

Soundings



American Cetacean Society- Monterey Bay Chapter
PO Box H E, Pacific Grove, CA 93950

January 2010

**MONTHLY MEETING AT HOPKINS MARINE STATION, LECTURE HALL
BOAT WORKS BUILDING
(ACROSS FROM THE AMERICAN TIN CANNERY OUTLET STORES)**

Meeting is open to the Public

Date: Thursday, January 28, 2010

Time: 7:30 PM. **PLEASE JOIN US AT 7:00 FOR
REFRESHMENTS**

SPEAKER: COLLEEN YOUNG, M. S. MARINE SCIENCE

SUBJECT: HARBOR SEALS: MONTEREY BAY AND BEYOND

Harbor Seals are, at the same time, common and enigmatic. We see them all the time resting on rocks, sandy beaches and near shore waters. But what are we seeing? Since these are nocturnal hunters, we are watching them sleep or rest, for the most part. So much of their life happens out of sight, underwater or at night, when most of us are sleeping.

Our speaker recently received her masters from San Jose State University/Moss Landing Marine Labs where she studied in Jim Harvey's Vertebrate Ecology Lab. Colleen's Thesis focused on the effects of disturbance on Harbor Seals in Glacier Bay National Park, Alaska. As an avid diver, she has also spent time in the water, "up close and personal," with these amazing pinnipeds.

Colleen's presentation will take us through some basics about Harbor Seals, including our own Monterey Bay Population. She will then spend some time sharing the methodology and results of her research in Alaska.

Please join us for our first meeting of the New Year and learn more about our daytime near shore neighbors.

INSIDE THIS ISSUE

CALENDAR.....	2
BOOK RECOMMENDATIONS...	7
CONSERVATION GROUPS FILE SUIT CHALLENGING NEW RULE ALLOWING HAWAII SWORDFISH FLEET TO TRIPLE ITS CATCH OF SEA TURTLES	3
THE 'BYCATCH' DOWNED BY INDUSTRIAL FISHING	4
PITCH OF BLUE WHALE SONGS IS DECLINING AROUND THE WORLD, SCIENTISTS DISCOVER	4
AUSTRALIAN FOSSIL UNLOCKS SECRETS TO THE ORIGIN OF WHALES.....	6
SIGHTINGS.....	7
MEMBERSHIP.....	8

CALENDAR

Jan 15: Hopkins Marine Station Winter 2010 Seminars: Larry Crowder, Duke University
Bycatch of Marine Megafauna: From Synthesis to Solutions. Lecture time is 12:00-1:00

Thru-Feb 28, 2010- Darwin: Evolution/Revolution. San Diego Museum of Natural History.

GO WHALE WATCHING WITH ACS

Join us early Saturday morning, **January 16**, as we search for California gray whales as they pass Monterey during the peak of their annual migration. Local experts will be on board to identify and discuss the marine life we are sure to encounter. If you go on one gray whale adventure this year, choose to accompany the Monterey Bay Chapter of the American Cetacean Society on this annual fundraising trip. All proceeds from the trip are generously donated by Monterey Whale Watching to ACS to help fulfill our mission of research, education and conservation of whales and dolphins. The 2-hour trip departs Monterey Whale Watching on Fishermans Wharf at 7am. ACS members pay \$20, and non-members pay \$30, which includes a year-long membership to the world's oldest whale conservation organization. We'll be on the largest vessel in the Monterey fleet, the 100' Princess Monterey. We anticipate that a group of Salinas students and chaperones will be on board, many to catch their first view of a whale.

Bring warm clothes, binoculars and cameras. A comfortable inside galley offers beverages and snacks for sale.

Payment and reservations can be mailed ahead to ACS, PO Box HE, Pacific Grove, CA 93950, or we'll be accepting payment at the Dec. 3 meeting. For more

information, please call Jerry Loomis at 419-1051, Sally Eastham at 372-6919 or Tony Lorenz at 901-7259. Be at Fishermans Wharf by 6:45am on January 16, and we'll be off to see the whales!

Feb.3-7 : 7th Annual San Francisco Ocean Film Festival. J' LA Chic Theatre 39 at Pier 39. More Info to Follow.

