

Soundings



American Cetacean Society- Monterey Bay Chapter
PO Box H E, Pacific Grove, CA 93950
www.starrsites.com/acsmb

January 2009

January Meeting

Date: **Thursday, January 29, 2009**

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

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

Speaker: **Steve I. Lonhart, Ph.D.**

Title: **Characterization of rocky intertidal and kelp forest habitats along the Big Sur coast**

The Big Sur coastline is a scenic edge of the continent accessed by California's State Highway One. President Franklin Roosevelt was at the Grand Opening of the 139 mile section of the highway from Morro Bay to Carmel and the Big Sur coastline is a large part of that stretch of road. In 1966, at Bixby Bridge, Lady Bird Johnson dedicated Highway One as California's first Scenic Highway.

People from all over the world come to California to drive this road, frequently stopping to enjoy the breathtaking views which are often from locations 200 to 300 feet above sea level with a vertical drop to the ocean below. In the summer the highway is a tourist attraction but in the winter, during the rainy season, the highway can be treacherous because of landslides from the mountains above. The dangers of the highway are never more risky than after wild fires strip the hills and mountain faces of stabilizing plants and trees like those which occurred last summer.

On the other side of the highway is the Pacific Ocean and a significant portion of the Monterey Bay National Marine Sanctuary ("Sanctuary"). While tourists are looking at Point Sur or for whale spouts the scientists of the Sanctuary Integrated Monitoring Network ("SIMoN") are watching the denizens of the rocky intertidal and kelp forest habitats. Debris coming from natural slides or Cal Trans, as part of a road clearing operation, can drop many tons of material into the ocean with significant effects on these habitats. As a SIMoN scientist our speaker is responsible for developing research and monitoring programs within this section of the Sanctuary and for getting that information out to resource managers, researchers, educators and the general public.

Please join us for what promises to be a very interesting program about the Big Sur coast and the Monterey Bay National Marine Sanctuary.

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Artwork Credits

Fin Whales Page 3:
<http://www.australianfauna.com/images/finwhale.jpg>

Killer Whale Page 5: Robin Makowski

Right Whale, Page 9: Richard Ellis

CALENDAR

January – February 2009

Marine Science Seminar Weekend
at Camp Ocean Pines in Cambria, CA

January 23-25 Session 1 : "Humpback Whales" by Dr. Jim Darling. Come to hear the latest updates on humpback and gray whales. Get a signed copy of his latest book. Field trips include whale-watching with Jim from Morro Bay.

Jan 29th-Feb 1st Session 2: "All about Abalone" by Dr. John Pearse and Dr. George Trevelyan. Lectures will be given by Dr. Pearse from UCSC about abalone life history. A field trip to local tide pools and the Cayucos Abalone farm will be included. For more info contact Chris Cameron at 805-927-0254

ACS-MB CHAPTER GRAY WHALE FUNDRAISER.

SATURDAY JAN. 24TH, 7 AM-9:30 AM

Cost \$40.00. Trip will take place on the 100ft Princess Monterey out of Monterey Whale Watching. Located on Fisherman's Wharf in Monterey, CA. Monterey Bay is the best place along the west coast to observe south-bound Gray Whales. Gray Whales migrate across Monterey Bay and resume hugging the coast somewhere between Pt. Pinos and Pt. Lobos making Gray Whale observation along the Monterey coast incredibly accessible to whale-watchers. Monterey is home to a plethora of Gray Whale experts and we hope to be traveling with a few. Other possible sightings include Killer Whales and Dolphins. All proceeds from this trip are donated to the Monterey Bay Chapter of ACS. For more information on the natural history of Gray Whales we recommend Gray Whales by Alan Baldrige and David G. Gordon. For more trip information and reservations please call Tony Lorenz at 831-648-8968 or Jerry Loomis at 831-419-1051.

Feb. 17th -19th. 29th Symposium on Sea Turtle Biology and Conservation. Brisbane, Australia
For more info go to www.turtlesbrisbane.org

Feb 13th-15th. Fourth Annual Whale Quest. Kapalua Ritz-Carlton. Kapalua, Maui, Hawaii. Presenters will include Jim Darling, Bruce Mate, Mark Ferrari, David Matilla, John Stern and Flip Nicklin. For more info go to info@whaletrust.org.

Feb 18th-26th. 36th Annual Meeting Of The Pacific Seabird Group Hakodate, Hokkaido, Japan. Field Trips include visiting the winter roosting habitat of the Stellar Sea Eagle and White Tailed Sea Eagle. For info go to www.PacificSeabirds.org

Feb 19-22. The 6th Annual San Francisco Ocean Film Festival. Cowell Theatre at Fort Mason Center. For Info Call (415)561-6251

Feb 21-Mar 21 Sat 9:00am-4:30pm. Biological Field Studies: Marine Mammals of California. This course covers the natural history of marine mammals, including life history, behavior, acoustics, physiology, identification, conservation, field sampling and research techniques. Class is being offered at Monterey Peninsula College for more info call(831)646-4125.

"SOUNDINGS" NEWSLETTER NOW ONLINE BACK TO 1980

With the permission of ACS Monterey, the Miller Library at Hopkins Marine Station scanned its print copies of the "Soundings" newsletter to create a digital archive of searchable PDF files. These files have been deposited into the Aquatic Commons digital archive and are available at <http://aquacomm.fcla.edu/>. While the library's holdings were relatively complete, there were some missing issues. A list of the remaining gaps is below. If anyone has one or more of these issues please contact Joe Wible at wible@stanford.edu or 831-655-6228. Seeking to borrow following issues of "Soundings":

1981 – April	1988-Jul, Aug, Oct
1985 – July	1989-Jun, Jul, Aug, Oct
1987 – Nov	2002-July

JAPAN SELLS ICELANDIC WHALE MEAT

By Richard Black

Whale meat imported from Iceland and Norway has gone on sale in Japan, according to the Icelandic firm which caught and exported most of the meat.

Hvalur hf told BBC News that after completing food safety checks, the meat was now being distributed. The consignment is Iceland's first whale export to Japan in 20 years. The trade is legal because all three countries have registered exemptions to rules banning international trade in whale products.

There were unconfirmed reports last weekend that the meat was on sale, but this is the first official notification.

Some environmental groups fear that Iceland and Norway want to step up whale meat exports to Japan, which is seen as having the biggest potential market.

The present consignment consists of 65 tonnes of fin whale meat caught by Hvalur hf, and five tonnes of minke whale meat exported by the Norwegian company Myklebust Trading. It arrived in Tokyo in June, received an import permit last month, and has now been given a clean bill of health.

"The meat has now cleared customs in Japan after undergoing very rigorous testing to ensure that it meets every aspect of Japan's food safety regulations," said Hvalur's CEO Kristjan Loftsson.

"We were always confident that this would be the case. It was only a question of time, as Japan is legally obliged to handle whale meat imports in the same way as any other seafood."

Mr Loftsson, whose company is the only one in Iceland equipped to hunt fin whales - the second biggest species - told BBC News that this export was designed to re-introduce fin meat to Japanese palates. It is considered one of the tastiest varieties, but has largely been absent from the market in recent years, as Japan's own hunts excluded the species until the 2005/6 Antarctic season.

Mr. Loftsson said that if the market

permitted, he could eventually hunt as many fin whales as Icelandic scientists recommended - provided the government granted a quota, which is likely if there is a proven market.

Although the fin is internationally classified as an endangered species, estimates of the north Atlantic stock run to about 30,000, and Icelandic scientists recently suggested that an annual catch of 200 would not damage the local stock.

But Arni Finnsson of the Iceland Nature Conservation Association (INCA) believes the market may not be as welcoming as the exporters hope.

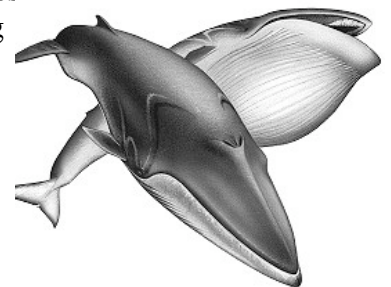
"I don't believe there will ever be a market in Japan for Icelandic meat that can be profitable," he said. "If they allow it from Iceland, they have to allow it from Norway, and then you could have thousands of minke whales flooding the market - it's impossible."

He believes the export is a political move designed to show the coalition government - which is divided on the issue - that whaling can be a profitable venture, generating jobs at a time when the country is in dire economic straits.

He also believes Hvalur has an interest in scuppering the "peace progress" within the International Whaling Commission which is exploring whether pro- and anti-whaling countries can find a compromise between their very different positions.

The next meeting in the process takes place next week in Cambridge.

The whale meat trade is banned under the Convention on International Trade in Endangered Species (CITES), but Iceland, Japan and Norway have all registered res permits, exempting themselves from the ban.



<http://news.bbc.co.uk/go/pr/fr/2/hi/science/nature/7767716.stm>

SEVEN SOUTHERN RESIDENT KILLER WHALES MISSING!

The southern resident killer whale population (SRKW) is near and dear to us all. In fact, this population of the Pacific Northwest's most magnificent marine mammals is what brought me to the San Juan Islands more than thirty years ago, with a US government contract to see whether what the late Dr. Mike Bigg said was true. Mike claimed, and later unequivocally verified, that each and every killer whale in the Pacific Northwest could be individually photo-identified; therefore, we could know the status of the regions most charismatic icon then, and forevermore. This website is dedicated to providing all of the information we have gathered about these whales since Mike's discovery that whales can be individually recognized.

We always knew that the SRKW's eat salmon – fishermen used to shoot them to get rid of the competition. Now, we know that these whales predominantly eat Chinook salmon (*O. tsawyscha*), and that is not surprising because these are large nutritious fish that were historically and prehistorically very abundant year-round. We also know that many populations (ESU's in scientific and government-speak) of Chinook salmon from California to British Columbia are threatened with extinction, if not already extinct, and many are recently declining in many parts of their range (see NOAA Fisheries Chart http://www.nmfs.noaa.gov/pr/pdfs/critical_habitat/chinooksalmon.pdf). This is a tragedy for the Chinook, the fishermen, and the whales. I am going to largely restrict my comments to the tragedy for whales, though I am not insensitive to the plight of fish and humans.

The evidence indicates that about 96% of the diet of SRKW's consists of salmon, with 71% being Chinook salmon and 22% being Chum salmon (*O. keta* in autumn). Some estimates put the percentage of Chinook in the annual diet as high as 80%. Coho (*O. kisutch*), Pink (*O. gorbuscha*), Sockeye salmon (*O. nerka*), and Steelhead (*O. mykiss*), though seasonally abundant in some regions, comprise only about

5% of the known diet of SRKW's. [For a description and status of all of these salmonids see <http://www.nwr.noaa.gov/ESA-Salmon-Listings/>.

Killer whales are large dolphins, and diet studies of these animals indicate that they consume about 2.5 to 5% of their body weight of suitable prey species per day. I have calculated that the 83 killer whales in the SRKW population have a total biomass of about 638,000 pounds and probably eat about 25,000 pounds of fish per day in aggregate. That is a lot of fish!... more than 1,200 nice 20 pound fish per day! 438,000 fish per year! Compare that, however, to the historical catch of Chinook salmon by humans over the past thirty years (data from Pacific Fisheries Management Council:

Clearly, human harvests of Chinook salmon over the most recent three decades have been two to nine times the consumption by SRKW's (catches down from over 3.5 million Chinook caught in 1976 to less than one million Chinook caught in 1999. Currently, the Chinook catches are even lower, and the long term forecast: "wild salmon in California and Pacific Northwest almost assuredly will be reduced even further by 2100." (Salmon 2100: The Future of Wild Pacific Salmon, American Fisheries Society, 2006). "The causes have been, and in many cases still are 1) Intense commercial, recreational, and subsistence fishing, and especially since the 1990's, mixed stock fishing; 2) Freshwater and estuarine habitat alteration due to urbanizing, farming, logging, and ranching; 3) Dams built and operated for electricity generation, flood control, irrigation, and other purposes." The list continues with virtually no disagreement among the experts. The abundance of Chinook salmon in this region in 1900 was more than twelve million adult salmon returning to spawn each year.

Then, compare this graph of the SRKW population status in the Spring of 2008:

From 1976 until around 1981 the SRKW's were recovering from the removal of several dozen young whales for aquaria and marine

parks, hence their population size would have been much larger (probably over one hundred) prior to 1981 had the removals not occurred.

My considered opinion is that the total number of Chinook salmon required to be available for the SRKW's, and the ecosystem, is on the order of two and a half million adult fish per year, and that a recovery goal for both SRKW's and Chinook salmon in the region is on the order of five million adult fish per year (roughly the number of Chinook salmon CAUGHT by fishermen in the Columbia River alone from the mid to late 1800's!). Regrettably, we cannot turn back the clock to those times prior to 1900, and there are many obstacles, including dams, in the way of Chinook salmon restoration to viable population levels; but, it is imperative for the survival of both Chinook salmon and SRKW's that our society (US and Canada, First Nation and Arrivals) make the effort to restore these icon species to functional levels in the ecosystem. It is not just the fish and the whales at stake, it is our own survival slipping away. The missing whales are:

J43 last seen 2007/11/24, K7 last seen 2007/12/23, L21 last seen 2008/06/29, L101 last seen 2008/01/27 in Monterey, CA, J11 last seen 2008/07/19, L111 last seen 2008/08/21, and L67. That list accounts for seven whales that have died in a twelve month period, tying the record for SRKW deaths in 1999 as the worst survival period in the history of our study. This year is not over and the population number by 31 December may change again. These numbers are examined statistically in several different ways, so do not take this as a summary of 2008 just yet. What we present is a twelve month running summary that will be updated to a calendar year summary after the 31 December population size is determined. The statistical comparison to the population size of the Northern Resident Killer Whales (NRKW's) is made as of 1 July each year.

http://www.whaleresearch.com/thecenter/2008_News_SevenMissing.html



KILLER WHALE
(*Orcinus orca*)

WHALES' TEETH ARE AID TO MATING

By Richard Black

The bizarre teeth of male beaked whales have evolved to help females choose their mates, research suggests.

The males do not seem to use the two teeth on the outside of their jaws for eating, but for scratching each other.

Scientists have now used DNA analysis to show the teeth probably evolved as secondary sexual traits to help females select males of the right species.

Beaked whales are a family of about 21 species that make up the least known group of whales or dolphins. They are typically about four metres long and spend most of their time deep in the ocean foraging for food, surfacing rarely and briefly. Some species have never been seen alive, and are only known from dead whales washed up on shore.

"Beaked whales are among the least known, least understood and, frankly, most bizarre whales in the ocean," said Scott Baker, associate director of the Marine Mammal Institute at Oregon State University in the US.

"They are the only cetacean species with tusks, and scientists have long wondered why, since their diet primarily is squid."

TREE OF LIFE

The shape of the teeth, or tusks, varies markedly between different species. In some, they actually appear to hinder feeding, as they wrap over the upper jaw, preventing it from opening fully.

Females do not show teeth; and this difference between the sexes, or sexual dimorphism, is virtually the only way to tell them apart.

The teeth are very different from the long, slender, spiraling tusks of the narwhal, which are thought to be primarily sensory organs.

The research team, which also included Dr Merel Dalebout from the University of New South Wales in Sydney, took DNA samples from

14 beaked whale species and used it to construct a family tree depicting how the various species had developed.

One of the theories of beaked whale evolution is that different groups emerged in ocean canyons that were more or less isolated from the wider oceans, and that this pattern of evolution was responsible for different shapes of tooth. But the genetic work suggests this is unlikely.

"It turns out that tusks are largely an ornamental trait that became a driver in species separation," said Dr Baker, whose research is reported in the journal *Systematic Biology*. "The tusks help females identify males within their species, which could otherwise be difficult as these species are quite similar to each other in shape and coloration."

So females use the shape of the teeth to select males of the right species to mate with. They may also choose mates based on the size or shape of the individual's teeth or of the scars they bear.

In turn, this also means that the more successful males are the ones with the shape of teeth most characteristic of that particular species, ensuring that the shapes are preserved and perhaps enhanced over evolutionary time - a secondary sexual characteristic. The researchers believe this is the first time that secondary sexual selection has been shown to have shaped the evolution of any marine mammal.

FIGHTING TALK

Well-studied secondary sexual characteristics include the antlers of deer. They are much more prominent on males, indicate strength, and are used for fighting.

Natacha Aguilar, who has been studying beaked whales in the Canary Islands for a decade, agreed that the theory made sense.

"Little is known about the social structure of beaked whales, but at least some species live in harem-like groups where one adult male accompanies a group with females and juveniles," she told BBC News.

"In this context, the male will need to fight with other males for access to a female group, and to

be attractive to the females for them to choose him.

