the first week in May, and two of our stranding network volunteers made the journey to Pico Island, Azores, to help photo ID the blue whales. Unfortunately, the blue whales didn't get the message so didn't show up (25 were sighted in 2010 during the same period last year). However, the intrepid travelers were treated to high winds and heavy seas, in addition to many sightings of sperm whales, common, striped and Risso's dolphins. Did you know that the sperm whale's blowhole is slightly off-center, to the left? See photo below -



June/July is seal pup birthing season in our area.



### June/July is seal pup birthing season.

Seal "pupping" occurs in June and July in our area. If you find a seal pup on the beach, its mother is likely feeding nearby. **Give the pup space - stay back 100 yards.** For your safety and the health of the pup, leave the pup alone. If it is injured or being harassed, or remains on the beach for over 24 hours, report it to 1-866-ORCANET, (672-2638) or 360-678-3765. **DO NOT TOUCH!** 

## Harbor Porpoise Strandings in 2011

NOAA Fisheries is requesting notification of all harbor porpoise strandings that occur in the Northwest Region. It appears that there is an increase in strandings in Washington and we would like to keep a close watch on the numbers. If you have a harbor porpoise stranding in your area please send Kristin.Wilkinson@noaa.gov an email with some of the basic information such as: Field ID number, stranding date, age class, sex, and location. A copy of the Level A would be appreciated if it is available and it can be emailed or faxed to 206-526-6736. If you have a stranding in your area and you are unable to necropsy the porpoise please contact me and I may be able to arrange for the carcass to be necropsied by a cooperating researcher.



Photo: Cascadia Research Collective

The John H. Prescott Marine Mammal Rescue Assistance Grant Program Report FY2001-2010 – A Decade of Support to Save and Conserve Stranded Marine Mammals is available online at: http://www.nmfs.noaa.gov/pr/pdfs/health/prescott\_report\_2001-10final.pdf

We encourage network members and volunteers to look at the report so you can learn more about other regional groups and the types of strandings that occur outside of the Northwest Region. The report includes information about John H. Prescott, the grant recipients, regional overviews, and emergency funding.

And here is a good solid reason for stranding networks to exist!

http://www.upi.com/Science\_News/2011/06/07/Whale-stranding-gives-living-species-clues/UPI-67711307492749/

## A Timely Advisory from NOAA

It's the time of year when you are most likely to come across a pregnant stranded animal or placenta on the beach. Please use extreme caution while examining these animals to prevent injury or illness. Since the initial health advisory in 2009 *Coxiella burnetii* has been detected by PCR in the placentas of Pacific Harbor seals (17/27), Harbor porpoises (2/6), and Steller sea lions (2/3) collected in the Pacific Northwest as well as Northern fur seals (Alaska) and a California sea lion (California). This is in addition to the initial report published in 1999 from a harbor seal in California.

*Coxiella burnetii* is an obligate intracellular bacterial pathogen, and is the causative agent of Q fever.







## **EVENTS/Save the Date(s)**

June is Orca Month

## Orca Network's FUNdraising dance June 17th

"Orcas in our Midst" book launch also

Orca Sing (see next page for more details)



Ruffles' memorial—tbd Granny's birthday—July 2nd Lolita anniversary—August

## Fin Fest— October

Details to follow on these 4 events

Check for updates at http://www.orcanetwork.org/news/events.html

### Central Puget Sound Marine Mammal Stranding Network

Principal Investigators: Matt Klope Dr. Stephanie Norman Susan Berta Sandy Dubpernell 360-675-3817 425-398-4115 360-678-3451 360-678-3765

Photo credits in this newsletter: Sandy Dubpernell, Jill Hein and Nicole Luce

Page 1 "Who am I?" Sperm whale—these whales can be found along Washington's coast. Page 6 The 6 species of dolphins called whales are Melon Headed Whale, Killer Whale (Orca), Pygmy Killer Whale, False Killer Whale, Short-Finned Pilot Whale and the Long-Finned Pilot Whale.

# June is Orca Awareness Month!



## Orca Network Presents Orca Month FUNdraising Dance! Friday, June 17

at the Coupeville Rec Hall, corner of Alexander and Coveland St.

Come dine and dance and join us in a big superpod to celebrate  $\ensuremath{\mathsf{Orca}}$  Month in Washington.

5 - 7 pm: Orcas In Our Midst book launch celebration, food, spirits, acoustic music

7 - 11 pm: Dance your fins off with



Tasty rock, cookin' blues, footstompin' roadhouse, with a dollop o' funk!

\$15 admission at the door

Proceeds support Orca Network's Whale Sighting Network and education programs. www.orcanetwork.org info@orcanetwork.org 360.678.3451



## Orca Sing

Orca Network will co-sponsor Orca Sing 2011 along with the Whale Museum, Friends of the San Juans, People for Puget Sound, American Cetacean Society-Puget Sound, The Whale Trail, Killer Whale Tales and the Seattle City Cantabile Choir. Orca Sing 2010 will take place on **June 18 at Lime Kiln Whale Watch park on San Juan Island, at 6:30 pm.** The choir will sing for the whales. Sponsors will be on hand with booths.