

Soundings



American Cetacean Society- Monterey Bay Chapter

May 2013

PO Box H E, Pacific Grove, CA 93950

AMERICAN CETACEAN SOCIETY- MONTEREY BAY CHAPTER

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, May 30, 2013 Time: 7:30 PM.

PLEASE JOIN US AT 7:00 FOR REFRESHMENTS

Speaker: Doug Cheeseman
Subject: Hippo and Whale Evolution

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Doug Cheeseman will compare hippos and whales in an energetic program with 100 images focusing on wildlife behavior that he has observed, including mating and feeding strategies. Doug has been leading African wildlife safaris since 1978 and Cheesemans' Ecology Safaris charter to Antarctica since 1994. He was a lecturer on the Lindblad Explorer back in 1984 for Salen Lindblad on an Antarctic circumnavigation. In 1998 Doug retired from many years of teaching zoology and ecology at De Anza College to photograph wildlife and to lead safaris around the world full time. He is an enthusiastic speaker and has many great photos to choose from taken on safari of hippos and other African wildlife and on pelagic trips of several different species of cetaceans from many areas, including Antarctica. He will discuss social and survival behavior in Orcas, Humpbacks, other cetaceans, and their relatives, the Hippopotamus, plus a few other fascinating wildlife species. He will have many action photos. Join Doug as he compares characteristics of cetaceans in the Southern Ocean to their close relatives, the Hippos of Africa.

CALENDAR

May 20-23: 64th Tuna Conference. "Back to Biology: the Role of Life History Characteristics in Tuna Stock Assessments." Lake Arrowhead, CA

June 1, 9am-12pm: Saturday Workshop for Beginners. "Drawing the Sea." Local naturalist and artist Kate Spencer will assist in teaching with drawing and watercolor to illustrate the sea and its life forms.

Register at:

hopkins.stanford.edu/workshops

June 24-30: Marine Mammal Courses at Moss Landing Marine Laboratory. Techniques and Theories of Animal Training. Bio 348 . For a complete class description and further info please contact Dr. Jenifer A. Zeligs at: slewths.mlml.calstate.edu/

June 29, 9am-1:30pm: ACS Monterey Bay Chapter Summer Whale Watch Fundraiser.

"Searching For Nature's Giants." We will be searching the biggest animal to have ever lived, the Great Blue Whale. We will also be searching for humpback, fin, minke, and killer whales. Albatross and numerous seabirds are also likely to be encountered. For reservations and Info

July 13, 8am-4pm: ACS/LA Summertime Blues and Humpbacks Whale Watch Adventure. Whale Watcher's will spend the day searching for blue and humpback whales

aboard the newly renovated 75ft Condor Express. For more info and reservations call 424-266-0516

July 18-24: Marine Mammal Courses at Moss Landing Marine Laboratory. Working With Marine Mammals: Bio 347. For a complete class description and further info please contact Dr. Jenifer A. Zeligs at: slewths.mlml.calstate.edu/

July 27: ACS Monterey Bay Chapter BBQ. Honoring Katy Castagna. Veterans Memorial Park, Monterey, CA.

August 10: ACS National Annual Fundraiser. Blue Whales: Behemoths Of The Deep. Condor Express, Santa Barbara, CA. For info and reservations, call 310-548-6279 or acsonline.org

BOOK RECOMMENDATIONS

My Beloved Brontosaurus: On the Road with Old Bones, New Science, and Our Favorite Dinosaurs
Brian Switek

Plant and Animal Endemism in California
Susan P. Harrison

Down by the Bay: San Francisco's History between the Tides
Matthew Morse Booker

Odd Couples: Extraordinary Differences between the Sexes in the Animal Kingdom
Daphne J. Fairbairn

Surviving the Shark: How a Brutal Great White Shark Attack Turned a Surfer into a Dedicated Defender of Sharks
Jonathan and Margaret Kathrein

SINGING HUMPBACK WHALES TRACKED ON NORTHWEST ATLANTIC FEEDING GROUND
From Science Daily
Published: 4/29/13

Male humpback whales sing complex songs in tropical waters during the winter breeding season, but they also sing at higher latitudes at other times of the year. NOAA researchers have provided the first detailed description linking humpback whale movements to acoustic behavior on a feeding ground in the Northwest Atlantic.