"These parameters all favour the hypothesis of sexual selection as a force in shaping the most striking sexual dimorphism characteristic in beaked whales, the tusks."

Dr Aguilar's group, from the University of La Laguna in Tenerife, has pioneered the use of photographic identification for beaked whales, and has shown that individuals can be identified by the scars they bear. However, much about these elusive animals remains a mystery, including how many there are in the seas, where they live, and exactly how many species exist.

<http://news.bbc.co.uk/go/pr/fr//2/hi/science/nature/7783517.stm>



PRESIDENT MESSAGE

Dear Members of the Monterey Bay Chapter of the American Cetacean Society,

Congratulations! You have demonstrated your commitment to whales and dolphins by your membership in the oldest whale conservation organization in the world, established in 1967. Locally, you are part of a robust chapter of approximately 150 members in one of the world's richest marine environments. Our mission is to promote research, conservation and education about cetaceans, which we accomplish through various activities throughout the year.

The new year has brought a lot of change, including changes in the ACSMB Board of Directors. Our chapter is deeply grateful for the leadership of Jerry Loomis as president for the past several years. With your approval, I am honored and humbled to have the torch passed to me.

Renowned cetacean sculptor and first ACSMB president, Randy Puckett, will become vice-president, changing roles with Dave Zaches, who will be a member-at-large. We welcome Art Haseltine to the board, joining member-at-large Dida Kutz.

ACSMB is probably most well known for its outstanding program presentations at the monthly meetings at Hopkins Marine Station. Program co-chairs Alan Baldrige and Bob

Mannix continue to lure top-notch researchers and scientists to provide programs to enlarge our knowledge about marine life. Angel-at-large Sheila Baldrige maintains responsibility for our meeting site at the Boatworks Building and ensures that refreshments are provided.

Gratitude is extended to the following board members for continuing to provide their time and talent to our local chapter: *Soundings* editors Tony Lorenz and Mary K. Paul; Treasurer, Katy Castagna; Membership, Sally Eastham; Secretary, Gina Thomas; Conservation, Carol Maehr; Education, Rene Rodriguez and Morgen Puckett; Newsletter mailing, Barbara Oliver; Special Events, Tony Lorenz; and Webmaster Evelyn Starr. We also appreciate the contributions of our scientific advisory board who read and rank research grant proposals for funding. Members include Jud Vandevere, Esta Lee Albright, Richard Ternullo, Tom Kieckhefer, Alan Baldrige, and Jerry Loomis.

We gratefully acknowledge both Monterey Whale Watching and Monterey Bay Whale Watch for their continuing support of our chapter fundraising efforts. Please patronize these informative, whale-sensitive organizations whenever visiting cetaceans in Monterey Bay. We are charged with the responsibility to make positive changes for the world's whales and dolphins. Thank you for being a member of the American Cetacean Society, Monterey Bay Chapter. Save the Whales,

Diane Glim, President



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

Date	#	Type of Animal(s)
1/1 p.m.	10	Gray Whales
	1000	Risso's Dolphins
1/1 a.m.	8	Gray Whales
	600	Risso's Dolphins
12/31 p.m.	5	Gray Whales
	100	Risso's Dolphins
12/31 a.m.	11	Gray Whales
	500	Risso's Dolphins

12/30 p.m.	4	Gray Whales
	100	Risso's Dolphins
12/30 a.m.	6	Gray Whales
	50	Risso's Dolphins
12/29 p.m.	2	Gray Whales
	410	Risso's Dolphins
12/29 a.m.	3	Gray Whales
	350	Risso's Dolphins
12/28 p.m.	1	Gray Whale
12/28 a.m.	3	Gray Whales
	50	Risso's Dolphins
12/27 p.m.	7	Gray Whales
	2	Killer Whales
	150	Risso's Dolphins
12/27 a.m.	10	Gray Whales
	100	Long-beaked Common Dolphins
	300	Risso's Dolphins

Skipped dates indicate no trip

NOTABLE MEDIA

DVD: National Geographic Live: Wings of the Albatross Frans Lanting
Frans Lanting's live Albatross presentation given last February at the Rio Theatre in Santa Cruz shown in it's entirety on DVD.

Albatross Their World, Their Ways

Tui De Roy and Mark Jones, 2008.

One of the most comprehensive books available on the natural history of Albatross

Witness To Extinction: How We Failed To Save The Yangtze River Dolphin.

Samuel Turvey- 2008 Oxford University Press

In Defense of Dolphins: The New Moral Frontier.

Thomas I. White, Ph.D. 2008 Blackwell Publishing

Trying Leviathan: The Nineteenth-Century New York Court Case That Put the Whale on Trial and Challenged the Order of Nature.

Graham Burnett, 2008 Princeton University Press. Won the 2008 New York City Book Award.

(For Young Readers) Davy's Dream: A Young Boys Adventure With Wild Orca Whales by Paul Owen Lewis

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Monterey Bay Chapter
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American Cetacean Society Membership Application Chapter#24

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Membership level _____

Membership levels and Annual dues:
 Lifetime \$750 Patron \$500 Contributing \$250
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 Student/Teacher/Senior \$25
 Subscription only * \$15/11 issues (*not entitled to membership benefits)

Check ___ Mastercard ___ Visa ___ Expiration date _____

Signature _____

Make checks payable to: ACS/Monterey Bay Chapter
Return to: Membership Secretary, ACS Monterey Bay Chapter
P.O. Box H E Pacific Grove, CA 93950

**ACSMB
Board Members for 2008**

Diane Glim, *President*
 Randy Puckett, *Vice-president*
 Katy Castagna, *Treasurer*
 Sally Eastham, *Membership*
 Gina Thomas, *Secretary*
 Diane Glim, *Publicity*
 Tony Lorenz, *Special Events*
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Soundings



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February 2009

February Meeting

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Meeting is open to the public

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

Speaker: **Chad Widmer, Senior Aquarist and Jelly Wrangler**

Title: **Jelly Blooms and Climate Change; and, Deep Sea Jellies**

Jellies are some of the more beautiful and interesting denizens of the sea. Even though they have no brain, no heart, no circulatory system no lungs or no gills, Jellies captivate us with their graceful movement and often beautiful color. They are important links in food webs transferring nutrition from zooplankton up the food system to the charismatic mega fauna such as dolphin, leather back turtles and the largest boney fish in the ocean, the mola mola or ocean sun fish.

The best excursions into the world of Jellies are those which are lead by a special guide called a Jelly Wrangler. We, in the Monterey Bay area, are fortunate to have a world famous Jelly Wrangler in the person of Chad Widmer, Senior Aquarist at the Monterey Bay Aquarium.

Chad has managed the display, the culturing and the acquisition of jellies at the Aquarium for eight years. Additionally, Chad spent five years working with the penguins in Splash Zone. Chad's research into the world of deep sea jellies has been going on for about three years. He recently completed a feasibility study regarding a display featuring Humboldt squid at the Aquarium.

As a Jelly Wranglers, Chad and his team are responsible for keeping 15 exhibits in the Drifters Gallery full of jellies. This is a challenge for many reasons including the fact that wild jellies are not always available for collection. So, to keep things more under control, Chad runs a culturing lab for the jellies. He raises his own.

Chad's success at raising jellies culminated in a book: *How to Keep Jellyfish in Aquariums: an Introductory Guide for Maintaining Healthy Jellies*. So if you want to include an aquarium of jellies in your living room décor you should start with a copy of this book to keep your tank healthy and looking good. For more information check out Chad's web site by googling: Jelly Keeping 101. As for Chad's research, some preliminary findings about jellies in the Southern Monterey Bay were published in 2005 in *Ecosystem Observations for the Monterey Bay National Marine Sanctuary*. Chad will also update us on his more recent work with deep sea jellies.

Please join us for what promises to be a fun and informative evening.

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CALENDAR

Feb 13th-15th. Fourth Annual Whale Quest. Kapalua Ritz-Carlton. Kapalua, Maui, Hawaii. Presenters will include Jim Darling, Bruce Mate, Mark Ferrari, David Matilla, John Stern and Flip Nicklin. For more info go to info@whaletrust.org.

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March 29-April 3 MMPA. The First International Conference on Marine Mammal Protected Areas Conference will be held at the Grand Wailea Resort in Maui, Hawaii. For more info go to ICMMPA.org

April 3-5 SEAMAMMS. Southeast and Mid Atlantic Marine Mammal Symposium. For more info go to www.unc.edu/seamamms

Saturday April 18th 8:00am-3:00pm. 2009 Sanctuary Currents Symposium to be held at the Hyatt Regency Conference Center in Monterey. For more info go to www.sanctuarysimon.org

Sunday April 19th 13th Annual Point Mugu Whale Festival will be held at Leo Carrillo State Park/Beach. For more info go to www.malibuinterp.com

Saturday May, 30th ACS National Humpback Whale Watch Santa Barbara, CA. Trip will take place on the 'Condor Express'. For more info go to ACS.org or call Bernardo Alps at 310-548 8966

Lectures and Classes

Saturday, February 14, 2:00pm Celebrate Charles Darwin's Birthday with birthday cake and listen to Steven Palumbi, Director, Hopkins Marine Laboratory. Lecture: " Evolution Explosion: How Humans Cause Rapid Evolutionary Change"

Jim Estes- Friday February 20th 12:00 noon Science and the Endangered Species Act: Using trophic cascades to develop ecosystem based recovery for Sea Otters in Alaska. Lecture to be given at Moss Landing Marine Laboratory

John Ryan-Friday May 8th 12:00 noon Seasonal and episodic variability of the Monterey Bay Upwelling Shadow. Lecture to be given at Moss Landing Marine Laboratories.

Shark Days: Sat and Sun February 21-22 Monterey Bay Aquarium 10:00am-6:00pm Learn more about shark biology, ecology, and conservation and how important sharks are in maintaining ocean ecosystem health and biodiversity.

Claudio Campagna Ph.d Wednesday February 12 3:00pm. Centro Nacional de Patagonia-The Sea and Sky Project: Conservation of the Patagonian Sea. Lecture will take place in the Pacific Forum Room, MBARI

Art Miller Ph.d U.C. San Diego- Wednesday, March 11th, 3:30pm. Ocean climate circulation changes associated with the decline of Stellar sea

lion populations in the Gulf of Alaska. Lecture will take place at U.C. Santa Cruz at 3:30-5:00pm in the earth and ocean science building.

Point Sur Lighthouse Whale Watch: Sat and Sun 10:00am and 1:00pm. 3 hour tour during the gray whale migration season (Jan-March). Hike begins on west side of Highway 1-19 miles south of Rio Rd., Carmel. Cost is \$20.00. First come first serve



FEDERAL GOVERNMENT CONSIDERS BAN ON IMPORTED SWORDFISH TO PROTECT MARINE MAMMALS

SAN FRANCISCO — The U.S. Commerce Department announced today that it is considering banning the imports of foreign swordfish until exporting countries can provide proof that their fishing practices are equally protective of marine mammals — including whales, dolphins, and sea lions — as methods used by U.S. fishermen. Today's announcement, published in the Federal Register, comes in response to a petition filed in March by the Turtle Island Restoration Network and the Center for Biological Diversity seeking enforcement of the Marine Mammal Protection Act. See the Federal Register Notice.

The Act requires any country wishing to export fish products to the United States to provide proof that the country's fishing practices do not harm or kill marine mammals in excess of U.S. standards. Information gained from a Freedom of Information Act request has revealed that the U.S. government has ignored this mandatory duty for decades, though evidence shows that foreign fishing fleets kill hundreds of thousands of marine mammals every year. Swordfish fleets, which use gillnets and longlines, are particularly deadly to marine mammals.

"All the U.S. government has to do to save thousands of whales, dolphins, and seals each year is enforce existing law," said Mike Milne, of Turtle Island Restoration Network. "Restricting access to the U.S. market is a golden opportunity to make the global fishing fleet more sustainable."

The Marine Mammal Protection Act was designed to help ensure that U.S. fishers are not put at a competitive disadvantage from poorly-regulated foreign fleets and to put market pressure on foreign nations to improve their fishing practices to reduce impacts on marine mammals. Nevertheless, despite the fact that most swordfish is caught with fishing gear that entangles and kills marine mammals, the U.S. government has allowed the importation of swordfish from more than 40 countries without requiring any proof of impacts on marine mammals. Banning swordfish imports would also benefit endangered sea turtles that are captured and killed on longlines set to catch swordfish — a primary cause of the decline and near-extinction of the Pacific leatherback sea turtle. The U.S. is the one of the world's top importers of swordfish, bringing in more than 20 million pounds every year.

"Right now most consumers have no clue that the swordfish steak on their plate comes with a side of dead dolphins, whales, seals and sea lions," said Andrea Treece, staff attorney for the Center for Biological Diversity. "By banning imported swordfish until foreign fleets clean up their acts, the United States can lead the way in making international fisheries more sustainable and ensure that U.S. consumers aren't unintentionally harming the creatures they care about."

Domestic swordfish fishers use longlines, gillnets, and harpoons to catch swordfish. While U.S. longline and gillnet fisheries still catch significant numbers of marine mammals and other non-target species, regulations imposing time-area closures and requiring the use of net-extendors, acoustic deterrents, dehooking devices, and various safe-handling measures have substantially reduced marine mammal bycatch and mortality in U.S. fisheries. A harpoon fishery for swordfish in southern California has no marine mammal bycatch.

"Marine mammal populations around the globe are suffering because the shelves of the American supermarkets are filled with illegal imports of foreign swordfish," Milne added. "It's time the U.S. government followed the law and

protected the American people's love of and desire for healthy marine mammal populations."

The government is accepting comments on the petition for the next 45 days.



IS THIS THE END OF THE BLUEFIN TUNA?

They are among the most legendary and majestic fish in the sea – and beyond doubt the most valuable. A decision taken this week, however, means that the bluefin tuna of the Mediterranean are probably now also the most endangered fish in the sea, with overfishing pushing the stock towards the brink of collapse.

Celebrated since the time of Homer, the mighty and meaty bluefin these days have ardent admirers on the other side of the world: the Japanese, who prize them above all other fish for use in sushi and sashimi. But so great is the Japanese demand that it is driving catches well beyond what scientists consider to be safe limits and towards commercial extinction.

Earlier this week, however, a vital opportunity to pull the bluefin back from the brink was missed when the official body charged with preventing the stock from collapsing agreed to allow catch quotas for 2009 far higher than its own scientists recommended.

Amid a chorus of protests and dismay from conservationists, the International Commission for the Conservation of Atlantic Tunas (ICCAT), meeting in Marrakech, Morocco, endorsed a total allowable catch (TAC) of 22,000 tonnes for next year – while ICCAT's own scientists had recommended a TAC ranging from 8,500 to 15,000 tonnes per year, warning there were real risks of the fishery collapsing otherwise.

The scientists also urged a seasonal closure during the fragile spawning months of May and June, but the meeting agreed to allow industrial fishing up to 20 June.

The decision, which was branded "a disgrace" by the World Wide Fund for Nature (WWF) and fiercely attacked by other conservation bodies, was driven by the European Union, amid allegations that the EU had threatened developing

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nations with trade sanctions if they supported lower catch limits and extended closed seasons. During the meeting, the names of some countries appeared and disappeared from the more scientifically based proposals.

The EU is representing the interests of several countries who have big fishing fleets hunting the multi-million-dollar bonanza that the annual catch represents. In the lead are the French, with about 600 tuna boats, followed by the Italians, who have a fleet of about 200 vessels. It is thought that half the Italian fleet may be unlicensed boats, especially those from Calabria in southern Italy, and Sicily, where Mafia connections to some of the fishing operations are strongly suspected. Algeria, Croatia, Greece, Libya, Malta, Spain, Morocco, Tunisia and Turkey are other countries with tuna fishing fleets.

The hunt is based around the spawning habits of a specific subspecies of the bluefin tuna, the eastern Atlantic bluefin, which swims every May from the Atlantic, where it spends the winter, through the Straits of Gibraltar to spawn in June and July in the warmer waters of the Mediterranean. The migration takes place in huge schools of fish which, in the past, were miles wide and millions strong – and even with today's depleted numbers it can still be a remarkable spectacle. Spawning sites, where the females releases millions of eggs at night, are scattered from one end of the Mediterranean to the other.

Intercepting the huge shoals has been done for thousands of years but, in recent years, advances in fishing technology, as well as demand, have made the contest entirely one-sided. ICATT has established rules for the fishery but conservationists claim they are being consistently broken by the hunters. For example, the use of spotter aircraft to locate the tuna shoals has been banned in the month of June since 2001 but such spotter planes have been seen operating from Libya, Malta and Italy. Similarly, drift nets have also been banned but Italian fishermen have been found to be using them.