Feb. 17-20: 37th Annual Meeting of the Pacific Seabird Group. Long Beach, CA. Lifetime Achievement Award (Dr. Dan Anderson).

Feb.19- 21: Marine Science Weekend at Camp Ocean Pines. Marine Mammal Field Sketches and Gray Whale Seminar with world renowned marine mammal illustrator Peter Folkiens. Lectures, field trip to Piedras Blancas and a Boat Trip in search of gray whales and other marine mammals will be included in this weekend of marine mammal immersion. For more info call Chris Cameron at Camp Ocean Pines at 805-927-0254.

April 27-29 : International Sea Turtle Society: 30th Sea Turtle Symposium. Goa, India.

May 17-20: 61st Tuna Conference. Lake Arrowhead, CA. It's Not About the Catch but the Bycatch.

Nov.12-14: The American Cetacean Society 12th International Conference will be held in Monterey at Embassy Suites Hotel and Conference Center. Local Monterey Bay ACS chapter volunteers are needed, and sign-ups will be available at the monthly meetings

CONSERVATION GROUPS FILE SUIT CHALLENGING NEW RULE ALLOWING HAWAII SWORDFISH FLEET TO TRIPLE ITS CATCH OF SEA TURTLES

December 16th, 2009

Today, conservation groups Turtle Island Restoration Network, Center for Biological Diversity, and KAHEA, represented by Earthjustice, filed a lawsuit in federal district court in Honolulu, Hawai'i challenging the National Marine Fisheries Service's issuance on December 10, 2009 of a rule removing all limits on effort in the Hawai'i-based longline swordfish fishery, and allowing the fleet to catch nearly three times as many loggerhead sea turtles as was previously permitted. Read the complaint. The new rule conflicts with the Fisheries Service's own assessment that the North Pacific loggerhead sea turtle is in danger of extinction. (Loggerhead Status Review.) That report, released only four months ago, noted that incidental capture in longline fisheries is a primary threat to the species' continued existence.

The new regulations increase allowable capture of threatened North Pacific loggerhead sea turtles from 17 per year to 46 per year. The rule continues to allow the capture of 16 endangered Pacific leatherbacks each year. The fishery also catches, injures, and kills false killer whales, humpback whales, albatross, blue sharks, and other "bycatch."

"The sea turtles are swimming toward extinction, yet this plan seems intent on continuing the same old fishery policies hastening their demise," said Teri Shore, Program Director of Turtle Island Restoration Network in Forest Knolls, CA. "We are disappointed, given Obama's new directives to protect the oceans." The president's Ocean Task Force recently held hearings around the country to develop a national ocean policy, including one in Hawai'i last September.

"The US government is going to allow even more sea turtles to be injured and killed to provide US consumers with swordfish, a product that is tainted with high levels of mercury. This is

what we experienced and learned to expect from the Bush Administration, but we 'hoped' for something better from the Obama administration. It appears the fishing industry is still calling the shots when it comes to protecting oceans and human health," said Todd Steiner, biologist and Executive Director of Turtle Island Restoration Network.

Swordfish longline vessels trail up to 60 miles of fishing line suspended in the water with floats, with as many as a thousand baited hooks deployed at regular intervals. Sea turtles become hooked while trying to take bait or entangled while swimming through the nearly invisible lines. These encounters can drown the turtle or leave it with serious wounds. Sea birds such as albatross dive for the bait and become hooked, and marine mammals, including endangered humpback whales, become hooked when they swim through the floating lines.

"The Fisheries Service has admitted that loggerhead and leatherback sea turtles in the Pacific face a significant risk of extinction unless we reduce the number of turtles killed by commercial fisheries," said Andrea Treece, an attorney with the Center for Biological Diversity in San Francisco. "Unfortunately, rather than take action to better protect sea turtles, the agency is proposing measures that would actually increase the number of turtles killed."

"The law requires the Fisheries Service to minimize harm to sea turtles, and prohibits harm to albatross, both of which are being driven to extinction mainly because of irresponsible fishing practices," said Paul Achitoff, an attorney with Earthjustice in Hawai'i. "The agency is once again pandering to WESPAC's insatiable appetite for short-term profits, disregarding the law in favor of maximizing swordfish catch."