Findings from the study, published April 10 in the journal PLOS ONE, demonstrate the potential applications of passive acoustic tracking and monitoring for marine mammal conservation and management.

Co-author Sofie Van Parijs, who heads the passive acoustics group at the Woods Hole Laboratory of NOAA's Northeast Fisheries Science Center (NEFSC), says this study is not so much about biology, but about acoustic methods.

"We have monitored and acoustically recorded whale sounds for years, and are now able to 'mine' these data using new computer software applications and methods," said Van Parijs. "Passive acoustic tracking has enabled us to localize humpback whale song to study the movements of individual whales, and to relate the singing to specific behaviors. This has never before been accomplished for singing humpbacks on a northwest Atlantic feeding ground."

"Passive acoustic tracking of humpback whales and other cetacean species provides an opportunity to collect data on movement patterns that are difficult—or impossible—to obtain using other techniques," said lead author Joy Stanistreet, who worked with Van Parijs and co-author Denise Risch at the NEFSC's Woods Hole Laboratory at the time of the study. Stanistreet is currently a graduate student at the Duke University Marine Laboratory in Beaufort, N.C.

Since 2007, NEFSC researchers have used year-round passive acoustic monitoring to study ocean noise in the Stellwagen Bank National Marine Sanctuary, a feeding ground for humpback whales and other marine mammal species in the southern Gulf of Maine. Humpback whales typically frequent the sanctuary between April and December and feed on sand lance and other small schooling fish. Humpback whale singing in the sanctuary usually occurs from April through May, following the spring migration from southern waters, and from August to December before the return fall migration. During the summer, humpbacks remain in the sanctuary but generally do not sing while they feed.

The researchers used data from acoustic recordings collected from an array of 10 bottom-mounted marine autonomous recording units (MARUs). Continuous 24-hour recordings units were deployed in the sanctuary for four consecutive three-month periods during 2009. The MARUs were placed three to six miles apart, and the arrays shifted seasonally to areas within the sanctuary having high whale concentrations.

Humpback whale songs were recorded in distinct time periods during spring and fall. No songs were recorded during summer and winter, although humpback whales remained in the area. Songs were most common in the spring, and occurrences of singing increased significantly before and after migration periods.

Forty-three song sessions, each lasting from 30 minutes to eight hours, were used to track individual singing whales. Most of the singers were actively swimming; the patterns and rates of their movement ranged from slow meandering to a faster directional movement. In one case, two singers were tracked at the same time, suggesting a potential reaction by one singer to the presence of the other.

Marine mammal researchers could also use passive acoustic localization and tracking methods to better understand the geographic distribution, abundance, and densities of cetacean species, many of which are threatened by human activities. These applications may help inform and enhance marine mammal conservation and management efforts. The study was funded by the National Oceanographic Partnership Program, a collaboration of federal agencies that provides leadership and coordination of national oceanographic research and education initiatives.

GREAT WHITE SHARKS SCAVENGING ON DEAD WHALES

From Science Daily

Published: 4/10/13

Many terrestrial animals are frequently observed scavenging on other animals- whether it is a hyena stealing a lion kill in the Serengeti or a buzzard swooping down on a dead animal. However, documenting this

sort of activity in the oceans is especially difficult, and often overlooked in marine food web studies.

In a new study published in PLOS ONE titled, "White sharks (*Carcharodon carcharias*) scavenging on whales and its potential role in further shaping the ecology of an apex predator," Captain Chris Fallows from Apex Expeditions collaborated with University of Miami (UM) scientists Dr. Neil Hammerschlag and Austin Gallagher, to explore the behaviors of great white sharks scavenging on dead whales in South Africa. The team documented as many as 40 different sharks scavenging on a carcass over the course of a single day, revealing unique social interactions among sharks.

The study summarized observations based on four scavenging events opportunistically observed over a 10 year period. In each multi-day observation, the team recorded daily evidence of social, aggregative and feeding behaviors observed in the waters off South Africa. They suggest that although the occurrence of coming upon a whale carcass may be sporadic, the shark populations are likely prepared to scavenge on them, and may even rely on their scavenging activities to supplement their regular feeding activities.