But the most serious and frequent malpractice is exceeding catch quota limits, which

is thought to happen with all countries involved in the fishery. For example, the French this year had a quota of 4,300 tonnes but are thought to have caught about 7,000 tonnes. Most of the catching is done with purse-seines, which are very large bag-like nets capable of scooping up an entire tuna school. The purse-seines allow the tuna to be taken alive and transported to tuna ranches – there are about 40 scattered about the Mediterranean – where they are fattened for the Japanese market. The greater the fat content of the fish, the higher the price the Japanese will pay. They are slaughtered in the autumn and freighted to Japan.

The tuna ranching is driven by Japanese demand, which in turn, say conservationists, is driving the overfishing. The meeting at Marrakech had a chance to bring the fishery back under control, but the decision, taken by politicians with powerful fishing groups in their constituencies, went the other way. It was fiercely attacked by groups such as WWF. "This is not a decision, it is a disgrace which leaves WWF little choice but to look elsewhere to save this fishery from itself," said Dr Sergi Tudela, head of the WWF's Mediterranean fisheries programme.

The Green Party group in the European Parliament also lashed out at the decision. "The ICCAT quotas are a death sentence for the bluefin tuna," said the Green Party MEP Raül Romeva, who attended the meeting. "It is completely unacceptable that the body responsible for managing stocks has set a TAC that is 50 per cent higher than the scientific advice. The EU had pressed for even higher catches. It is morally bankrupt for [the EU Fisheries] Commissioner Joe Borg to make noises about the need to conserve bluefin tuna before the ICCAT meeting, when the European community then proceeds to use strong-arm, bullying tactics to try to impose a maximum total catch two-thirds higher than the scientific advice.

"The EU has bankrolled the decimation of bluefin stocks by subsidising the new large fishing vessels that are responsible for overfishing, to the detriment of certain traditional fishing fleets. When the stocks are gone, the same ship owners who

lobbied to overexploit bluefin tuna will come cap in hand for more EU money. This must not be allowed to happen."



NEW PAPER ON ONE OF HAWAI'I'S RAREST SPECIES OF WHALES, THE PYGMY KILLER WHALE

Summary

The first evidence of a resident population of pygmy killer whales anywhere in the world is provided in a paper published on-line in the journal *Marine Mammal Science* on December 29, 2008. This is an extremely rare species of whale that has never been studied in detail in the wild and was previously thought to live primarily in the open ocean. Based on photos taken over a 22-year period off the island of Hawai'i, this study indicates that there is a small resident population off the island. Analyses of associations also indicate that this species forms long-lasting bonds among individuals, similar to the more well-known pilot whales and killer whales. The population is at risk from human impacts because of the small population size. With only very infrequent encounters, monitoring trends in this population in response to potential impacts from naval sonar exercises or fishing activities in Hawai'i will be almost impossible.

More information on our Hawai'i odontocete research is available on our Hawai'i web page.

Background and additional details

The pygmy killer whale, a small toothed whale found in tropical oceanic waters world-wide, is one of the least-frequently encountered species of delphinids (oceanic dolphins) in the world. This study was primarily undertaken off the island of Hawai'i, using photographs taken by researcher Dan McSweeney of the Wild Whale Research Foundation, a non-profit group based on the island of Hawai'i. These photos were taken over a 22-year period during studies of the more commonly observed short-finned pilot whales. These observations were combined with additional photo-

identification effort since 2000 by researchers from Cascadia Research Collective. Additional photos were also provided by Tori Cullins of the Wild Dolphin Foundation, Deron Verbeck, and Beth Goodwin.

This study has shown that although they are encountered only very infrequently, there appears to be a small resident population of pygmy killer whales off the island of Hawai'i. This is the first evidence of a resident population of this species anywhere in the world. Individuals were re-sighted over periods of up to 21 years, and there is evidence they use the area year-round. In addition, using photographs of individuals traveling together in the same group, it is clear that some associations among individuals are very stable, similar to the long-term associations seen in some other species of whales such as killer whales and short-finned pilot whales.

There are several important conservation and management implications of this work. Because of the small population size the population is more at risk from human impacts than most species of whales and dolphins in Hawaiian waters. A stranded pygmy killer whale found dead on O'ahu in 2006 had evidence of interacting with fishing gear (a hook and line injury in the mouth), and Hawai'i is also home to regular naval sonar exercises that potentially could impact this species. With the very low encounter rates it will be almost impossible to determine whether the population is increasing or decreasing or monitor the impacts of such activities as naval exercises. Also, the standard methods NMFS uses for monitoring population trends, large-vessel line-transect surveys, will not be feasible, given the low encounter rates.

Cascadia Research and the Wild Whale Research Foundation are continuing studies of this species in Hawai'i. In early December 2008 the first-ever satellite tag was deployed on a pygmy killer whale off the island of Hawai'i to examine movements.

The complete citation of the on-line version of the paper is:

McSweeney, D.J., R.W. Baird, S.D. Mahaffy, D.L. Webster, and G.S. Schorr. 2008. Site fidelity and association patterns of a rare species: pygmy killer whales (*Feresa attenuata*) in the main Hawaiian Islands. *Marine Mammal Science* 25. DOI: 10.1111/j.1748-7692.2008.00267.x

Pdf copies are available from the journal publisher Wiley InterScience or obtained by contacting Robin Baird at [rwbaired \(at\) casadiaresearch.org](mailto:rwbaired@casadiaresearch.org)



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

Date	#	Type of Animal(s)
1/29 p.m.	20	Gray Whales
	10	Pacific White-sided Dolphins
	50	Long-beaked Common Dolphins
	150	Risso's Dolphins
	30	Northern Right Whale Dolphins
1/29 a.m.	5	Gray Whales
1/28	10	Gray Whales
	50	Pacific White-sided Dolphins
	400	Risso's Dolphins
1/27 p.m.	10	Gray Whales
1/27 a.m.	15	Gray Whales
	1000	Long-beaked Common Dolphins
	345	Risso's Dolphins
1/25 a.m.	1	Gray Whale
1/25 early a.m.	12	Gray Whales
	70	Pacific White-sided Dolphins
	20	Dall's Porpoise
1/24 p.m.	20	Gray Whales
	100	Pacific White-sided Dolphins
	100	Northern Right Whale Dolphins
1/24 a.m.	16	Gray Whales
	200	Pacific White-sided Dolphins
	100	Northern Right Whale Dolphins
1/23	18	Gray Whales
	30	Pacific White-sided Dolphins
	100	Risso's Dolphins
	10	Northern Right Whale Dolphins
	8	Gray Whales
1/20 a.m.	58	Gray Whales
	8	Risso's Dolphins
1/20 early a.m.	25	Gray Whales
	5	Dall's Porpoise
1/19 p.m.	40	Gray Whales
	35	Risso's Dolphins
1/19 a.m.	45	Gray Whales
1/18 p.m.	18	Gray Whales

	20	Risso's Dolphins
	20	Dall's Porpoise
1/18 a.m.	20	Gray Whales
	20	Long-beaked Common Dolphins
1/18 early a.m.	7	Gray Whales
1/17 p.m.	25	Gray Whales
	200	Risso's Dolphins
1/17 a.m.	30	Gray Whales
1/17 early a.m.	20	Gray Whales
	50	Pacific White-sided Dolphins
1/16 p.m.	40	Gray Whales
1/16 a.m.	30	Gray Whales
1/15 p.m.	30	Gray Whales
1/15 a.m.	15	Gray Whales
1/14 p.m.	10	Gray Whales
	500	Long-beaked Common Dolphins
1/14 a.m.	8	Gray Whales
	500	Long-beaked Common Dolphins
	12	Risso's Dolphins
1/13 p.m.	27	Gray Whales
	20	Pacific White-sided Dolphins
1/13 a.m.	30	Gray Whales
	400	Long-beaked Common Dolphins
1/12 p.m.	18	Gray Whales
	45	Risso's Dolphins
1/12 a.m.	19	Gray Whales
1/11 p.m.	15	Gray Whales
1/11 a.m.	30	Gray Whales
1/10 p.m.	11	Gray Whales
	15	Risso's Dolphins
1/10 a.m.	25	Gray Whales
1/9 p.m.	20	Gray Whales
1/9 a.m.	15	Gray Whales
	20	Pacific White-sided Dolphins
1/8	11	Gray Whales
	20	Pacific White-sided Dolphins
1/7	17	Gray Whales
	12	Risso's Dolphins
1/6 p.m.	5	Gray Whales
	20	Risso's Dolphins
1/6 a.m.	11	Gray Whales
1/5	5	Gray Whales
	20	Pacific White-sided Dolphins
	250	Risso's Dolphins
1/4 p.m.	4	Gray Whales
1/4 a.m.	27	Gray Whales
	1000	Risso's Dolphins
1/4 early a.m.	9	Gray Whales
	700	Risso's Dolphins
	2	Northern Right Whale Dolphins
1/3 p.m.	15	Gray Whales
	300	Risso's Dolphins

Skipped dates indicate no trip



NOTABLE MEDIA

National Geographic Atlas of the Ocean: The Deep Frontier by Sylvia A Earl. December 2008

Sustainable Sushi: A Guide to Saving the Oceans One Bite at a Time by Classon Trenor. January 2009

The Complete Guide to Antarctic Wildlife: Birds and Mammals of the Antarctic and Southern Ocean (Second Edition). Hadoram Shirihihi. Princeton University Press 2008

A Wildlife Guide to Chile: Continental Chile, Chilean Antarctica, Easter Island, Juan Fernandez Archipelago by Sharon Chester. 2008 Princeton University Press

Birds and Mammals of Coastal Patagonia by Graham Harris. 2008 Princeton University Press

DVD- Island of the Great White Shark by Filmmaker Richard Theiss. 2008 RTSea Productions

"How Accurate Are Observer Reported Kills of Albatrosses on Longlines?" blueocean.org
Albatross Report 2008.pdf

For Young Readers and Educators:

Look Who Lives in the Ocean by Brook Bessesen 2009 Arizona Highways Press
www.brookbessesen.com

Reign of the Sea Dragons by Sneed B. Collard 2008

Sea Secrets: Tiny Clues To A Big Mystery by Mary M. Cerullo and Beth E. Simmons 2009

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ACSMB

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Diane Glim, *Publicity*
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Soundings



American Cetacean Society- Monterey Bay Chapter
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MARCH 2009

February Meeting

Date: **Thursday, March 26, 2009**

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

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

Speaker: **Kristen C. Ruegg, Ph.D., Palumbi Lab, Hopkins Marine Station**

Title: **Reconstruction of the Historical Population Size of the Antarctic Minke Whale**

As we all know, the need for effective marine conservation continues to become more apparent the more we learn about that environment and its importance to a healthy planetary ecosystem. The activities of humans over time have disrupted Nature's balance in so many ways. Effective conservation requires an accurate understanding of the past so that the management programs designed and implemented will have a real chance to restore a healthy balance to our planet.

Among other things, our speaker will discuss the "Krill Surplus Hypothesis" which posits that the hunting of nearly 2 million great whales led to competitive release for smaller krill eating species like the Southern Ocean minke whale. If true, the current size of the Southern Ocean minke whale population could be artificially high as an indirect result of past whaling.



for an informative presentation about this important and cutting edge research.

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Minke Whale Photo Credit:
<http://www.nzetc.org/etexts/Bio20Tuat01/>

CALENDAR

Calendar of Scheduled Public Events at the PG Museum of Natural History:

- Darwin Exhibit in the Museum's Yadon Gallery- On Exhibit Through March.
- Saturday March 21, 2p.m.-Dr. Andres Dursrenfeld, Resolving Darwin's dilemma and evolution of complexity: How modern biology fills the gap between the peppered moth and the Burgess Shale.
- March 28, April 25, June 27, Science Saturday's: Hands on activities with themes that tie into a special exhibit or chosen permanent exhibit.
- March 28: Marine Protected Areas opening reception (5-7p.m. main Exhibit hall)
- May 3: Paul Ehrlich fundraiser (afternoon-eve, Exhibit hall)

For more info please contact the museum's education coordinator Annie Holdren at 831-648-5716

Sunday, March 15, 10 a.m. & Tuesday, March 17, 1p.m. : Kingdom of the Blue Whale on the National Geographic Station. DVD to be released March 31, 2009

March 29-April 3 MMPA. The First International Conference on Marine Mammal Protected Areas Conference will be held at the Grand Wailea Resort in Maui, Hawaii. For more info go to ICMMPA.org

April 3-5 SEAMAMMS: Southeast and Mid Atlantic Marine Mammal Symposium. For more info go to www.unc.edu/seamamms

Saturday April 18th 8:00am-3:00pm.
2009 Sanctuary Currents Symposium to be held at the Hyatt Regency Conference Center in Monterey
For more info go to www.sanctuarysimon.org

American Cetacean Society-Monterey Bay

Sunday April 19th: 13th Annual Point Mugu Whale Festival will be held at Leo Carrillo State Park/Beach. For more info go to www.malibuinterp.com

May 5 through June 7: Santa Cruz Museum of Natural History. Illustrating Nature: Student works from the Science Illustration Program at U.C.S.C.

Friday, May 15- Saturday, May 16 Cooking For Solutions 2009. All cooking for solutions events support the Aquarium's Seafood Watch Program For more info go to www.mbayaq.org

Saturday May, 30th ACS National Humpback Whale Watch Santa Barbara, CA. Trip will take place on the 'Condor Express'. For more info go to ACS.org or call Bernardo Alps at 310-548 8966

Point Sur Lighthouse Whale Watch: Sat and Sun 10:00am and 1:00pm. 3-hour tour during the gray whale migration season (Jan-March). Hike begins on west side of Highway 1- 19 miles south of Rio Rd., Carmel. Cost is \$20.00. First come first serve

Lectures and Classes

Art Miller Ph.d U.C. San Diego- Wednesday, March 11th, 3:30pm. Ocean climate circulation changes associated with the decline of Stellar sea lion populations in the Gulf of Alaska. Lecture will take place at U.C. Santa Cruz at 3:30-5:00pm in the earth and ocean science building.

John Ryan-Friday May 8th 12:00 noon
Seasonal and episodic variability of the Monterey Bay Upwelling Shadow. Lecture to be given at Moss Landing Marine Laboratories.

www.starrsites.com/acsm6/

HAWAII TUNA LONGLINERS SNAG AND KILL MORE DOLPHINS, WHALES, AND SEABIRDS IN 2008

Recently released data from National Marine Fisheries Service (NMFS) indicates Hawaii's tuna longliners' bycatch rose dramatically in 2008. It is estimated more than 60 dolphins and whales were caught in 2008, a 50% increase from the 40 caught the year before, including such species as Risso's and spotted dolphins, short-finned pilot whales, and false killer whales. In addition, 15 "unidentified" whales and another 10 "unidentified" marine mammals were included in the take numbers recorded by government observers. See the NMFS report at: http://www.seaturtles.org/downloads/2008_Hawaii_Tuna_bycatch.pdf

"With government observers present on only one of every five Hawaiian tuna longline vessels, we don't know the true magnitude of the US slaughter," said Mike Milne of Sea Turtle Restoration Project. He continued, "When the US bycatch is combined with the unknown death toll from the foreign tuna fleets, which outnumber the US fleet at least 10- to-1, it is clear why the carnage on the open seas is driving many protected species to the verge of extinction."

Almost 2 1/2 times more Black-footed albatross—listed as globally Endangered on the International Union for the Conservation of Nature's Red List of Threatened Species—were killed as collateral damage in the tuna fishery compared to 2007. The Northwest Hawaiian Islands is this species most important nesting ground, home to over 90% of the world's Black-footed albatross population. See a fact sheet about the Black-footed albatross at: http://seaturtles.org/downloads/Black_Footed_Albatross_Factsheet.doc. Highly migratory sea turtles were also not exempt from the tuna fleet's longlines-- 15 endangered olive ridley sea turtles and 5 critically endangered Pacific leatherback sea turtles were likely captured to be released injured or dead.

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"The Obama administration needs to step up and reduce US fisheries impacts on protected species, which has been largely ignored in the past eight years, so it can reassert its leadership in protecting these species on the global stage," said Todd Steiner, executive director of Turtle Island Restoration Network.

Recent DNA analysis of Hawaii's false killer whales has shown they are genetically distinct and are the only known island-associated population of false killer whales in the world. The best estimates suggest there may be as few as 123 island-associated false killer whales. Scientists are concerned that bycatch in the tuna longline fishery may lead to their extinction. See a fact sheet on this species:

<http://www.seaturtles.org/downloads/False%20Killer%20Whale.pdf>



FOSSIL OF PREGNANT WHALE FOUND

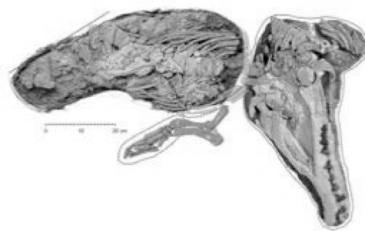
By Roberta Kwok

Fossils of a female whale and fetus suggest that early whales gave birth on land. University of Michigan Museum of Paleontology

Scientists have discovered the first known fossils of a pregnant early whale and her unborn calf, and with them evidence that these ancient creatures may have given birth on land.

