

# Central Puget Sound Marine Mammal Stranding Network

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

# Fall/Winter 2010 Newsletter

Greetings to the CPS Marine Mammal Stranding Network Volunteers!

Here is another newsletter full of fun photos and info about our activities for the past months. You'll find information on -

Stranding responses by species (January through October)

Level A investigations

**Research Project** 

Advanced Class in Specimen Collection

Contaminants are Forever

Samson on stage (or ceiling)

Way of Whales Workshop on January 29th, 2011

Baja trip to see the friendly Gray Whales

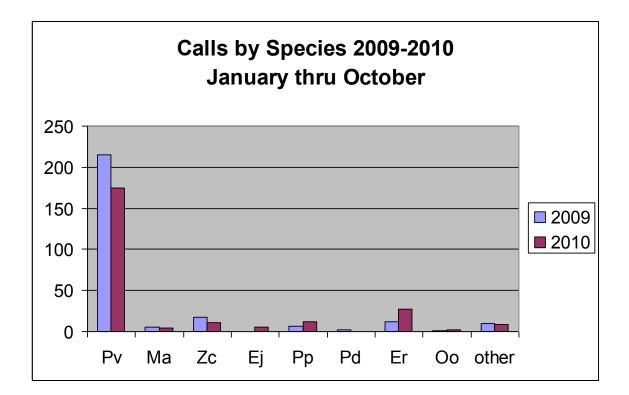
Reminder— please send in your volunteer hours—from July to October— to Susan at susan@orcanetwork.org

To report stranded marine mammals, please CALL: 1-866-ORCANET, or 360-678-3765 or email: <u>Orca Network</u> http://www.orcanetwork.org/strandings.html

# Incoming Stranding Calls for 2009 and 2010 January through October

In 2010, from January through October, we had a total of 245 reports of marine mammals and other "strandings" vs a total of 270 in 2009 during the same time period. Our stranding season appeared to get off to a slow start this year but picked up in October, which was a pretty busy month.

The chart below shows the calls received by species. "Other" included Brydes and minke whales, bottle nosed dolphins, river otters, octopus, an oil spill, a human foot and a truck stuck in the sand. Calls came in from as far away as the San Juan Islands, Port Orchard, Tacoma, and California.



#### Key:

- Pv Phoco vitulina Harbor seal
- Ma Mirounga angustirostris Elephant seal
- Zc Zalophus californianus California sea lion
- Ej Eumetopias jubatus Steller sea lion
- Pp Phocoena phocoena Harbor porpoise
- Pd Phocenoides dalli Dall's porpoise
- Er Eschrichtius robustus gray whale
- Oo Orcinus orca orca

Other anything not listed above

# Level A Investigations

The Network has completed a total of 55 Level A investigations so far this year: 42 harbor seals, 1 CA sea lion, 3 Steller sea lions, 2 elephant seals, 4 harbor porpoises and 3 gray whales. Many of the carcasses were too severely scavenged or too decomposed to offer much information. However, there were a few unusual findings.

Two **Steller sea lions** were partially necropsied on the beach by Matt Klope and Sandy Dubpernell revealing severely ruptured internal organs, particularly the livers. There were no marks of any kind externally, but the deaths are believed to have been caused by trauma from transient orca attacks. These Stellers washed up during the same time frame when transient orcas were seen in the area and were witnessed ramming Patch, our spring resident gray whale. Patch survived the attack, but the sea lions bled to death internally. As there were no orca rake marks on the carcasses it is believed that the orcas were not hunting to feed, but rather to teach the young how to hunt.



Matt & Sandy ready to do examination-Mutiny Bay April 2010



A 40 foot adult female **gray whale** was towed to the sea plane base for necropsy. Examination of the stomach and intestines revealed that they were packed with shredded wood, not a nutritious food for a whale. COD: probable malnutrition.