"Although rarely seen, we suspect that as white sharks mature, scavenging on whales becomes more prevalent and significant to these species than previously thought," said Hammerschlag, who is director of the R.J. Dunlap Marine Conservation Program at UM.

The team found that sharks showed a clear preference for scavenging on the blubber, probably because these high calorie meals can sustain the sharks for longer periods of time. Interestingly, though, the study also found that sharks showed an initial preference for feeding on the whale's fluke before moving on to feed on the rest of the carcass. The team also found that

while scavenging on whales, they ceased hunting and feeding on seals, one of their primary natural prey.

"While scavenging on the whale, the sharks clearly showed a size-based pecking order," said Fallows. "The biggest sharks came right in, targeting areas of highest blubber content, while smaller sharks fed on areas with less blubber or kept their distance from the whale, mostly scavenging on pieces of blubber that drifted away from the carcass."

The paper reveals how the social and size structure of sharks at the carcass appeared to be influenced by environmental patterns. "The cues, such as the oils, emanating from this pulse of food are likely attracting much larger sharks over 4.5 meters from long distances to scavenge," said Gallagher. "These data provide some credence to the hypothesis that large white sharks may be swimming known ocean corridors looking for dead, dying, or vulnerable whales."

"By attracting many large white sharks together to scavenge, we suspect that the appearance of a whale carcass can play a role in shaping the behaviors, movements, and the ecosystem impacts of white sharks" said Hammerschlag. "These patterns may shed some light into the ecology of this often studied -- yet still highly enigmatic -- marine predator."

SWORDFISH CAUGHT IN DRIFTNETS IS CALIFORNIA'S DEADLIEST CATCH

From Sea Turtle Restoration Project

Published: 4/22/13

The California drift gillnet fishery for swordfish and shark is the most dangerous fishery for whales and other marine mammals along the U.S. West Coast from California to Alaska. A new federal review of marine mammal bycatch in commercial fisheries found that the drift gillnet fleet is causing more harm to whales than ever.

The 25 vessels operating in the drift gillnet fishery now

accidentally capture and kill more whales and marine mammals than any other fishery along the U.S. West Coast.

"The capture and death of whales and dolphins in the deadly California drift gillnet fishery is far too high, and this has been going on far too long" said Teri Shore, Program Director at SeaTurtles.org. "It's time to phase out drift gillnets along the California coast as soon as possible."

Due to the capture and drowning of an estimated 16 endangered sperm whales two years ago, the California drift gillnet fishery for swordfish and shark will now be designated as a harmful Category 1 fishery under the Marine Mammal Protection Act. Recently it was ranked in the less serious Category 2.

The only other U.S. Pacific commercial fishery ranked at that serious Category 1 level of marine mammal harm is the much larger Hawaii longline tuna fleet with 125 vessels.

National Marine Fisheries Service made the determination in its newly published 2013 annual review of marine mammal bycatch in commercial fisheries. Download the proposed new regulation below.

The new ranking for the drift gillnet fishery could trigger new protections for sperm whales and other marine mammals. The fishery accidentally captures and kills about 3 sperm whales per year, a rate that is more than double the number that federal biologists say the West Coast population can sustain without risk of extinction.

Shore will be arguing for the phase out of the California drift gillnet fishery at the 40th Annual Fisheries Forum hosted by the California Assembly Joint Committee on Fisheries and Aquaculture on Thursday, April 25, in Sacramento.

Over the past decade, more than 1,000 sea lions, dolphins, whales and turtles drowned after getting tangled in the large-mesh drift gillnets targeting swordfish and shark.

Recently, SeaTurtles.org helped defeat federal fishery manager's proposals to expand the drift gillnet fishery at the of

risk capturing more whales, dolphins and other marine mammals as well as endangered leatherback sea turtles.

While most gillnets have been banned in California because of their deadly toll on endangered wildlife, the state's drift gillnet fishery targeting swordfish and thresher shark continues to operate. Nets that stretch a mile are set to "soak" overnight, and catch and drown marine animals indiscriminately.

HAWAII'S TUNA FISHERY TAKING DEADLY TOLL ON WHALES, SEA TURTLES AND SEABIRDS

From Sea Turtle Restoration Project

Published: 5/7/13

An estimated 20 endangered sea turtles, 35 protected whales and dolphins, and 165 Black-footed and Laysan albatross were injured or killed by Hawaii-based tuna fishing boats in just the first three months of 2013. This is according to recently published federal fishery observer reports from the Pacific Islands Region of National Marine Fisheries Service.