The 48-million-year-old whale fetus is positioned for a head-first delivery typical of land mammals, says palaeontologist Philip Gingerich of the University of Michigan in Ann Arbor, who led the study. The findings lend credence to the idea that early whales — protocetids — were amphibious animals that fed in the oceans but came ashore to sleep, mate and give birth.

The report is "fascinating", says Ewan Fordyce, a palaeontologist at the University of Otago in Dunedin, New Zealand, who was not involved in the work. "These protocetid whales truly were



Fossils of a female whale and fetus (blue) suggest that early whales gave birth on land.

University of Michigan Museum of Paleontology

www.starrsites.com/acsmf/

transitional between fully marine and fully amphibious," he says.

Head first

Protocetids, which lived 49 million–37 million years ago and were roughly 2-5 metres long, had four legs with elongated flipper-like feet and small hooves that allowed them to roam on shore. They are thought to have evolved from land mammals called artiodactyls, which today include animals such as goats and cows.

Gingerich and his colleagues searched for preserved skeletons in a rock formation called Habib Rahi in Pakistan. The area, now inland, was once beneath a sea in which early whales may have made their transition from land to water. The researchers found the fossil fetus nestled in its mother's ribcage, as well as a nearly complete skeleton of what they believe to be a male nearby. The fossils belong to a newly identified whale species, which the researchers have dubbed *Maiacetus inuus*.

The fetus, estimated to have been about 66 centimetres long when alive, appeared to be near term and was oriented for a head-first delivery, the researchers report in PLoS ONE¹. Land mammals are normally born in this way, presumably to allow the young to breathe immediately, whereas mammals that live in the sea tend to be born tail-first, perhaps to avoid drowning.

Well preserved

The fossils are "beautiful and very informative", says Hans Thewissen, a whale palaeontologist at Northeastern Ohio Universities College of Medicine in Rootstown and a former student of Gingerich's. Although fragments of young whales have been found before, he says, this fossil fetus is unusually well preserved.

Because of the presence of the fetus, the team could confidently identify one fossil as female. The other adult fossil was 2.6 metres long and the animal's weight when alive was estimated to be 390 kilograms. This specimen was designated as male on the basis of its dimensions, large teeth and pelvic structure and the development of the teeth and bones suggested it was fully-grown.

Because the male was only 12% longer than the female, the males probably did not encounter intense competition that would have favoured bigger individuals, Gingerich says. That, in turn, could mean that food in the area was spread out, preventing males from staking claims over congregated females.

Jonathan Geisler, a palaeontologist at Georgia Southern University in Statesboro, cautions that it is too early to conclude that these whales gave birth on land. Modern hippos, which are closely related to whales, deliver babies both on land and in water, and published accounts describe births as feet-first, he says. Fetal position and birth environment may not have a "one-to-one correlation", says Geisler.



WAR AGAINST IVORY TRADE TAKES TO THE SEA by Michael McCarthy

It's the "other" ivory. And this week, conservationists in London stepped in to stop its sale. It might not be as well known as the stuff that comes from elephants, but the ivory from the narwhal, the tusked whale of the northern seas, is just as much in demand – and with that demand comes a threat just as severe as the one elephants face.

Not only is the narwhal's single spear-like tusk (which can be 8ft long) an object of great beauty, it is the object of myth and legend – in the Middle Ages it was considered to come from the unicorn – and so is highly prized by collectors. The demand for tusks is increasing and, as a result, so is hunting in the narwhal's core area of northern Canada and Greenland.

Campaigners from the Whale and Dolphin Conservation Society (WDCS) believe the rising hunting rate is a threat to the animal and so when seven narwhal tusks were entered into a major antiques sale at Bonhams, the London auction house, this week – where they were expected to fetch up to £10,000 each – they pressed for them to be withdrawn. The company agreed to do so, now the campaigners are calling on Bonhams to exclude narwhal tusks permanently, although the

auction house confined itself to saying the tusks were withdrawn from the sale "for procedural reasons" and gave no indication about future policy.

"We welcome Bonhams' decision to remove the narwhal tusks from sale, and we hope that the company will extend this decision to future sales both at its UK auction houses and overseas salerooms," said Chris Butler-Stroud, the WDCS chief executive.

The tusks were entered in The Gentleman's Library Sale, an annual auction bringing together natural history curiosities of the sort that might have adorned the library or the smoking room of a wealthy Victorian: when it took place on Wednesday, the full sale of more than 1,000 items – featuring items from antique globes to antlered deer heads – raised nearly £900,000.

WDCS believes that the seven tusks originally listed for auction would have represented the largest single offering of narwhal ivory in the UK since the European Union banned its import from Canada in 1984 and limited imports from Greenland to personal effects only (ie, not for resale) in 2004.

Although elephant ivory is banned from general sale, apart from in specially licensed auctions – one such took place last year – the sale of narwhal ivory is still legal, although the trade has to be monitored. But the WDCS believes that demand is steadily growing, with prices rising accordingly, and that this is pushing native peoples in arctic Canada and Greenland to hunt more and more of the animals.

One of the main narwhal populations in Greenland has been listed as critically endangered on Greenland's Red List of Species, and in 2008, the International Union for the Conservation of Nature, cited over-hunting as the major threat and warned that the species as a whole could become

"endangered" or "critically endangered" within five years.

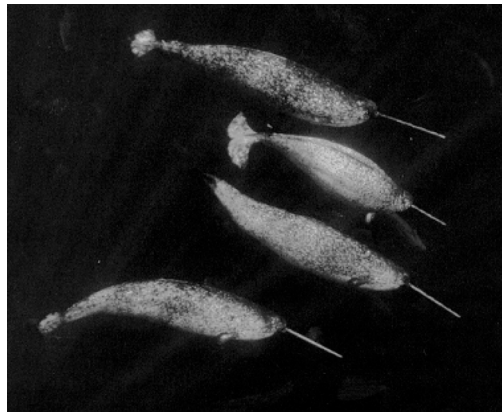
The society has also contacted Bonhams' US branch, Bonhams and Butterfields, with its concerns, as it has sold at least four narwhal tusks at its Los Angeles salesroom in the past two years, for prices ranging from \$11,000 (£8,000) to \$20,400 for a single tusk.

"The publicity surrounding sales such as these, and the high prices fetched by the tusks, adds to the motivation for hunters to take as many narwhals as possible, and for management agencies to set quotas way above sustainable levels," Mr. Butler-Stroud said.

Kate O'Connell, a WDCS researcher in the United States, said: "I think most people would find it abhorrent that such a trade should impact on such a beautiful animal."

Narwhals: The facts: The narwhal (*Monodon monoceros*) is a toothed whale closely related to the all-white beluga. Its single tusk is an elongated incisor tooth that in fully-grown males ranges from 7ft

to 10ft long. An exclusively arctic species, it is hunted only in Canada and Greenland, where between 300 and 500 animals are taken annually by native people. However, last November, hundreds of narwhals were trapped in the ice on the northern coast of Baffin Island, perhaps because the ice-formation regime in the arctic is being altered by climate change. Eventually all 629 were killed by Inuit hunters.



SAVE THE WHALE (AGAIN): SECRET PLAN TO LIFT HUNTING BAN by Geoffrey Lean

Twenty years ago, commercial whaling was outlawed. But hush-hush meetings between officials have paved the way for its return

Governments are preparing to breach the worldwide whaling ban, legitimising commercial

killing of the giant creatures for the first time in more than 20 years.

Key whaling and anti-whaling nations have thrashed out a plan at a series of unpublicised closed-door meetings to allow Japan to kill the leviathans for gain, after outlawing it for two decades. It is to be presented to a special meeting of the official International Whaling Commission (IWC) early next month.

Environmentalists say that the plan amounts to “waving the white flag” to Japan and they fear that it will usher in a new era of legal whaling around the world.

All commercial whaling has been banned since 1986 after the governments who make up the IWC voted by a three-quarters majority for a moratorium on the practice which drove species after species to the brink of extinction.

But Japan has continued to slaughter in the Southern Ocean around Antarctica, by exploiting a loophole in the international law which allows whales to be killed for “scientific” purposes.

Conservationists have harried these annual whale hunts on the high seas with their own ships, but the IWC has been powerless to stop the killing, even though Japan has steadily increased it beyond anything that could be justified for scientific research, and has sold the whale meat for food; this winter it is aiming to catch 935 minke and 50 fin whales.

The international body has remained powerless and deadlocked for decades, and even though both whaling and anti-whaling nations have assiduously recruited other countries to join them, neither side has been able to accumulate enough votes to give it victory under the IWC’s complex decision-making processes.

A year ago, as *The Independent* on Sunday exclusively reported at the time, the IWC began a series of closed meetings to try to find a compromise.

Since then a working group of 28 nations has met twice – in St Petersburg, Florida, in September and in Cambridge in December – and its leaders have thrashed out a package-deal

proposal to put to a meeting of the full commission in Rome in two weeks’ time.

The proposal is so sensitive that the document containing it is officially classified as a “non-paper”, and only two people – the chairmen of the IWC and of the working group – formally take responsibility for it. But sources say it has been thrashed out by Japan and five leading anti-whaling nations, including the United States.

The package would accede to a long-standing Japanese demand by allowing it to hunt minke whales near its coasts for an initial five-year period. It presents two options for dealing with “scientific” whaling – phasing it out over five years or effectively legitimising it – but Japan has already ruled out ending the practice, leaving only legitimisation on the table.

Patrick Ramage, of the International Fund for Animal Welfare, yesterday denounced the plan as “a political fix to give Japan what it wants” and accused conservationist nations of “waving the white flag”.

Mark Simmons, of the Whale and Dolphin Conservation Society, said that the package amounted to a “de facto lifting of the moratorium”. He feared that other nations would seek similar deals, leading to a worldwide revival of legal whaling.

But Alvaro de Soto, a Peruvian diplomat who chairs the working group, called the package “eminently practical”. He added: “If it is followed it will require compromise, possibly painful, by all concerned, which we profoundly hope they will be willing to make.”



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

<u>Date</u>	<u>#</u>	<u>Type of Animal(s)</u>
3/4 p.m.	12	Gray Whales
	30	Risso's Dolphins
3/5 a.m.	40	Killer Whales (Resident type)
3/4 p.m.	12	Gray Whales
3/4 a.m.	15	Gray Whales
3/3	2	Gray Whales
3/2	4	Gray Whales
2/28 a.m.	10	Gray Whales
2/28 early a.m.	5	Gray Whales
2/27 a.m.	10	Gray Whales
2/26 p.m.	10	Gray Whales
2/26 a.m.	16	Gray Whales
2/25 p.m.	8	Gray Whales
2/25 a.m.	12	Gray Whales
2/24	4	Gray Whales
	1	Black-footed Albatross
2/22 p.m.	6	Gray Whales
2/22 a.m.	5	Pacific White-sided Dolphins
2/21 p.m.	6	Gray Whales
2/21 a.m.	5	Gray Whales
	200	Pacific White-sided Dolphins
	200	Northern Right Whale Dolphins
2/20 p.m.	2	Gray Whales
2/20 a.m.	5	Gray Whales
2/19 p.m.	3	Gray Whales
2/19 a.m.	3	Gray Whales
2/18 p.m.	13	Gray Whales
2/18 a.m.	4	Gray Whales
2/17		Sea lions, seals, otters
2/14 p.m.	2	Gray Whales
2/14 a.m.	3	Gray Whales
2/13	3	Gray Whales
2/12	5	Gray Whales
	500	Long-beaked Common Dolphins
	20	Risso's Dolphins
2/11	2	Gray Whales
	1000	Long-beaked Common Dolphins
	8	Risso's Dolphins
2/10	6	Gray Whales
2/8 p.m.	3	Gray Whales
2/8 a.m.	2	Gray Whales
	10	Risso's Dolphins
	1	Salmon Shark
2/8 early a.m.	8	Gray Whales
2/7 p.m.	6	Gray Whales
2/7 a.m.	5	Gray Whales
	6	Risso's Dolphins
2/6 a.m.	3	Gray Whales
	30	Risso's Dolphins
2/5 p.m.	5	Gray Whales

	1	Humpback Whale
	110	Risso's Dolphins
2/5 a.m.	5	Gray Whales
2/4	15	Gray Whales
	1000	Risso's Dolphins
2/3	6	Gray Whales
	400	Risso's Dolphins
	6	Dall's Porpoise
2/2 p.m.	16	Gray Whales
	200	Risso's Dolphins
2/2 a.m.	7	Gray Whales
2/1 p.m.	4	Gray Whales
	100	Pacific White-sided Dolphins
2/1 a.m.	4	Gray Whales
	400	Pacific White-sided Dolphins

Skipped dates indicate no trip

NOTABLE MEDIA

Darwin's Universe: Evolution from A-Z by Richard Milner. 2009 UC Press

Charles Darwin: On the Origin of Species-The Illustrated Edition by David Quammen, General Editor

Darwin's Sacred Cause: Race, Slavery, and the Quest for Human Origins by Adrian Desmond and James Moore

Great Naturalist: from Aristotle to Darwin to Mary Anning by Robert Huxley

For Young Readers and Naturalist's:

Animals Charles Darwin Saw: An Around the World Adventure by Sandra Markle. 2009 Chronicle Books

What Darwin Saw: The Journey That Changed The World by Rosalyn Shanzer. 2009 National Geographic Publishing

DVD'S:

Kingdom of the Blue Whale; 2009 National Geographic Productions. Available March 31, 2009

Last Journey for the Leatherback; Dr. Stanely M. Minasian in conjunction with the Sea Turtle Island Restoration Project

Darwin's Secret Notebooks: A National Geographic Production 2009

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Soundings



American Cetacean Society- Monterey Bay Chapter
PO Box H E, Pacific Grove, CA 93950
www.starrsites.com/acsmc

APRIL 2009

April Meeting

Date: **Thursday, April 16, 2009**

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

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

Speaker: **Thomas A. Jefferson, Ph. D., Southwest Fisheries Science Center, NOAA Fisheries Service**

Title: **CAPTURING THE CRITICALLY ENDANGERED VAQUITA...WITH A CAMERA**

“The Vaquita is the world’s smallest porpoise. They live only in the northern reaches of the Gulf of California, Mexico. Scientists estimate that 150 animals remain. This shy, elusive porpoise is disappearing due to accidental entanglement in fishing nets set for shrimp. Following the loss of the Baiji (Yangtze River Dolphin) in 2006, the Vaquita is the next marine mammal in line for extinction.”(<http://www.whaletrackers.com/vaquita/>)

In 2008 our speaker spent one month in Mexico photographing vaquitas (*Phocoena sinus*) and came away with



the first high-quality images of this He and his crew also showed that identification of individuals is this species. He plans to use photo-identification techniques to build-up long-term catalog of individuals to investigate biological aspects that in its future management and conservation.

Please join us for this important presentation about the most endangered species of cetacean in the world.

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CALENDAR

Calendar of Scheduled Public Events at the PG Museum of Natural History

April 25 Science Saturday's: Hands on activities with themes that tie into a special exhibit or chosen permanent exhibit. For more info call Lori Mannel 831-648-5718

May 3: Paul Ehrlich fundraiser (afternoon-even, Exhibit hall)

Saturday May 9 1:30pm-3 pm: Workshop: "Grunion Greeters Workshop" For more info call Lori Mannel at 831-648-5718

Thru June 13: "Celebrate Our Underwater Parks" Local Photographer Kip Evans will take you on a journey of majestic kelp forests, deep canyons, rocky shores and the open ocean of the California coast. For more info call Lori Mannel at 831-648-5718

For more info please contact the museum's education coordinator Annie Holdren at 831-648-5716

Sun April 26 from 10am-4pm Earth Day Celebration at Custom House Plaza. ACSMB will have a new booth and we're looking for volunteers for 2 hour shifts and for folks just to stop by to say hello. Please contact Diane Glim at 646-8743 to help.

Saturday April 18th 8:00am-3pm. 2009 Sanctuary Currents Symposium to be held at the Hyatt Regency Conference Center in Monterey. For more info go to www.sanctuarysimon.org

Sunday April 19th: 13th Annual Point Mugu Whale Festival will be held at Leo Carrillo State Park/Beach. For more info go to www.malibuinterp.com.