"Expanding the commercial swordfish fishery in this way will have devastating consequences for the future of Hawai'i's public trust ocean resources," said Marti Townsend. "The Fisheries Service must manage Hawai'i's ocean resources more responsibly for the benefit of us all." said Marti Townsend, program director

of KAHEA: The Hawaiian-Environmental Alliance.

Overview of the new regulation:

- The "preferred" or weakest alternative was chosen.
- Sea turtle "take" meaning hooking, both harmed and killed:
- New rule: Loggerheads 46; Old rule: 17 (more than 3 times as many)
- Leatherbacks, 16, (both new and old rule - no change)
- Sets: New rule: No limit. Old rule: 2,120 (each set is one longline going out into the ocean; so each is NOT a permit; The 2,120 was spread out among all the permit holders). Note: The proposal to eliminate the set limit is odd, since fishermen have never come close to meeting it since the fishery re-opened in 2004. Last year 2008, 1,587 sets were recorded, and 1,570 the year before in 2007.
- Number of hooks "could increase to historic levels of 4,000 to 5,000 sets per year (3.4 to 4.2 million hooks/yr)."
- Number of Vessels: About 30 under old rule, probably about the same with new rule. But "some increased participation in the shallow-set fishery is anticipated with fishermen from the Hawaii-based deep-set tuna fishery moving into the fishery as a result of quotas being established for bigeye tuna. Entry into the Hawaii longline fishery, including both shallow (swordfish)- and deep-set (tuna) techniques, would remain limited to 164 vessels."

THE 'BYCATCH' DOWNED BY INDUSTRIAL FISHING

By Michael McCarthy

Concern is growing about the huge number of seabirds being killed by fisheries in the North Atlantic and the Mediterranean, the Royal Society for the Protection of Birds (RSPB) said yesterday.

Although conservationists' fears have so far focused on seabirds in the Southern Ocean,

especially albatrosses, there is mounting alarm over the numbers of northern species, such as shearwaters and petrels, falling victim to large-scale industrialised fishing methods.

The most deadly of these is longlining, which involves hooks set with bait on lines which stream out for great distances behind fishing vessels. Seabirds swoop on the bait when it is on the surface, before being hooked themselves as a so-called "bycatch".

It is estimated that 200,000 seabirds are being killed in fisheries in European waters every year, the RSPB said, with one species, the great shearwater, suffering an exceptionally high annual bycatch rate of 50,000 birds in the Spanish longline hake fishery to the west of Ireland.

Europe's rarest seabird, the Balearic shearwater, which is critically endangered with a population of just 2,000 pairs, is predicted to become extinct within 40 years if losses continue. Up to 50 individuals have been caught on hooks on a single longline.

The Cory's shearwater may suffer an annual bycatch rate of up to 10 per cent of the population in longline fisheries off Malta, according to Maltese fishermen.

The RSPB and BirdLife International are calling on the European Commission to implement an EU Community Plan of Action for reducing the incidental catch of seabirds in fisheries.

"Europe is incredibly important for seabirds, with some species occurring nowhere else, and this is a situation that Europe must tackle urgently," said RSPB spokesman Grahame Madge.

PITCH OF BLUE WHALE SONGS IS DECLINING AROUND THE WORLD, SCIENTISTS DISCOVER

ScienceDaily (Dec. 9, 2009)

The sound level of songs blue whales sing across the vast expanses of the ocean to attract potential mates has been steadily creeping downward for the past few decades, and a scientist at Scripps Institution of Oceanography at

UC San Diego and his colleagues believe the trend may be good news for the population of the endangered marine mammal.

Mark McDonald of WhaleAcoustics in Bellvue, Colo., along with John Hildebrand of Scripps Oceanography and Sarah Mesnick of NOAA Fisheries Southwest Fisheries Science Center studied blue whale song data from around the world and discovered a downward curve in the pitch, or frequency, of the songs. The decline was tracked in blue whales across the globe, from off the Southern California coast to the Indian and Southern Oceans.