"The high numbers of dolphins, whales and turtles killed or injured so early in the year is a clear sign that these longline fisheries are still a big problem for endangered species," said Teri Shore, Program Director, Turtle Island Restoration Network (SeaTurtles.org). "We need to roll back accidental capture of disappearing marine animals, not allow it to escalate."

This year new measures were imposed on the tuna fishery beginning in February to halt the hooking of false killer whales, whose numbers have declined to about 2,000 individuals in the Hawaiian Islands. Despite these efforts, numbers are on a frightening upwards trend.

First quarter observer reports revealed that between January and March the Hawaii deepset longline tuna fishery hooked the highest number of protected marine animals compared to any of the last first-quarter periods in 10 years including:

- 20 critically endangered leatherback, loggerhead, and olive ridley sea turtles
- 15 false killer whales (a dolphin species) - one more

could trigger a closure.

- 5 short-finned pilot whales
- 5 rare pygmy killer whales (a dolphin species) - at limit of acceptable harm under MMPA (5.2 Potential Biological Removal Level).
- 165 Black-footed and Laysan albatross - accounting for 99 percent of seabird hooking

If these high levels of incidental capture continue, the longline fishery could exceed allowable incidental take levels under the Marine Mammal Protection Act and Endangered Species Act. This could mean mandatory fishery closures and additional federal protections or actions.

The hooking and serious injury or death of even a single additional false killer whale from the endangered Hawaiian "insular" population would trigger a closure of fishing areas south of the Hawaiian Islands.

"Every bite of tuna sushi comes with a side of dead dolphins and sea turtles, and the true cost of Hawaii longline tuna is the cruel deaths of hundreds of dolphins, whales, sea turtles and seabirds," said Todd Steiner, biologist and executive director of Turtle Island Restoration Network (SeaTurtles.org). "The government's attempt to reduce the carnage through various restrictions on fishers is obviously not working and needs to be tightened up, not weakened."

ANTARCTIC BLUE WHALES PINPOINTED WITH SONAR

By Becky Oskin

Published: 5/8/13

Whales may be the biggest animals on Earth, but finding them in the vast open ocean isn't easy.

Now, an Australia-led research team has demonstrated a novel idea for chasing down the massive marine mammals. To search for Antarctic blue whales, the group dropped sonar buoys in the Ross Sea west of Antarctica, and listened for whale calls. They triangulated the whale's location from their calls, and then sailed to the right spot.

During the research cruise, the scientists photographed 57 blue whales, collected 23 skin biopsy samples and stuck on two satellite-tracking tags. They also spotted 11 pygmy blue whales and eight humpback whales, among a total 720 cetacean species (the group that includes whales, dolphins and porpoises).

"In many respects our expectations of what we could achieve have been exceeded," the scientists wrote on the expedition's blog.

The deep, resonating song of Antarctic blue whales travels hundreds of kilometers across the Southern Ocean, Brian Miller, of the Australian Antarctic Division and the lead marine mammal acoustician of the mission, said in a statement. The team returned with 626 hours of recordings, with 26,545 blue whale calls analyzed in real time.

The whale's satellite tags will transmit never-before obtained data on how the whales feed near the edge of the Antarctic ice, marine biologist Virginia Andrews-Goff of the Australian Marine Mammals Center said in a statement.

The International Whaling Commission estimates the population of Antarctic blue whales is between 400 and 1,400 individuals. The leviathans were slaughtered to near extinction in the early 1900s by whalers, who took some 340,000 whales, according to a statement from the Australian government.

Researchers worldwide have used acoustic technology to track whale species for decades, including blue whales, humpback whales and right whales. This is the first time that scientists have located whales for tagging and identification by identifying their positions with sonar, the statement said.