Sat & Sun April 25-26: Moss Landing Marine Laboratory Open House: Open House will include-Lab Exhibits, Student Prospects and Activities, Puppet Show, BBQ, T-Shirt, Bake Sale and More
For more info call 831-771-400 or go to mlmlblog.wordpress.com

May 18-21: 60th Tuna Conference Lake Arrowhead, California Yellowfin Tuna Art on Tuna Conference Website Illustrated by Monterey Bay Whalewatch Naturalist Kate Spencer. For more info go to www.tunaconference.org

May 5 thru June 7: Santa Cruz Museum of Natural History. Illustrating Nature: Student works from the Science Illustration Program at U.C.S.C.

Friday, May 15- Saturday, May 16 Cooking For Solutions 2009. All cooking for solutions events support the Aquarium's Seafood Watch Program
For more info go to www.mbayaq.org

Saturday May 30th: ACS National Humpback Whale Watch Santa Barbara, CA. Trip will take place on the 'Condor Express'. For more info go to ACS.org or call Bernardo Alps at 310-548 8966

Point Sur Lighthouse Whale Watch: Sat and Sun 10:00am and 1:00pm. 3-hour tour during the gray whale migration season (Jan-March). Hike begins on west side of Highway 1- 19 miles south of Rio Rd., Carmel. Cost is \$20.00. First come first serve

Friday May 8th 12:00 noon: John Ryan- Seasonal and episodic variability of the Monterey Bay Upwelling Shadow. Lecture to be given at Moss Landing Marine Laboratories.

SUMMER CLASSES

Working with Marine Mammals at MLML with Dr. Jennifer Zeligs Hurley:

Session 1-Techniques and Theories of Animal Training: Bio 348 July 6-12, 2009 9:00am-5:00pm

Session 2- Working With Marine Mammals: Bio 347 July 20-26 9:00am-5:00pm

Certificate of Completion in Beginning Marine Mammology with completion of both classes and 5 day internship. For more info contact Jennifer at jzeligs@mlml.calstate.edu

Marine Science Courses at UCSC:

Biology of Marine Mammals: Bio 126 Session one: June 22-July 24 Introduction to marine mammal physiology, anatomy, evolution and ecology with emphasis on marine mammals of Monterey Bay

Marine Science Illustration: Scientific Communication 126 Session Two: July 22-August 28

For more info go to summer.ucsc.edu

DR. SAM RIDGWAY - 2009 NORRIS AWARD WINNER

by Andrew Read

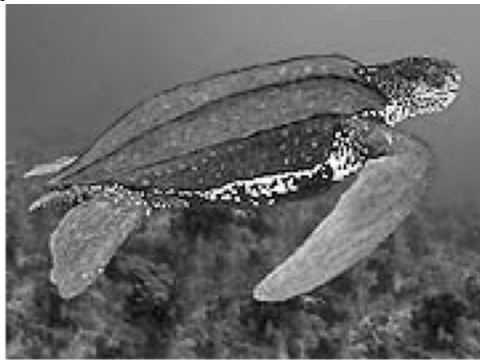
I am very happy to report that the winner of the 2009 Kenneth S. Norris Career Achievement Award is Dr. Sam H. Ridgway. This award was established in honor of the Society's founding president as an acknowledgement of exemplary lifetime contributions to science and society through research, teaching, and service in marine mammal science. The award is granted every second year, in association with the Society's Biennial Conference.

Sam has made an enormous contribution to our field, from his pioneering work on the physiology of marine mammals, to studies of marine mammal medicine and, more recently, the effects of anthropogenic sound on marine mammals. We are honored to recognize Sam's contribution to our field in this way. As this year's honoree, Sam will deliver a plenary lecture at the Conference in Quebec City and write an associated paper for Marine Mammal Science. Please join me in congratulating Dr. Sam Ridgway on this award.

PLASTIC GARBAGE ACCOUNTS FOR ONE-THIRD OF LEATHERBACK SEA TURTLE MORTALITIES

by Jeremy Hance (mongabay.com)

A new study in *Marine Pollution Bulletin* has confirmed that the world's largest sea turtle is succumbing in startling numbers to an environmental issue that receives little attention: plastic trash in the oceans.



To conduct his study Dr. Mike James from Dalhousie University and colleagues looked back over four decades of leatherback necropsies, i.e. post-mortems of animals.

"We wanted to see if plastics ingestion in leatherbacks was hype or reality," says James. It

has long been theorized that leatherbacks often confuse plastic trash, especially plastic bags, with one of their favorite prey—jellyfish. In an unfortunate connection, both jellyfish and plastic trash are often found at where oceanic water masses meet.

"After reviewing the results of 371 necropsies since 1968, we discovered over one third of the turtles had ingested plastic," James says.

Plastic consumed by turtles leads to partial or complete obstruction of gastrointestinal tract. While the plastic takes its toll on the turtle's diet, energy, and reproduction, a complete blockage can lead to starvation. The more plastic a turtle ingests the more likely the trash will kill it, but even a little plastic can weaken a turtle significantly.

"The frustrating, yet hopeful aspect is that humans can easily begin addressing the solution, without major lifestyle changes," says Dr. James. "It's as simple as reducing packaging and moving towards alternative, biodegradable materials and recycling."

Leatherbacks are currently classified by the IUCN Redlist as critically endangered. Having inhabited the earth for over a hundred million years—surviving comets, global warming, and ice ages—it would be sadly ironic if the leatherback should go extinct due to something humans consider as innocuous as plastic bags.

CONSERVATION GROUPS SUE TO PROTECT FALSE KILLER WHALES IN HAWAI'I LONGLINE FISHERY KILLING WHALES AT TWICE SUSTAINABLE LEVELS

Honolulu, Hawai'i – Seeking an end to the continuing slaughter of false killer whales (*Pseudorca crassidens*) in the waters of Hawai'i, Earthjustice, representing a coalition of conservation groups, filed suit in federal court in Honolulu today against the National Marine Fisheries Service, challenging the agency's failure to devise a plan to protect the whales from the Hawai'i-based longline fishery. The coalition includes Hui Mālama i Koholā, the Center for

Biological Diversity, and Turtle Island Restoration Network.

Each year, the Hawai‘i-based longline fleet hooks and entangles false killer whales, resulting in serious injury or death through drowning. The Fisheries Service’s own studies show that, for nearly a decade, the Hawai‘i longline fishery has been killing Hawai‘i’s false killer whales at rates far beyond what the population – which currently numbers only about 500 – can sustain.

“Longlines attempting to catch tuna and swordfish indiscriminately kill whales, dolphins, and sea turtles. For far too long, the Bush administration ignored its obligation to save Hawai‘i’s false killer whales,” said Todd Steiner, biologist and executive director of Turtle Island Restoration Network. “We call on the Obama administration to end this slaughter quickly, before it’s too late.”

“In 1994, Congress amended the Marine Mammal Protection Act to require the Fisheries Service to try to eliminate marine mammal death and serious injury in commercial fisheries,” explained David Henkin, an attorney with Earthjustice who is representing the coalition in court. “For years, the agency has ignored its legal duty to develop a plan to reduce the longline fishery’s deadly interactions with false killer whales and other marine mammals. Hawai‘i’s marine mammals are paying with their lives for the Fisheries Service’s refusal to comply with the law.”

“The Hawaiian values of mālama (to care for) and kuleana (to be responsible for) mean that we all have to take part in protecting Hawai‘i’s false killer whales from needless deaths in the longline fishery’s gear,” explained William Ailā of Hui Mālama i Koholā.

“The National Marine Fisheries Service has ignored our pleas to address the slaughter of false killer whales, claiming inadequate funds, but it’s never bothered to ask Congress to appropriate the money needed to get the job done,” said Andrea Treece, a senior attorney for the Center for Biological Diversity.

Background: On August 10, 2004, under pressure from an Earthjustice lawsuit representing the same three conservation groups, the National Marine Fisheries Service re-classified the Hawai‘i-based longline fishery as “Category I” due to its excessive incidental take of Hawai‘i’s false killer whales. This reclassification officially triggered the Marine Mammal Protection Act’s requirement to establish a “take reduction team” to devise a plan to bring the fishery’s incidental take “to insignificant levels approaching a zero mortality and serious injury rate.” Instead, for more than four years, the Fisheries Service has done nothing, claiming inadequate funding, while refusing to ask Congress for additional money.

A December 2008 Government Accountability Office study found that “the false killer whale is the only marine mammal for which incidental take by commercial fisheries is above its maximum removal level that is not covered by a take reduction team.”

The National Marine Fisheries Service’s longstanding refusal to establish a take (killing) reduction team for Hawai‘i’s false killer whales contravenes Congress’s command that commercial fisheries “reduce incidental mortality and serious injury of marine mammals to insignificant levels approaching a zero mortality and serious injury rate.” The GAO report found “it is important that NMFS adhere to the deadlines in the MMPA, as delays in establishing teams and developing and finalizing take reduction plans could result in continued harm to already dwindling marine populations.”

Read the GAO study here: <http://gao.gov/new.items/d0978.pdf>
View a copy of the complaint here: http://www.seaturtles.org/downloads/False_killer_whale_lawsuit.pdf



CANNED TUNA: GO BEYOND THE LABEL TO FIND HEALTHY, DOLPHIN-FRIENDLY

TUNA by Paul McRandle

Canned tuna has been a lunchtime staple for generations, and its ubiquity has led to widespread consumer attention to fish and oceans. In the 1970s, consumers became concerned about the unintended “bycatch” of dolphins in tuna nets. In the last decade, there’s been an additional concern: the high mercury content in some tuna, especially steaks from large bluefin tuna and canned chunk white. No one wants to pack a heavy metal in their child’s lunch box.

Yet tuna can be high in omega-3 fatty acids, providing a low-fat, heart-healthy source of protein. So when you’re shopping for canned tuna, whether for yourself or a child, what’s the best choice? Learn how to decode the user-unfriendly labels so you can pick it out in store shelves.

SLAUGHTER OF THE SEALS IN RUSSIA IS STOPPED BY VLADIMIR PUTIN

The dewy-eyed innocence of baby seals has prompted a rare burst of environmental activism in Russia that has moved Vladimir Putin to end their slaughter. The annual spring cull in the northern White Sea region has been scrapped after Mr Putin condemned the clubbing of baby seals for their fur as a “bloody trade”.

The Natural Resources and Ecology Ministry said that it was responding to public concern, but the Prime Minister’s words appeared to have been decisive.

Yuri Trutnev, the Natural Resources Minister, reacted swiftly, outlawing the cull of harp seals younger than one year old after Mr Putin told a Cabinet meeting that “it’s clear that it should have been banned long ago”.

The ministry said: “This is a serious step forward to protect Russia’s biological diversity. This decision was made largely thanks to public environmental organisations which took an active position on this issue.” Conservation groups have staged protests in 20 Russian cities this week, demanding an end to the slaughter. Activists

accused Norwegian companies of encouraging the killing because seal hunting was no longer allowed in their own country.

Environmental groups said yesterday that they were delighted by their victory after 15 years of campaigning. Igor Belyatsky, spokesman for the International Fund for Animal Welfare, said: “It’s obvious that without Putin it would have been more difficult. The quick reaction of the authorities was because of his words. When someone like Putin speaks in favour of a ban then it is difficult to oppose it.”

Igor Chestin, the chief executive of the WWF in Russia, said that it would now press the Transport Ministry to restrict ship movements near the seals’ breeding grounds because global warming was thinning ice cover in the White Sea. An estimated 5,000 “whitecoat” seals less than two weeks old were dying after falling prematurely into the sea because ships were breaking the ice, he said. Villagers in the region opposed a ban, arguing that earnings from the cull were vital to their communities. The Government said that it would provide 48 million roubles (£1 million) in financial support to hunters over the next three years.

Mr Putin, who enjoys an action-man image and has been photographed bare-chested with a hunting rifle, has clearly had a change of heart over the plight of baby seals. As President, he vetoed legislation in 2000 that would have banned seal hunting despite a 273-1 vote in favour in parliament.

Death on the ice

— Annual quotas previously allowed up to 35,000 baby seals to be killed in the White Sea in March

— Hunters normally club seal pups to kill them to avoid damaging pelts

— The International Fund for Animal Welfare reported the birth of about 300,000 seals in the White Sea population in 2003 and only 120,000 in 2008

— The world’s largest annual commercial seal hunt, due to begin this month, takes place in Canada

— 207,000 seals were caught in Canada last year, earning the 6,000 licensed sealers a total of \$7 million (£4.8 million)

— The EU is considering a ban on all seal products

KILLING SEA LIONS WON'T SAVE SALMON

by Scott Beckstead,

Oregon, Washington and Idaho have now received permission to start shooting sea lions in the Columbia River. Sea lions, lazing in the sun, scratching their heads with their hand-like back flippers, will now be in the crosshairs. They can be shot at Bonneville Dam, at Astoria or at any other place in the river or along the coast that is not a breeding colony.

The crime that merits this death sentence? Eating fish.

About 25 percent of the spring salmon migrating in the Columbia are listed under the Endangered Species Act. Because salmon are expected to return in record high numbers to the Columbia this spring, up to 13 percent of these ESA-listed fish can die as a result of human anglers - while sea lions will eat less than 4 percent.

Recent government documents acknowledge that predation by sea lions is fairly stable at about 4,000 fish. This is not true for the pressure on fish from fishermen lining the banks and plying the river with their nets. Washington and Oregon allow the percentage of mortality to the listed fish to increase when the run is larger. Rather than capping the kill at a specific, and low, level and allowing more fish to escape to spawn in years with a higher run size, fishermen are allowed to kill more -- up to 17 percent, depending on the size of the run.

If we are to save the fish, we must address the real problems facing the fish, not just address the frustration of fishermen who want the fish for

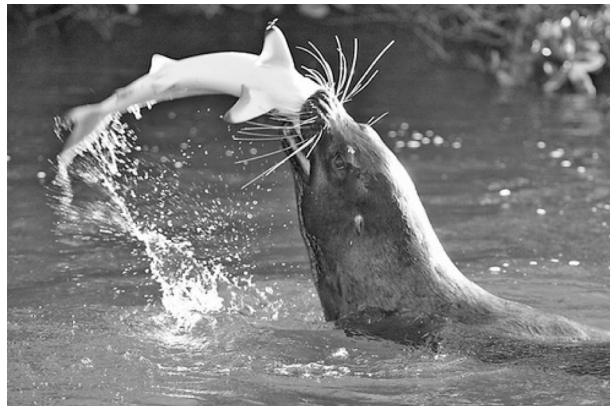
themselves. Salmon recovery is hindered by a number of factors. Foremost is the inability of the fish to successfully navigate their traditional spawning rivers: dams block passage, water is taken from their rivers and pristine habitats are degraded. While they are in the ocean, they are caught in commercial fisheries. As they spawn in the spring, fishermen await them.

A government biological assessment lists the top two factors limiting recovery as poor survival of the out-migrating juvenile salmon and fish hatchery practices. Neither of these is addressed by killing sea lions, whose predation was among the least of the factors considered in the government's assessment.

It may be frustrating for anglers to watch a sea lion catch a salmon for which they were fishing. But sea lions and salmon have been in a natural cycle for decades. Salmon and other fish migrate in runs as a strategy for "swamping" their predators to assure that enough get through to survive. However, the fish can't adapt to survive the impediments that humans put in their path.

Soon the quiet of the Columbia may be disturbed by the sound of gunshots. Soon a walk along its banks may reveal a dead or injured sea lion. Killing sea lions will not save the salmon from further decline, it will just kill sea lions.

Scott Beckstead is senior state director for Oregon of The Humane Society of the United States.