"The basic style of singing is the same, the tones are there, but the animal is shifting the frequency down over time. The more recent it is, the lower the frequency the animal is singing in, and we have found that in every song we have data for," said Hildebrand, a



professor of oceanography in the Marine Physical Laboratory at Scripps.

The study's results are published in the most recent issue of the journal *Endangered Species Research*.

The researchers examined a list of possible causes for the frequency drop—from climate change to a rise in human-produced ocean noise—and believe it may be explained by the increase of blue whale numbers following bans on commercial whaling activities.

While the function of blue whale songs is not known and scientists have much more to learn, they do know that all singers have been determined to be males and that the high-intensity, or loud, and low-frequency songs propagate long distances across the ocean. Blue

whales are widely dispersed during the breeding season and it is likely that songs function to advertise which species is singing and the location of the singing whale.

In the heyday of commercial whaling, as blue whale numbers plummeted, it may have been advantageous for males to sing higher frequency songs, the researchers believe, in order to maximize their transmission distance and their ability to locate potential mates (females) or competitors (other males).

"It may be that when (blue whale) densities go up, it's not so far to get to the closest female, whereas back when they were depleted it may have been that the closest female was a long way away," said Hildebrand.

In the 1960s, when blue whale numbers were substantially reduced and recordings of the animals were first made, there may

have been a tradeoff in which the male suitors chose to sing higher frequencies that were louder and heard over greater distances, Hildebrand said. In more recent years, as population sizes have increased, it may now be more advantageous for males to sing songs that are lower in frequency rather than louder.

"When they make these songs they need to use most of the air in their lungs," said Hildebrand. "It's like an opera singer that sees how long he can hold a note. The (male) songs are made to impress the females and/or other males, so I think that's how the boy blue whales are impressing the girls, or are showing off to other boys: by making a loud and long song."

The scientists say the same downward pitch phenomenon may be true in other whales

such as fin and humpbacks, but the blue whale song, with a comparatively easier song to analyze, is a good springboard to study other species. Hildebrand says such knowledge about whale songs could be important in monitoring whale populations and recovery efforts.

During the study the researchers analyzed thousands of blue whale songs divided into at least 10 worldwide regions. These include the Northeast, Southwest and Northwest Pacific Ocean; the North Atlantic; the Southern Ocean near Antarctica; and the North and Southeast Indian Ocean. Blue whale songs have been recorded for the last 45 years through scientific and military applications by seafloor seismometers tracking regional earthquakes and dedicated whale acoustic recording packages.

In addition to NOAA National Marine Fisheries Service's Southwest Fisheries Science Center, Mesnick is affiliated with Scripps' Center for Marine Biodiversity and Conservation.

This research was funded by the U.S. Navy, NOAA and the National Science Foundation.

AUSTRALIAN FOSSIL UNLOCKS SECRETS TO THE ORIGIN OF WHALES

ScienceDaily (Dec. 23, 2009)

Museum Victoria paleobiologist Dr. Erich Fitzgerald has made groundbreaking discoveries into the origin of baleen whales, based on a 25-million-year-old fossil found near Torquay in Victoria, Australia.

Dr Fitzgerald's study, which is published in the Zoological Journal of the Linnean Society, is centred on *Mammalodon colliveri*, a primitive toothed baleen whale, one of a group of whales that includes the largest animal ever to have lived, the blue whale. Although *Mammalodon* was discovered in 1932 and named in 1939, it has remained relatively unknown until now.

"Through study of *Mammalodon*, I hypothesise that it was a bottom-feeding mud-sucker that may have used its tongue and short, blunt snout to suck small prey from sand and mud on the seafloor. This indicates early and varied

experimentation in the evolution of baleen whales," explained Dr Fitzgerald.

The research conducted by Dr Fitzgerald supports Charles Darwin's speculation in *The Origin of Species*, that some of the earliest baleen whales may have been suction feeders, and that their mud grubbing served as a precursor to the filter feeding of today's giants of the deep.

Although *Mammalodon* had a total body length of about 3 metres, it was a bizarre early offshoot from the lineage leading to the 30 metre long blue whale. The new research shows that *Mammalodon* is a dwarf, having evolved into a relatively tiny form from larger ancestors.