<u>SIGHTINGS</u> Compiled by Monterey Bay Whale Watch.					
For Complete listing and updates see gowhales.com/sighting					
Date	#	Type of Animal(s)			
5/7 p.m.	2	Humpback Whales	4/24 a.m.	3	Humpback Whales (1 friendly)
	50	Pacific White-sided Dolphins		1	Blue Whale
	200	Risso's Dolphins		2	Gray Whales
5/7 a.m.	15	Humpback Whales	4/23 a.m.	15	Baird's Beaked Whales
	2	Gray Whales (mom and calf snorkeling)		30	Risso's Dolphins
	20	Pacific White-sided Dolphins		4	Humpback Whales
	150	Risso's Dolphins	4/21 p.m.	1	Blue Whale
5/6 a.m.	4	Humpback Whales (2 "friendlies")	4/21 a.m.	80	Risso's Dolphins
	100	Pacific White-sided Dolphins		2	Harbor Porpoise
5/5 a.m.	4	Killer Whales		275	Risso's Dolphins
	200	Risso's Dolphins		2	Humpback Whales
5/4 a.m.	19	Humpback Whales		3	Killer Whales (transient type)
	50	Pacific White-sided Dolphins	4/20 a.m.	300	Pacific White-sided Dolphins
	700	Risso's Dolphins		3	Blue Whales
5/3 p.m.	8	Humpback Whales		5	Killer Whales (transient type)
	100	Risso's Dolphins	4/19 p.m.	40	Risso's Dolphins
5/3 a.m.	11	Humpback Whales	4/19 a.m.	5	Harbor Porpoise
	4	Killer Whales		2	Humpback Whales
	100	Risso's Dolphins		6	Humpback Whales
5/2 p.m.	10	Humpback Whales	4/18 p.m.	8	Killer Whales (including a calf)
	60	Risso's Dolphins		2	Gray Whales (cow/calf pair)
5/2 a.m.	16	Humpback Whales	4/18 a.m.	120	Risso's Dolphins
	1000	Risso's Dolphins		1	Gray Whale
5/1 p.m.	14	Humpback Whales		50	Risso's Dolphins
	1	Gray Whale	4/17 a.m.	5	Humpback Whales
	20	Risso's Dolphins	4/16 a.m.	hundreds	Risso's Dolphins
5/1 a.m.	20	Humpback Whales		2	Humpback Whales
	4	Killer Whales	4/14 a.m.	5	Pacific White-sided Dolphins
	30	Pacific White-sided Dolphins		1000	Risso's Dolphins
	100	Risso's Dolphins	4/13 a.m.	100	Risso's Dolphins
4/30 a.m.	1	Humpback Whale		1	Humpback Whale
	50	Risso's Dolphins	4/12 a.m.	2	Gray Whales
4/29 a.m.	28	Humpback Whales		100	Risso's Dolphins
	14	Killer Whales	4/10 a.m.	75	Humpback Whales
	200	Pacific White-sided Dolphins		2	Humpback Whales
	100	Risso's Dolphins		3	Gray Whales 4/7 p.m.
	1	Northern Sea Lion eating a skate	4/7 a.m.	4	Humpback Whales (2 very active)
4/28 p.m.	5	Humpback Whales		4	Gray Whales
	2	Gray Whales		35	Risso's Dolphins
4/28 a.m.	9	Humpback Whales	4/6 a.m.	6	Humpback Whales (2 lunge feeding)
4/27 a.m.	1	Humpback Whale		5	Gray Whales
	8	Killer Whales	4/6 p.m.	75	Risso's Dolphins
4/26 a.m.	5	Humpback Whales		3	Humpback Whales
	30	Pacific White-sided Dolphins		7	Gray Whales
	500	Risso's Dolphins		20	Pacific White-sided Dolphins
	5	Northern Right Whale		450	Risso's Dolphins
		Dolphins	4/6 a.m.	5	Humpback Whales
4/25 p.m.	7	Humpback Whales		20	Gray Whales
	20	Risso's Dolphins	4/5 p.m.	15	Pacific White-sided Dolphins
4/25 a.m.	5	Humpback Whales		230	Risso's Dolphins
	2	Gray Whales		7	Gray Whales
	15	Risso's Dolphins	4/5 a.m.	4	Humpback Whales
				25	Risso's Dolphins
				7	Gray Whales
				3	Humpback Whales

American Cetacean Society
Monterey Bay Chapter
P.O. Box H E
Pacific Grove, CA 93950



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kmarypaul@gmail.com