Gray whale stomach contents



Sandy Dubpernell & Carolyn Spehar, inspecting the eyeball



Susan Berta & Howard Garrett, wondering which organ to cut next



Good fresh baleen



A young female **harbor porpoise** (pre-reproductive age) was found to have an abnormal liver and a large collection of "stones" in her uterus. These stones were analyzed as uroliths, stones normally found in the urinary tract, although these were found in her reproductive system. Pending further tissue analysis. **Illegal take:** while on a camping trip, a couple picked up a **harbor seal pup** believing it had been abandoned by its mother. They kept it in the campsite overnight and took it home to Anacortes the next day. They called Wolf Hollow for instructions on how to care for the pup. They were immediately reported to NOAA Enforcement. The Enforcement Officer retrieved the pup which was transferred to Wolf Hollow Rehab Center. Results of the Enforcement decision are unknown at this time, but an event like this is a violation of the Marine Mammal Protection Act and a Federal misdemeanor and can result in a substantial fine. What were they thinking?



Here it is November and the weather is getting colder - and what does appear but a molting juvenile **elephant seal**?

"She" (gender actually unknown) appeared at the Fort Casey campgrounds in the midst of a boy scout campout and stayed a few days to attend the christening ceremony for the new ferry, the Chetzemoka. She disappeared later when the festivities were over.

### **Research Project**

Susan's many hours of hard work at getting us Prescott Grant money again this summer enabled us to continue our Network research project on analyzing marine mammal blubber samples for dioxins and furans. Last year 14 samples were analyzed with some porpoises and a CA sea lion showing significant levels of these toxins. Harbor seals are exhibiting lower levels. Another 7 samples have been sent for analysis to Pace Analytical Labs in Wisconsin this month, including blubber samples from one CA sea lion, 2 Steller sea lions and 4 harbor porpoises.

Dioxins and furans are a family of toxic chemicals that remain persistent in our environment and bioaccumulate in humans and animals. They are likely to be human carcinogens. In animals they may cause changes in hormone systems, alterations in fetal development, reduced reproduction capacity and immunosuppression. They are compounds formed via combustion and industrial chemical processes and can be found in air, soil, sediments and food (particularly in animals fats from eating meat and dairy products.)



Dr. Stephanie Norman teaching anatomy/ necropsy to students



Matt Klope teaching necropsy at Oak Harbor HS Science class

It's orca season in Puget Sound—from October through January. Call OrcaNetwork if you see them 1-866-ORCANET

# Advanced Class to be Offered in Specimen Collection

There are many times when Susan, Matt and I are not available to collect blubber samples from fresh dead carcasses. These samples are needed for our research project analyzing for dioxins and furans. We plan on offering an advanced stranding network class for any of you who are willing to do a bit of surgery on selected carcasses. Sampling for blubber is simple and not bloody work......

We also would like to train some willing volunteers in the removal of skulls on which we do ballistics study (if gunshot is suspected) and for providing specimens to local schools, universities, researchers and other approved organizations as educational tools. This can be very bloody work.

We will set up the necropsy lab at Matt's ManLand with carcasses upon which to practice sometime early next year. Date unknown at this time. Please sign up if you are interested in doing "surgery" on fresh selected carcasses. By "selected" I mean mostly adult animals, not seal pups. I need a list of folks who want to take part in this further education as I have to order equipment for the sampling.

### If you are interested, please contact me at <u>dubpernells@yahoo.com</u>.



Also, for any of you who want a refresher class - I will be teaching the NMFS Stranding Class over the 2 afternoon sessions (3 hours) at Sound Waters. Sound Waters will be held Saturday, February 5th, at South Whidbey High School. You'll need to sign up for Class BC2 when registration opens (January 7th, 2011).

# Contaminants Are "Forever"

Condor biologists in California have uncovered a serious problem with the eggs from nesting condors living near the shores of Big Sur. The shells are very thin - reminiscent of the DDT effects until DDT was banned in the US four decades earlier. The Southern California flock of condors living many miles from the coast produce normal eggs.