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**MONTEREY WHALE
WATCHING**

MONTEREY BAY WHALE WATCH

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

Date	#	Type of Animal(s)
3/27 p.m.	6	Humpback Whales
	350	Risso's Dolphins
3/27 a.m.	5	Humpback Whales
3/26	500	Risso's Dolphins
	5	Harbor Porpoise
3/25 p.m.	3	Gray Whales
	2	Humpback Whales
3/25 a.m.	2	Humpback Whales
3/24 p.m.	4	Humpback Whales
	7	Harbor Porpoise
3/24 a.m.	7	Gray Whales
3/21 p.m.	3	Gray Whales
	5	Humpback Whales
3/21 a.m.	11	Gray Whales
	3	Humpback Whales
3/20 p.m.	8	Gray Whales
3/20 a.m.	6	Gray Whales
3/19 p.m.	8	Gray Whales
	2	Humpback Whales
3/19 a.m.	18	Gray Whales
	5	Killer Whales (Transient type)
	20	Risso's Dolphins
3/18 p.m.	14	Gray Whales
	6	Risso's Dolphins
3/18 a.m.	16	Gray Whales
3/17 p.m.	15	Gray Whales
3/17 a.m.	14	Gray Whales
3/16 p.m.	16	Gray Whales
3/16 a.m.	12	Gray Whales
3/15 p.m.	29	Gray Whales
3/15 a.m.	20	Gray Whales
3/15 early a.m.	33	Gray Whales
3/14 p.m.	12	Gray Whales
3/14 a.m.	600	Pacific White-sided Dolphins
	10	Northern Right Whale Dolphins
3/14 early a.m.	23	Gray Whales
3/13 p.m.	17	Gray Whales
3/13 a.m.	19	Gray Whales
3/12 p.m.	28	Gray Whales
	70	Risso's Dolphins
3/12 a.m.	26	Gray Whales
3/11 p.m.	14	Gray Whales
3/11 a.m.	20	Gray Whales
	6	Killer Whales
3/10 a.m.	6	Gray Whales

3/8 a.m.	17	Gray Whales
	100	Pacific White-sided Dolphins
	200	Risso's Dolphins
3/7 p.m.	8	Gray Whales
3/7 a.m.	13	Gray Whales
	1000	Pacific White-sided Dolphins
	500	Risso's Dolphins
3/6 p.m.	10	Gray Whales
	15	Bottlenose Dolphins
3/6 a.m.	14	Gray Whales
	50	Risso's Dolphins
3/5 p.m.	12	Gray Whales
	30	Risso's Dolphins
3/5 a.m.	40	Killer Whales (Resident type)
3/4 p.m.	12	Gray Whales
3/4 a.m.	15	Gray Whales
3/3	2	Gray Whales
3/2	4	Gray Whales
3/1 p.m.	10	Gray Whales
3/1 a.m.	15	Gray Whales
Skipped dates indicate no trip		

NOTABLE MEDIA

National Geographic Complete Birds of the World
All New Regional Field Guide 2009 National Geographic Publication includes 900 illustrations

Dolphin Mysteries: Unlocking the Secrets of Communication by Toni Frohoff and Kathleen M. Dudzinski. 2008 Yale University Press

Princeton Encyclopedia of Mammals. Edited by David W. Macdonald. 2009 Princeton University Press
1,529 color illustrations, 172 color maps, 163 line illustrations

Animal Migration: Remarkable Journeys in the Wild Edited by Ben Hoare. 2009 U.C. Press

March 2009 National Geographic Magazine: "Still Blue" excellent article about eastern North Pacific Blue Whale migration and calving grounds at the Costa Rica Dome. Photographs by Flip Nicklin and Phil Colla

Orca Field Guide: Laminated North Pacific Coast Killer Whale Field Guide. Features descriptions and behaviors of fish eating resident and mammal eating killer whales of the North Pacific. Available at the Whale Museum in Friday Harbor

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

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American Cetacean Society Membership Application Chapter#24

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Renewal _____

Name _____

Address _____ Email _____

City, State, Zip _____

Membership level _____

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ACSMB

Board Members for 2009

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Randy Puckett, *Vice-president*
Katy Castagna, *Treasurer*
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tonylorenz@bigbluebay.com

Soundings



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

MAY 2009

May Meeting

Date: Thursday, May 28, 2009

**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

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

Speaker: Jodi Frediani, Photographer and Swimmer

**Title: Swimming with Humpback Whales on the Silver Bank: a
photograph journey!**

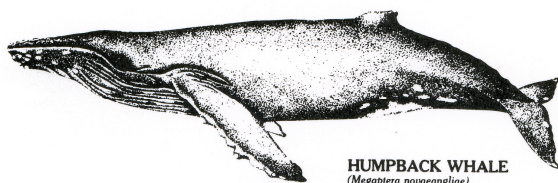
The Silver Bank, lying 70 miles north of the coast of the Dominican Republic, is one of the few places on earth where one can freely swim with humpback whales in their environment, on their terms. Photographer Jodi Frediani has spent eight weeks over the past eight years following her passion, snorkeling with and photographing the North Atlantic humpbacks, which congregate on the Silver Bank each year. From January through April, they give birth and raise their calves before making the long voyage up the east coast of North America where they feed off Massachusetts' "Stellwagen Bank", and as far north as the waters of Iceland and Greenland for the summer. These whales are also believed to breed along the Bank, though no one has yet been privileged to see them either give birth or mate.

Established as the Silver Bank Humpback Whale Sanctuary in 1986, the Sanctuary was enlarged in 1996 and renamed the Sanctuary for the Marine Mammals of the Dominican Republic. Swimming with the whales is highly regulated with only three vessel permits issued each year.

Individuals fortunate enough to share the whale-swim experience snorkel in close proximity to mothers and calves, may swim with "singers" and sometimes float alongside a pair of "valentines" or "dancers." Curious calves often approach swimmers for an up-close view and it is hard to discern who is watching whom.

Jodi has captured the full experience in color photographs and will share the excitement, the energy and wonder of these close in-water encounters, while offering a bit of natural history and tales of special whales. You can see some of Jodi's photography at www.jodifrediani.com.

Please join us for what promises to be an entertaining and informative evening about humpbacks from the "other" coast.



HUMPBACK WHALE
(Megaptera novaeangliae)

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CALENDAR

Calendar of Scheduled Public Events at the PG Museum of Natural History

Saturday May 9 1:30pm-3 pm: Workshop: "Grunion Greeters Workshop" For more info call Lori Mannel at 831-648-5718

Thru June 13: "Celebrate Our Underwater Parks" Local Photographer Kip Evans will take you on a journey of majestic kelp forests, deep canyons, rocky shores and the open ocean of the California coast. For more info call Lori Mannel at 831-648-5718

For more info please contact the museum's education coordinator Annie Holdren at 831-648-5716

Friday May 8th noon: John Ryan- Seasonal and episodic variability of the Monterey Bay Upwelling Shadow. Lecture to be given at Moss Landing Marine Laboratories

Friday, May 15- Saturday, May 16 Cooking For Solutions 2009. All cooking for solutions events support the Aquarium's Seafood Watch Program For more info go to www.mbayaq.org

May 18-21: 60th Tuna Conference Lake Arrowhead, California Yellow-fin Tuna Art on Tuna Conference Website Illustrated by Monterey Bay Whalewatch Naturalist Kate Spencer. For more info go to www.tunaconference.org

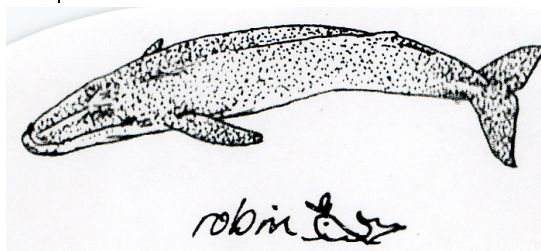
May 5 thru June 7: Santa Cruz Museum of Natural History. Illustrating Nature: Student works from the Science Illustration Program at U.C.S.C.

Saturday May 30th: ACS National Humpback Whale Watch Santa Barbara, CA. Trip will take place on the 'Condor Express'. For more info go to ACS.org or call Bernardo Alps at 310-548 8966

Point Sur Lighthouse Whale Watch: Sat and Sun 10:00am and 1:00pm. 3-hour tour during the gray whale migration season (Jan-Mar). Hike begins on west side of Highway 1- 19 miles south of Rio Rd., Carmel. Cost is \$20.00. First come first serve

June 29-July 3: NMEA09-One World Conserving One Ocean at Asilomar Conference Grounds. Conference will include a whale watch field trip aboard the 100ft Princess Monterey. For more info go to www.nmea.org

Sat August 15: ACS National Blue Whale Watch aboard the Condor Express. 8am-4pm. Cost \$88.00-\$104.00. Trip Departs from the Santa Barbara Harbor. For more info call 310-548-7821



SUMMER CLASSES & SEMINARS

Working with Marine Mammals at MLML with Dr. Jennifer Zeligs Hurley.

Session 1-Techniques and Theories of Animal Training: Bio 348 July 6-12, 9:00am-5:00pm

Session 2- Working With Marine Mammals: Bio 347 July 20-26 9:00am-5:00pm

Certificate of Completion in Beginning Marine Mammology with completion of both classes and 5 day internship. For more info contact Jennifer at jzeligs@mlml.calstate.edu

Marine Science Courses at UCSC:

Biology of Marine Mammals: Bio 126 Session one: June 22-July 24 Introduction to marine mammal physiology, anatomy, evolution and ecology with emphasis on marine mammals of Monterey Bay

Marine Science Illustration: Scientific Communication 126 Session Two: July 22-August 28

For more info go to summer.ucsc.edu

Marine Science Seminars at MBARI:

Wed June 3: Deborah Cramer, Ph.D: Across the Great Divide: Bridging Complex Science to the Public Pacific Forum-3:00pm

Wed June 10: Marcus Eriksen, Ph.D and Anna Cummins. Synthetic Sea, Synthetic Me. Plastic Debris in the Marine Environment. Pacific Forum 3:00pm

STUDY FINDS 6,000 RARE IRRAWADDY DOLPHINS OFF BANGLADESH

Thousands of rare Irrawaddy dolphins have been found in Bangladeshi waters, a wildlife advocacy group said today, a hopeful sign for a vulnerable species found only in small numbers elsewhere.

However, the newly discovered population is already threatened by climate change and fishing nets, the New York-based Wildlife Conservation Society said.

Nearly 6,000 Irrawaddy dolphins, which are related to orcas or killer whales, were found living in freshwater regions of Bangladesh's Sundarbans mangrove forest and the adjacent waters of the Bay of Bengal, the Wildlife Conservation Society announced.

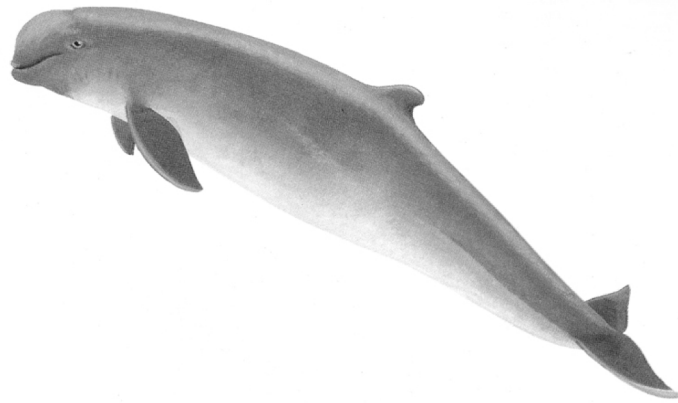
Prior to this study the largest known populations of Irrawaddy dolphins numbered in the low hundreds or less, a news release from the group said.

"This discovery gives us great hope that there is a future for Irrawaddy dolphins," said Brian D Smith, the study's lead author. "Bangladesh clearly serves as an important sanctuary for Irrawaddy dolphins, and conservation in this region should be a top priority."

The Irrawaddy dolphin grows to up to 2.5 metres in length and frequents large rivers, estuaries, and freshwater lagoons in south and southeast Asia.

Scientists do not know exactly how many Irrawaddy dolphins remain. In 2008, they were listed as vulnerable in the International Union of Conservation of Nature's Red List based on population declines in known populations, according to the news release.

The results of the study were made public today at the First International Conference on Marine Mammal Protected Areas in Maui, Hawaii.



The news release did not say when the study was conducted but Bangladeshi researchers in the team said it was launched in 2004.

Ainun Nishat, the Bangladesh head of International Union for Conservation of Nature, said the finding was an indication that "ecology in the area is not dead yet."

"There is plenty of food, mainly fish, in the area for the dolphins to eat," said Nishat, who was not involved in the study. "What is now needed is to restrict fishing in the area to protect the dolphins."

During the study, researchers encountered two dolphins that had become entangled and subsequently drowned in fishing nets — a common occurrence, according to local fishermen.

Rising sea levels caused by climate change also threaten the freshwater dolphins, the researchers said.

Wildlife Conservation Society has asked Bangladeshi authorities to establish a sanctuary for the dolphins in the Sundarbans mangrove forest.

"The sanctuary may take time," said Mohammad Jalilur Rahman, an official at the state-run Bangladesh Fisheries Research Institute. "But we are already motivating the fishermen not to harm the dolphins which get entangled in their nets."

**THEY'RE SAVING MORE THAN WHALES
WINNER FOR EDUCATION: THE MARINE
MAMMAL CENTER, SAUSALITO, CA.
COASTAL LIVING AWARDS MAMMAL
CENTER** by Kate Finley

In 1975, while working at a natural history museum in San Rafael, California, Lloyd Smalley had a problem: People had nowhere else to bring

sick/injured wild sea animals, and the museum's doorstep was getting pretty crowded. So he did what anyone with a background in zoology would do—he started a grassroots operation to help the wounded and return them to their coastal habitat.

Out of his efforts grew The Marine Mammal Center. Its ongoing rehabilitation, conservation, preservation, and education programs and events now reach more than 100,000 people. The center rescues and rehabilitates 500 to 1,200 animals each year. In the past 24 years, it has helped return more than 12,000 of them—sea lions, elephant seals, sea otters, harbor seals, fur seals, dolphins, porpoises, and more—to the wild. And it conducts some 600 to 700 educational programs annually, all with only 30-plus staff members and almost 800 dedicated volunteers.

Their creative programs target schoolchildren, lower-income students, and the community at large. “Our ultimate goal is to inform each generation about marine mammals and their importance,” says Ann Bauer, the center’s director of education. “We want people to know that marine mammals are indicator species,” adds communications specialist Mieke Eerkens. “They inform us about the health of our oceans. They have a lot to teach us.”

With the completion of a new \$32 million facility opening to the public in June, funded through donations and grants and built to meet Leadership in Energy and Environmental Design (LEED) certification rating standards, The Marine Mammal Center is ensuring we’ll always have a place to learn.

For more information, call 415/289-7355 or visit marinemammalcenter.org.

Winning Strategies

- Hands-on curriculum in Bay Area schools, courtesy of the interactive Whale Bus
- On-site classroom and internship program to cater to the needs of inner-city students
- Leave Seals Be, a public awareness initiative that cautions beachgoers against disturbing vulnerable seal pups

OVERFISHING TO WIPE OUT BLUEFIN TUNA IN 3 YEARS (Reporting by Ben Harding)

MADRID (Reuters) - Overfishing will wipe out the breeding population of Atlantic bluefin tuna, one of the ocean's largest and fastest predators, in three years unless catches are dramatically reduced, conservation group WWF said on Tuesday.

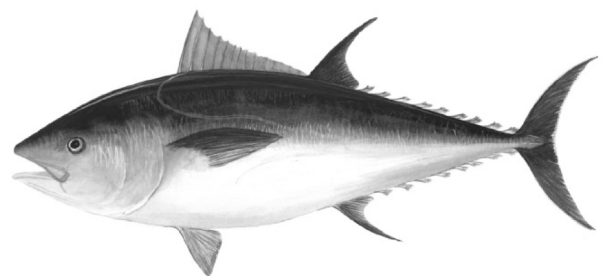
As European fishing fleets prepare to begin the two-month Mediterranean fishing season on Wednesday, WWF said its analysis showed the bluefin tuna that spawn -- those aged four years and older -- will have disappeared by 2012 at current rates.

"For years people have been asking when the collapse of this fishery will happen, and now we have the answer," said Sergi Tudela, Head of Fisheries at WWF Mediterranean.

The fish, which can weigh over half a ton and accelerate faster than a sports car, are a favorite of sushi lovers. Demand from Japan has triggered an explosion in the size of the Mediterranean fleet over the past decade and many of those boats use illegal spotter planes to track the warm-blooded tuna.

"Mediterranean (Atlantic) bluefin tuna is collapsing as we speak and yet the fishery will kick off again tomorrow for business as usual. It is absurd and inexcusable to open a fishing season when stocks of the target species are collapsing," added Tudela.

Environmental groups condemned an agreement signed in November by states setting bluefin quotas -- a body dominated by EU members. The groups called it "a disaster" and "a disgrace," saying the states again chose to ignore



their own scientists and set quotas 47 percent higher than recommended.

Illegal fishing is also rife for the bluefin, the dried, dark red meat of which once fed Roman armies on the march.

Growing numbers of restaurants and retailers including Carrefour's Italian supermarkets are boycotting it.

WWF said that analysis of official data showed the average size of mature tunas had more than halved since the 1990s and that this has had a disproportionately high impact since bigger fish produced many more offspring.

The bluefin can only be saved by a complete halt to fishing in May and June as the fish rush through the Straits of Gibraltar to spawn in the Mediterranean, WWF and other campaign groups say.

NEW PUBLICATION ON BLUE WHALE MOVEMENTS AND POPULATION STRUCTURE

The following article has recently been published on-line and will appear in a 2009 issue of *Marine Mammal Science*:

Calambokidis, J., J. Barlow, J.K.B. Ford, T.E. Chandler, and A.B. Dougal. 2009. "Insights into the population structure of blue whales in the eastern North Pacific from recent sightings and photographic identifications." *Marine Mammal Science* (DOI:10.1111/j.1748-7692.2009.00298.x).