Mammalodon belongs to the same family as *Janjucetus hunderi*, fossils of which were also found in 25 million year old Oligocene rocks near Torquay in Victoria. This family is unique to southeast Australia, their fossils only being discovered in Victoria. "Clearly the seas off



Fossil skull of the whale *Mammalodon colliveri*. Length of skull about 45 cm. (Credit: Image: Rodney Start / Source: Museum Victoria)

southern Australia were a cradle for the evolution of a variety of tiny, weird whales that seem to have lived nowhere else," said Dr Fitzgerald.

SIGHTINGS compiled by Monterey Bay Whale Watch. For complete listing and updates see www.gowhales.com/sighting.htm

Date	#	Type of Animal(s)
1/3 p.m.	5	Gray Whales
	7	Killer Whales
	800	Long-beaked Common Dolphins
	180	Risso's Dolphins
	16	Dall's Porpoise
1/3 a.m.	2	Gray Whales
	7	Killer Whales (transient type)
1/2 p.m.	7	Killer Whales (transient type)
	600	Long-beaked Common Dolphins
	60	Risso's Dolphins
1/2 a.m.	3	Gray Whales
1/1 p.m.	13	Gray Whales
	45	Risso's Dolphins
1/1 a.m.	6	Gray Whales
	30	Risso's Dolphins
12/31 p.m.	8	Gray Whales
	1500	Long-beaked Common Dolphins
12/31 a.m.	4	Gray Whales
	50	Northern Right Whale Dolphins
12/30 p.m.	9	Gray Whales
	135	Risso's Dolphins
12/30 a.m.	1	Gray Whale
	320	Risso's Dolphins
12/29 p.m.	3	Gray Whales
	200	Long-beaked Common Dolphins
	60	Risso's Dolphins
12/29 a.m.	2	Gray Whales
	115	Risso's Dolphins
12/28 p.m.	3	Gray Whales
	75	Risso's Dolphins
12/28 a.m.	2	Gray Whales
	1400	Long-beaked Common Dolphins
12/27 p.m.	3	Gray Whales
	4	Humpback Whales
	8	Long-beaked Common Dolphins
	80	Risso's Dolphins
	3	Harbor Porpoise
12/27 a.m.	6	Gray Whales
	8	Long-beaked Common Dolphins
	270	Risso's Dolphins
12/26 p.m.	1	Gray Whale
	250	Risso's Dolphins
	2	Harbor Porpoise
12/26 a.m.	250	Risso's Dolphins
12/24 p.m.	65	Risso's Dolphins

12/24 a.m.	4	Gray Whales
	50	Risso's Dolphins
12/23 p.m.	9	Killer Whales
	40	Long-beaked Common Dolphins
	80	Risso's Dolphins
12/23 a.m.	9	Killer Whales (transient type)
	70	Risso's Dolphins
12/22	5	Gray Whales
	800	Long-beaked Common Dolphins
12/21 p.m.	250	Risso's Dolphins
12/21 a.m.	4	Gray Whales
12/20 p.m.	3	Killer Whales
(transient type)		
	200	Risso's Dolphins
12/20 a.m.	40	Risso's Dolphins
	15	Dall's Porpoise
12/19 p.m.	30	Long-beaked Common Dolphins
	1800	Risso's Dolphins
12/19 a.m.	1	Gray Whale
	1800	Risso's Dolphins
12/15	2	Gray Whales
	1	Humpback Whale
	1200	Risso's Dolphins
	300	Northern Right Whale Dolphins
12/2	2	Humpback Whales
	9	Killer Whales (transient type)
	4	Dall's Porpoise
12/1	2	Humpback Whales
	7	Harbor Porpoise

BOOK RECOMMENDATIONS

Waterbirds by Theodore Cross.
2009 (W.W. Norton and Company)

Tuna: Love, Death, and Mercury
by Richard Ellis with a new epilogue

Polar Obsession by Paul Nicklin.
2009 National Geographic Publishing
Remarkable photos of Polar Bears, Walrus,
Elephant Seals, Leopard Seals and Penguins to
name just a few.

Great White: The Majesty of Sharks by Chris
Fallows. A critical achievement by Chris Fallows
in his attempt to save this magnificent apex
predator.

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