A major food source for the Big Sur carrion-eating condors is dead marine mammals including California sea lions. Sea lion blubber is known to contain high levels of DDE, a toxic metabolic breakdown of DDT. But what is the source of DDT?

A large DDT hot spot in the marine sediments off the Southern California coast is in an area known as the Palos Verde Shelf near a breeding ground for sea lions that eat the local fish. These sea lions migrate north to haul out on the Big Sur Coast, a favorite feeding spot for the condors.

A half century earlier the area was utilized by the Montrose Chemical Corp, the world's largest producer of DDT pesticide. The company discharged its DDT waste directly into the LA County Cont'd next page.....

sewer system from which it made its way to the ocean. The discharge was stopped in 1971 but sediments containing it still remain to contaminate the coastal waters.

The EPA has declared this area a superfund site with plans to cap the site with sand and silt in 2012. New York Times 11/16/10. Forwarded by Mary Jo Adams.

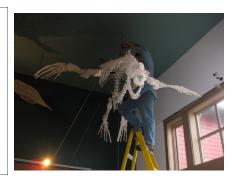
Another interesting tidbit:

One of the ways researchers determine where the different ecotypes of orcas have been eating is by their chemical signature - the orcas with high levels of DDT have been foraging off California, those with high levels of PCBs have been feeding off WA, and those further north in Canada typically have higher levels of Dioxins. It's a sad state of affairs when you can tell what region an orcas prey is from by the chemical signature! Susan Berta.



Samson—the pterodactyl—er no - Steller sea lion, is proudly swimming in his new home at the Coupeville Wharf.

Matt is happy to have Samson's vacated ManLand space back .



#### William the Concherer

Australian researchers have noted an usual behavior of some bottlenose dolphins. A dolphin was seen surfacing with a conch shell. Thinking it was play, the researchers took photographs. When the pictures were developed they noted the dolphin slurping a fish from the shell. The researchers think the dolphins may chase a fish into the shell trapping it there. Then they take the shell to the surface and knock it around to stun the fish before tipping it into their mouths - a new foraging behavior giving the dolphins access to prey that others can't reach. (New Scientist/18 Sept 2010)





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

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

Photo credits in this newsletter: Sandy Dubpernell and Jill Hein

### Ways of Whales workshop Saturday, January 29, 2011 9:30 am – 4:30 pm Coupeville Middle School Performing Arts Center 501 S. Main St, Coupeville

Cost of the workshop is \$25, and lunch will be available for purchase on-site for pre-registered participants.

http://www.orcanetwork.org/news/events.html or by contacting Orca Network at <u>360-678-3451</u> or info@orcanetwork.org.

Baja Trip—March 2011

This is an AMAZING experience - come join us & the Gray whales in Baja~

VISIT THE GRAY WHALES OF BAJA'S SAN IGNACIO LAGOON WITH ORCA NETWORK!

Join our Five-day Expedition to Baja to visit the friendly Gray Whales of San Ignacio Lagoon March 9 - 13, 2011.

Orca Network is pleased to announce our 5th trip to San Ignacio Lagoon, Baja, Mexico to visit the Gray Whales in one of their birthing lagoons, and learn about the amazing ecosystems of Baja's Biosphere Reserve. The trip will raise much needed funding for Orca Network's Sighting Network and education programs, while providing an opportunity to watch and learn about the gray whales on the southern end of their migration, and experience the "Friendly Grays" of Baja.

Please let us know if you are interested in joining us on our 2011 trip - the cost for this year's trip is: \$2500 per person, including biosphere & tourist cards.

A deposit of \$750 is required to reserve and confirm your space; final payment of the balance is due Dec. 1, 2010. For more information -

http://www.orcanetwork.org/news/events.html or by contacting Orca Network at <u>360-678-3451</u> or info@orcanetwork.org.