The definitive version is available at Wiley InterScience

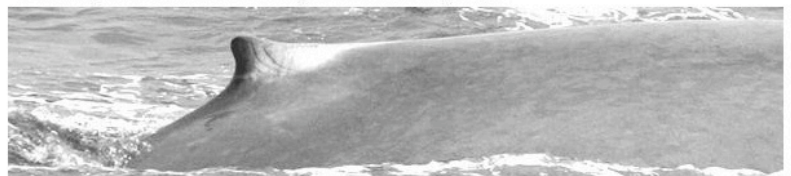
Abstract

Blue whales were widely distributed in the North Pacific prior to the primary period of modern commercial whaling in the early 1900s. Despite concentrations of blue whale catches off British Columbia and in the Gulf of Alaska, there had been few documented sightings in these areas since whaling for blue whales ended in 1965. In contrast, large concentrations of blue whales have been documented off California and Baja

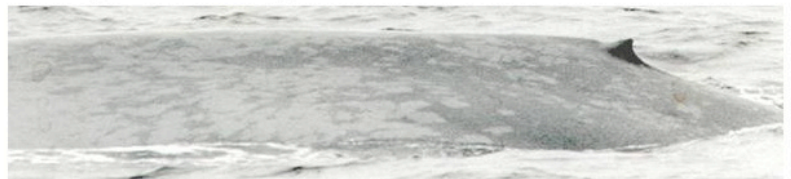
California and in the eastern tropical Pacific since the 1970s, but it was not known if these animals were part of the same population that previously ranged into Alaskan waters. We document 15 blue whale sightings off British Columbia and in the Gulf of Alaska made since 1997, and use identification photographs to show that whales in these areas are currently part of the California feeding population. We speculate that this may represent a return to a migration pattern that has existed for earlier periods for eastern North Pacific blue whale population. One possible explanation for a shift in blue whale use is changes in prey driven by changes in oceanographic conditions, including the Pacific Decadal Oscillation (PDO), which coincides with some of the observed shifts in blue whale occurrence



ID #1118, Santa Barbara Channel, California 30 July 1998



ID #1118, Gulf of Alaska 14 July 2004



ID #233, off Bodega Bay, California 14 July 2004



ID #233, SW of the Queen Charlotte Is., British Columbia 7 Aug 2003

Identification photographs showing match between blue whale seen in Alaska and California (top two) and British Columbia and California (bottom two)

SATELLITE TAGGING OF MAMMAL-EATING KILLER WHALES

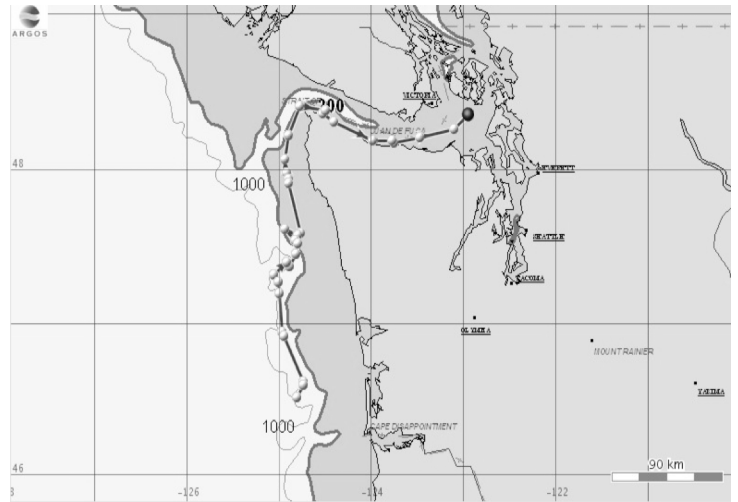
Cascadia Research has been collaborating with the Northwest Fisheries Science Center of NOAA Fisheries, Fisheries and Oceans Canada, the Alaska SeaLife Center, and the Center for Whale Research, to examine movements and habitat use of mammal-eating killer whales using satellite tags.

Researcher Russ Andrews (of the University of Alaska Fairbanks and the Alaska SeaLife Center) and colleagues recently published a paper using remotely-deployed satellite tags to examine movements of killer whales in the Antarctic and researchers in Alaska are also using them to study movements of both fish-eating and mammal-eating killer whales. We have been using these same tags to study movements of cetaceans in Hawaiian waters.

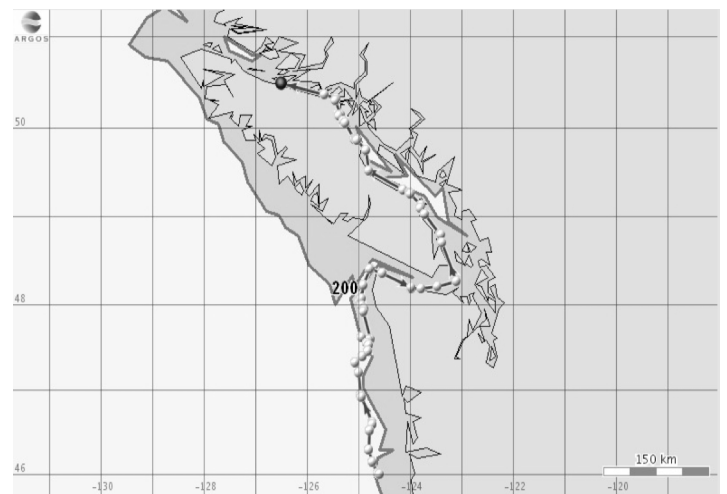
Mammal-eating killer whales are important top predators in the North Pacific. In recent years there has been a great deal of debate on the role these whales play in influencing their prey populations, particularly in Alaska. Understanding the movements of these animals is a critical component to assessing their influence on prey populations. Consequently, like researchers in Alaska we are deploying satellite-linked transmitters to determine whale movements. An understanding of large-scale movements will compliment our time depth-recorder deployments, which provide fine scale subsurface behavior.

In September 2008 we deployed three of these tags on mammal-eating killer whales in Juan de Fuca Strait. We were able to track the daily movements of these whales for 21, 47 and 94 days, yielding new information on the extent of the range in the fall as well as detailed information on the areas they occur most frequently. More information on the results of the September tagging can be found at our update page for that project.

<http://www.cascadiaresearch.org/robin/kwsattagging.htm>



Three days of movements of T11 as of the evening of April 9th



Six days of movements of T11 as of the morning of April 12th

**Enjoy LOCAL WHALES with
companies that have supported
ACS Monterey Bay:**

MONTEREY WHALE WATCHING

MONTEREY BAY WHALE WATCH

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

Date	#	Type of Animal(s)
4/27 p.m.	30	Killer Whales
	3	Humpback Whales
4/27 a.m.	30	Killer Whales *
	4	Humpback Whales
4/26 a.m.	24	Killer Whales
4/26 early a.m.	24	Killer Whales
4/25 a.m.	3	Humpback Whales
4/25 early a.m.	1	Humpback Whale
4/24	14	Killer Whales
	70	Pacific White-sided Dolphins
4/23 p.m.	23	Killer Whales
4/23 a.m.	23	Killer Whales
4/22 a.m.	20	Killer Whales*
4/21 p.m.	3	Humpback Whales
4/21 a.m.	22	Killer Whales !
4/20 p.m.	19	Killer Whales
	2	Humpback Whales
4/20 a.m.	10	Killer Whales*
	2	Humpback Whales
4/19 p.m.	26	Killer Whales
4/19 a.m.	26	Killer Whales
	10	Harbor Porpoise
4/19 early a.m.	26	Killer Whales!
4/18 p.m.	3	Humpback Whales
	9	Harbor Porpoise
4/18 a.m.	5	Humpback Whales
	12	Harbor Porpoise
4/18 early a.m.	8	Harbor Porpoise
4/17 p.m.	28	Killer Whales !
4/17 a.m.	22	Killer Whales !
4/16	18	Killer Whales !
4/12 p.m.	1	Humpback Whale
	35	Long-beaked Common Dolphins
4/12 a.m.	1	Gray Whale
	1	Humpback Whale
4/12 early a.m.	2	Humpback Whales
4/10	7	Humpback Whales
4/9 p.m.	30	Risso's Dolphins
4/9 a.m.	6	Humpback Whales
	15	Harbor Porpoise
4/8 p.m.	10	Killer Whales
	10	Risso's Dolphins

4/8 a.m.	10	Killer Whales !
	1	Gray Whale
	1	Humpback Whale
4/7 p.m.	12	Killer Whales *!
	2	Gray Whales
	2	Humpback Whales
	15	Harbor Porpoise
4/7 a.m.	5	Humpback Whales
	50	Harbor Porpoise
4/6 p.m.	2	Humpback Whales
	4	Harbor Porpoise
4/6 a.m.	7	Humpback Whales
	8	Harbor Porpoise
4/5 p.m.	2	Gray Whales
	2	Humpback Whales
4/5 a.m.	4	Killer Whales !
	1	Humpback Whale
	550	Pacific White-sided Dolphins
4/5 early a.m.	18	Killer Whales !
	8	Gray Whales
4/4 p.m.	2	Gray Whales
	4	Humpback Whales
4/4 a.m.	5	Humpback Whales
	3	Harbor Porpoise
4/4 early a.m.	2	Humpback Whales
4/2	9	Gray Whales
	2	Dall's Porpoise

Skipped dates indicate no trip
 * predation on gray whale
 ! transient type

NOTABLE MEDIA

Ocean Our Water Our World Our Lives by Deborah Cramer. 2009 Smithsonian Publications.

Big Fish by Richard Ellis. Richard blends natural history, science and art to describe the lives of sharks, billfish, tuna, and many more species of magnificent fish in this wonderful book.

Whales and Dolphins of the European Atlantic
 By Dylan Walker and Graeme Creswell.
 2009 Wild Guides Publications

Remarkable Creatures-Epic Adventures The Search For The Origin Of Species by Sean B. Carroll. 2009 Houghton Mifflin Harcourt Publishing Company.

National Geographic Magazine May 2009
 "Ancient Mariner" -Article about Leatherback Sea Turtles by Tim Appenzeller.

American Cetacean Society
Monterey Bay Chapter
P.O. Box H E
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American Cetacean Society Membership Application Chapter#24

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Membership levels and Annual dues:

Lifetime \$750 Patron \$500 Contributing \$250

Supporting \$75 Foreign \$45 Family \$45 Active \$35

Student/Teacher/Senior \$25

Subscription only * \$15/11 issues (*not entitled to membership benefits)

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ACSMB

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Randy Puckett, *Vice-president*
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Sally Eastham, *Membership*
Gina Thomas, *Secretary*
Diane Glim, *Publicity*
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Art Haseltine
Members at Large

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Tony Lorenz, Mary K. Paul,
Editors
Email: kmarypaul@gmail.com
tonylorenz@bigbluebay.com

Soundings



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

JUNE 2009

June Meeting

Date: Thursday, June 25, 2009

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

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

**SPEAKER: GENA BENTALL, RESEARCH BIOLOGIST,
MONTEREY BAY AQUARIUM**

**TITLE: NOT JUST A PRETTY FACE: UNDERSTANDING CALIFORNIA'S SEA
OTTERS**



Monterey Bay is the home of many different species of “charismatic mega fauna” but if there was a vote to determine which one was the most charismatic, chances are the sea otter would win. Otters are so cute and they are fun to watch, even when they are sleeping with their front paws covering their eyes to shield them from the sun.

They spend a lot of their lives in the kelp forest so they are close to shore and it is easy to see their day to day activities. Moms caring for their pups and otters doing summersaults in the water, an essential part of their grooming process, are easily observed from the coast line. These behaviors attract and engage even mildly interested observers.

But the California sea otter is so much more than cute and fun to watch. They are considered by some biologists to be a keystone species, one that has effects on other living things outside of their own food system; an indicator species, giving us clues about the health of the near shore ecosystem and apex predators playing an important role in their own food web.

Our speaker this month will cover the basics about California sea otters and she will also bring us up to date about the latest developments in sea otter research.

Please join us for what promises to be an informative program about Monterey Bay's most charismatic marine mammal.

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CALENDAR

Thru June 13: "Celebrate Our Underwater Parks" Local Photographer Kip Evans will take you on a journey of majestic kelp forests, deep canyons, rocky shores and the open ocean of the California coast. For more info call Lori Mannel at 831-648-5718

Pacific Grove Museum of Natural History
Natural Science Camp
Boys and Girls, Entering 3, 4, and 5th Grades
Session 1: June 22-26
Session 2: July 20-24
Monday-Friday 9:00am-4:00pm
Campers will investigate a new topic daily, including different animals and plants and their habitats, rocks and minerals, fossils, archeology, and botany. For more info call Annie Holdren at 831-648-5716 Ext 17

June 29-July 3: NMEA09-One World Conserving One Ocean at Asilomar Conference Grounds. Conference will include a whale watch field trip aboard the 100 ft. Princess Monterey. For more info go to www.nmea.org

Sat July 25th: ACS Monterey Bay Chapter Annual Indian Spring BBQ Indian Springs Village, Pebble Beach, CA. Cost-\$25.00. For more info call Tony Lorenz at 831-901-7259

Sat, August 1st 8am-4: ACS L.A. Chapter Blue Whale Watch. Trip will take place on the Condor Express in Santa Barbara, CA Cost \$93.00-104.00
For more info call 310-548-7821

Sat. August, 15th 8am-4: ACS National Blue Whale Watch, Aboard the Condor Express in Santa Barbara, CA. For info please call trip chair at 310-548-7821

Sat, Sept 1st 9am-1:30: ACS Monterey Bay Chapter Summer Whale Watch Fundraiser. Join cetacean experts for a day of whale watching in one of the most productive marine ecosystems in the world in search of the largest animal that has ever existed the "Great Blue Whale". We will also be on the lookout for Humpback Whales, Fin Whales, Killer Whales, Dolphins and Leatherback Sea Turtles. For More Info Call Tony Lorenz at 831-901-7259

Sat, Sept 12th Noon-5: MBARI's Open House. Open house will feature science and technology exhibits, research presentations, children's activities, ocean science career info and much more.

Sept. 24-27: Monterey Bay Birding Festival "Bridging the Americas". Watsonville Civic Plaza, Watsonville, CA

October 12-16: Society for Marine Mammalogy 18th Biennial Conference on the Biology of Marine Mammals., in Quebec City, QC, Canada. 2 Day Workshop will take place on October 10th and 11th. For more info go to www.marinemammalogy.com

SUMMER CLASSES & SEMINARS

Working with Marine Mammals at MLML with Dr. Jennifer Zelig Hurley.

Session 1-Techniques and Theories of Animal Training: Bio 348 July 6-12, 9:00am-5:00pm

Session 2- Working With Marine Mammals: Bio 347 July 20-26 9:00am-5:00pm

Certificate of Completion in Beginning Marine Mammalogy with completion of both classes and 5 day internship. For more info contact Jennifer at jzeligs@mlml.calstate.edu

Marine Science Courses at UCSC:

Biology of Marine Mammals: Bio 126 Session one: June 22-July 24 Introduction to marine mammal physiology, anatomy, evolution and ecology with emphasis on marine mammals of Monterey Bay

Marine Science Illustration: Scientific Communication 126 Session Two: July 22-August 28
For more info go to summer.ucsc.edu

**Enjoy LOCAL WHALES with
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**MONTEREY WHALE WATCHING
MONTEREY BAY WHALE WATCH**

PASSING OF KEN BLOOD

Ken Blood, beloved husband of Carol Maehr, departed from this life on May 11, 2009, as a result of a stroke. As he lived a beautiful life, his wife and daughter, both nurses, said he died a beautiful death. Ken was 87 years young, and lived many lifetimes of experiences during his time here.

A dear friend of our local ACS chapter and of whales, Ken was fascinated with the brains of whales, and spent time with them on the water and studying them. As a practicing clinical psychologist since the 1940s, he lived a chapter of his life in Africa, where he had a young gorilla as a house guest. As a WW II fighter pilot, Ken was shot down and spent the remainder of the war years in a prisoner of war camp until his escape. Ken was generous about sharing his life experiences through well-written memoirs. He loved to make music, and was a life-long dog lover, outdoorsman, musician, and dancer, and as all who knew him know, a deeply intelligent and spiritual person with a gift for reaching and understanding others.

Carol and Ken have an award-winning dog, Daisy, who shines in agility competitions. Through their dog club, SMART, Ken made many friends, including Derede, who eloquently wrote about Ken's passing and whose words are included here:

A couple of weeks ago, chatting at SMART, he mentioned to me he'd written a memoir, and his life sounded so interesting that I asked if I could borrow it. I have it by me now, wishing so much I could tell him I'd started reading it and how funny and well-written and full of wisdom I was finding it. I want to tell him how inspired I am by the wonderful inscriptions and songs and stories he wrote about his "Sunny Carol" and how strong and deep and also just plain happy their relationship seemed. And I want to thank him for all the insights he drew from high culture and low, from various religions and philosophies in its pages, and to tell him how much I admire the synthetic mind who could draw all these strands together.

Toward the end of the memoir, Ken wrote, "If anything is clear this side of the grave, it is that the stream of life changes each moment. I have no concerns about my departed relatives since I believe the Universe deals lovingly and equally with all. We share the same providence after death whether it be a state of unimaginable bliss or total unending stillness and peace. Just the same, I miss them."

Wherever you are, Ken, we know that you don't want us to be concerned, and that you are part of that loving and equitable Universe to which you have always felt connected. Just the same, we miss you

Derede

GIANT COD AND WHALES WERE ONCE PLENTIFUL: RESEARCHERS

by Virginie Montet

WASHINGTON (AFP) – Just 200 years ago, tens of thousands of whales swam the waters around New Zealand while sharks patrolled the British coastlines, say researchers who tell of lost abundance in the world's oceans.

Around 100 global experts have united under a group called the Census of Marine Life to study the state of the Earth's waters from a historical viewpoint and how advances in technology have wielded devastation on sea life.

The decade-long project brings researchers to Vancouver, Canada from Tuesday and aims to publish its final report in 2010 with inputs from historical accounts as well as geological, botanical and archaeological research.

"What we are looking at is a global picture of decline because of fisheries and habitat destruction," said Poul Holm, professor at Trinity college Dublin and one of

the authors of a report to be presented at the three-day conference.

The revolution in fishing first came in the 1600s, when boaters began taking their vessels out in pairs to fish with nets. Then, large scale fisheries began to take hold in the 1800s.

"The impact of early fisheries was substantial," Holm told AFP. "The impact on ocean life has been enormous. And it happened earlier than anyone would have thought."

Not so long ago, marine fauna was more abundant, fish were bigger and predators more numerous.

But the size of fish began to decline in Europe from the Middle Ages with the first mass-scale fisheries, and the variety of underwater sea life began to shrink as well.

Today, even the predator population is but 10 to 15 percent of what it was at the start of the 19th century, researchers say.

One hundred years ago, cod measuring 1.5 meters (nearly five feet) was frequently sold while today the biggest are around 50 centimeters (20 inches) because of overfishing and the trend of catching the cod too early.

The cod's average lifespan has also dropped dramatically from 10 years to barely 2.8, according to Holm.

Researchers point to losses in the whale population particularly around New Zealand, whose waters boasted between 22,000 and 32,000 whales at the start of the 1800s but only had about 25 in 1925. Around a thousand live today off the country's southern coast.

In the same area, where historians say settlers began moving to in the 13th century, the snapper population was seven times higher then.

In most of the zones studied, changes brought on by human activity stretched on for periods of more than a thousand years but radical changes are also observable within the space of just a few dozen years.

In south Florida's Key West for example, the average size of a fish in the mid 1950s was 20 kilograms (50 pounds). Today it is 2.3 kilograms (five pounds).

Still Holm says the findings give reason for hope. "It's very useful to just be aware of what we have lost," said Holm.

"Although we are detecting a story of decline, it's actually a hopeful message," he added.

"Because we can use the evidence to suggest that if we step back, if we introduce conservation measures, fisheries regulations and avoid some of the stresses that cause harm to ocean life, we will be able to rebuild ocean life to a level which provides a lot of hope and would be able to feed many more people than the oceans are able today."

WORLD'S LARGEST COLONY OF ENDANGERED TURTLES FOUND OFF WEST AFRICA

Discovery of up to 40,000 leatherback sea turtles may see species removed from critically endangered list

The world's largest colony of leatherback sea turtles has been identified by scientists, raising hopes that the giant creature may not be as endangered as previously thought. A new survey has revealed that Gabon, west Africa, has between 15,730 and 41,373 female turtles using its nesting beaches.

Matthew Witt of the University of Exeter, who led the research, said: "We knew that Gabon was an important nesting site for leatherback turtles but until now had little idea of the size of the population or its global

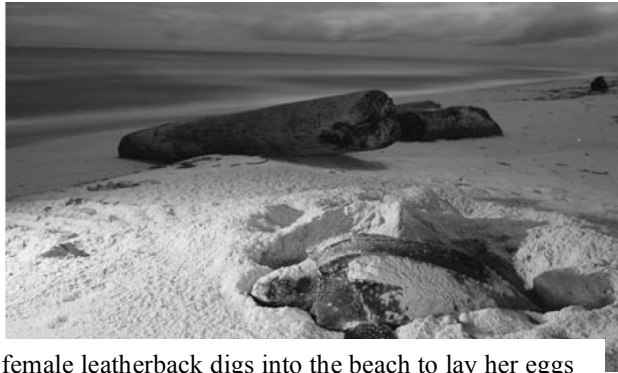
ranking. We are now focusing our efforts on working with local agencies, to coordinate conservation efforts to ensure this population is protected against the threats from illegal fisheries, nest poaching, pollution and habitat disturbance."

Concern for the leatherback grew after populations in the Indo-Pacific crashed by more than 90 percent in the 1980s and 1990s. The International Union for Conservation of Nature (IUCN) lists the species as critically endangered globally, with numbers of females thought to be as low as 34,000, but detailed population assessments in much of the Atlantic, especially Africa, had not previously been carried out. The new research is published in the journal *Biological Conservation*.

The survey, led by the University of Exeter with the Wildlife Conservation Society (WCS), counted nests

and nesting females during three nesting seasons between 2002 and 2007. They found 79% of nesting happens within national parks and other already protected areas.

Angela Formia of the WCS, said: "These findings show the critical importance of protected areas to maintain populations of sea turtles. Gabon should be commended for creating a network of national parks in 2002 that have provided a sanctuary for this endangered species as well as other rare wildlife."



A female leatherback digs into the beach to lay her eggs on the coast of Gabon. Photograph: Michael Nichols/NGPL/Getty Images

THIEVING WHALE CAUGHT ON VIDEO GIVES RARE CLUES ABOUT HUNTING STRATEGY, SOUND PRODUCTION

ScienceDaily (May 24, 2009) — For decades scientists have been intrigued by the variety of sounds emitted by sperm whales, partly due to a popular theory that suggests that the sounds might contain information about the animals' size. But historically it has been extremely difficult to demonstrate that these curious clicking noises can reveal information about the physical characteristics of the massive marine mammals. Now, researchers at Scripps Institution of Oceanography at UC San Diego are unlocking some of the mysteries of sperm whale sound production.

In a paper published in the May issue of the *Journal of the Acoustical Society of America*, Delphine Mathias and Aaron Thode of Scripps Oceanography for the first time describe a direct comparison between sperm whale clicking sounds and the physical features of the animal's head, including its size and internal organ structure.

The study provides a glimpse into a possible new approach for investigating the biology behind marine mammal sounds and perhaps more accurately counting their populations.

The roots of the unique study began years ago in Alaska, after sperm whales developed the ability to steal black cod off "longlines," deep-sea fishing gear that features a main fishing line draped across the ocean and fastened with shorter lines bearing baited hooks. Frustrated black cod fishermen began to realize that their longline fishing boats were attracting groups of whales—

which typically forage alone— to their longlines, somehow alerting the animals like a dinner bell.

To help fishermen and scientists better understand this behavior, Scripps researchers deployed acoustic recorders on longlines in 2004 off Sitka, Alaska, as part of the Southeast Alaska Sperm Whale Avoidance Project (SEASWAP). The results helped identify the sounds that attract whales to the fishing vessels. Encouraged, the researchers added video cameras to the fishing gear in 2006, which led to some unexpected results.

The resulting video, recorded using ambient light at 100 meters (328 feet) depth, not only successfully gave the fishermen a clear idea of how the thieving whales were stealing the fish—they pluck the line at one end to jar the black cod free at the other end, somewhat like shaking apples from a tree—but it gave scientists a chance to match the animal's acoustics with video depictions of its physical features. Sperm whales typically dive to dark depths spanning 300 to 2,000 meters (984 to 6,500 feet) to catch prey, making it virtually impossible to capture such activity on video. The fact that the animals produce foraging sounds at such shallow depths around fishing vessels is the main reason the Alaska footage is so unique.

The clicks emitted by the whales are produced more rapidly as they approach their targets of interest and are among the loudest and most intense sounds produced by any animal, according to Thode, an associate research scientist with Scripps Oceanography's Marine Physical Laboratory.

"The sounds can be louder than a firecracker," said Thode. "But until this video recording was made, scientists had not been able to get a direct measurement of the size of the animal and the foraging sounds at the same time."

The Alaska video allowed Mathias and Thode to not only match the size of the whale's head with its acoustic signal, but permitted them to infer the size of its spermaceti organ, which produces a white, waxy substance previously used in candles and ointments, as well as the so-called "junk" inside the whale's head. The junk is a large organ that is believed to play a role in transmitting sound from the whale's head.

Thode said the study could be a first step in the broader use of acoustics to census whale populations as supplements to visual counts of the animals. Currently it is difficult to relate the number of whale sounds recorded to the number of animals present. The ability to tease individuals apart acoustically would be a basic step toward solving the problem.

"It's interesting to see if you can identify an individual animal from its sounds and that's something people have been fascinated by for a long time," said Thode. "Humans can recognize individual people over the telephone using features of their sounds, but it's been quantitatively very difficult to do this for individual animals."

Thode said the video also may assist fishermen in reducing sperm whale encounters with their gear. Besides being economically damaging, the encounters are potentially dangerous to both humans and marine mammals due to the possibility of entanglement. Thode said the video recording has encouraged the U.S. National Marine Fisheries Service to start deploying acoustic recorders during black cod surveys off the Alaskan Coast to measure the scale of the sperm whale problem.

The research was supported by the National Geographic Society and North Pacific Research Board.

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

Date	#	Type of Animal(s)
5/26 p.m.	2	Humpback Whales
	1000	Risso's Dolphins
	800	Northern Right Whale Dolphins
5/26 a.m.	4	Humpback Whales
	50	Pacific White-sided Dolphins
	1400	Risso's Dolphins
	1500	Northern Right Whale Dolphins
5/25 p.m.	4	Humpback Whales
	75	Risso's Dolphins
5/25 a.m.	5	Humpback Whales
	1200	Pacific White-sided Dolphins
	2200	Risso's Dolphins
	2500	Northern Right Whale Dolphins
5/24 p.m.	8	Humpback Whales
	1800	Pacific White-sided Dolphins
	200	Risso's Dolphins
	1400	Northern Right Whale Dolphins
5/24 a.m.	11	Humpback Whales
	1500	Pacific White-sided Dolphins
	800	Northern Right Whale Dolphins
5/23 p.m.	1	Humpback Whale
	125	Pacific White-sided Dolphins
	50	Northern Right Whale Dolphins
5/23 a.m.	1	Humpback Whale
	1300	Pacific White-sided Dolphins
	40	Risso's Dolphins
	900	Northern Right Whale Dolphins
	7	Bottlenose Dolphins
5/22 p.m.	2	Humpback Whales
	35	Pacific White-sided Dolphins
	120	Risso's Dolphins
5/22 a.m.	1	Humpback Whale
	400	Pacific White-sided Dolphins
	30	Risso's Dolphins
	8	Harbor Porpoise
5/21 p.m.	15	Risso's Dolphins
5/21 a.m.	2	Killer Whales !
	200	Risso's Dolphins
	3	Harbor Porpoise
5/20	5	Humpback Whales
	1200	Pacific White-sided Dolphins
	1000	Northern Right Whale Dolphins
	1	Harbor Porpoise
5/19 p.m.	1	Humpback Whale
	5	Harbor Porpoise
5/19 a.m.	1	Humpback Whale
	10	Harbor Porpoise
5/18 p.m.	3	Humpback Whales
5/18 a.m.	900	Pacific White-sided Dolphins

	300	Risso's Dolphins
	80	Northern Right Whale Dolphins
5/17 p.m.	4	Humpback Whales
5/17 a.m.	2	Humpback Whales
	75	Pacific White-sided Dolphins
5/16 p.m.	1	Humpback Whale
	600	Pacific White-sided Dolphins
	1200	Risso's Dolphins
	500	Northern Right Whale Dolphins
5/16 a.m.	10	Killer Whales !
	400	Pacific White-sided Dolphins
	700	Risso's Dolphins
	200	Northern Right Whale Dolphins
5/15	300	Pacific White-sided Dolphins
	800	Risso's Dolphins
	50	Northern Right Whale Dolphins
5/14	4	Humpback Whales
	250	Pacific White-sided Dolphins
	200	Risso's Dolphins
	200	Northern Right Whale Dolphins
5/13 p.m.	2	Humpback Whales
	75	Pacific White-sided Dolphins
5/13 a.m.	7	Humpback Whales
	600	Pacific White-sided Dolphins
	800	Risso's Dolphins
	500	Northern Right Whale Dolphins
5/11	12	Humpback Whales
	350	Pacific White-sided Dolphins
	75	Northern Right Whale Dolphins
5/10	10	Humpback Whales
	800	Pacific White-sided Dolphins
	150	Northern Right Whale Dolphins
5/9	1	Humpback Whale
	750	Pacific White-sided Dolphins
	100	Northern Right Whale Dolphins
5/8	2	Humpback Whales
	400	Pacific White-sided Dolphins
5/7	2	Humpback Whales
5/6 p.m.	22	Humpback Whales
	150	Pacific White-sided Dolphins
5/6 a.m.	4	Humpback Whales
	350	Pacific White-sided Dolphins
5/5 a.m.	9	Killer Whales (feeding on gray whale, predation on elephant seal)
5/4 p.m.	7	Humpback Whales
5/4 a.m.	4	Humpback Whales
	2000	Pacific White-sided Dolphins
	300	Northern Right Whale Dolphins
5/3 p.m.	14	Killer Whales
	4	Humpback Whales
5/3 a.m.	14	Killer Whales*
	4	Humpback Whales

Skipped dates indicate no trip

* predation on gray whale

! transient type

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City, State, Zip _____

Membership level _____

Membership levels and Annual dues:

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Supporting \$75 Foreign \$45 Family \$45 Active \$35
Student/Teacher/Senior \$25

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ACSMB

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Sally Eastham, *Membership*
Gina Thomas, *Secretary*
Diane Glim, *Publicity*
Tony Lorenz, *Special Events*
Carol Maehr, *Conservation*
Barbara Oliver, *News Mailing*
Bob Mannix, Alan Baldrige,
Programs
Rene Rodriguez, Morgen Puckett,
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Tony Lorenz, Mary K. Paul,
Editors
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tonylorenz@bigbluebay.com

Soundings



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

JULY 2009

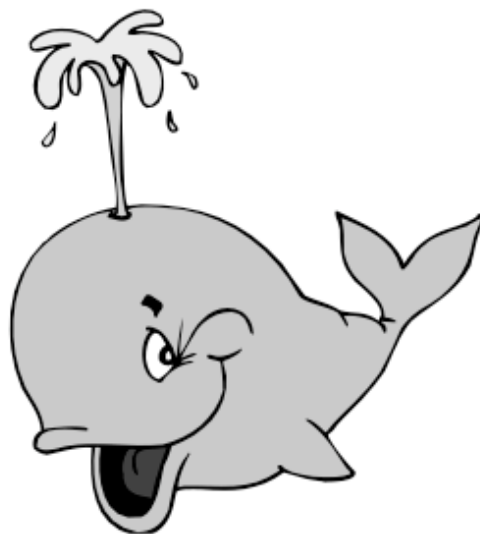


The American Cetacean Society, Monterey Bay Chapter
Annual BBQ!

When? Saturday, July 25, 2009 at 5:00 P.M.

Where? Indian Village, Pebble Beach

In honor of Carol Maehr and Sheila Baldrige
for their dedication to cetacean conservation



\$15 per person

Send payment to: ACS, P.O. Box HE, PG, 93950 by July 20
Call Diane Glim at 646-8743 for reservations or information
Bring your own table service.
B.Y.O.B.

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CALENDAR

Pacific Grove Museum of Natural History
Natural Science Camp
Boys and Girls, Entering 3, 4, and 5th Grades
Session 2: July 20-24

Monday-Friday 9:00am-4:00pm
Campers will investigate a new topic daily, including different animals and plants and their habitats, rocks and minerals, fossils, archeology, and botany. For more info call Annie Holdren at 831-648-5716 Ext 17

Sat July 25th: Annual ACS Monterey Bay Chapter BBQ honoring Carol Maehr and Sheila Baldrige. Indian Village Picnic Area, Pebble Beach. Send \$15 per person to ACSMB, PO BOX HE, Pacific Grove, CA 93950, or contact Diane Glim at 831-646-8743

Sat August 1st 8am -4: ACS L.A. Chapter Blue Whale Watch. Trip will take place on the Condor Express in Santa Barbara, CA Cost \$93.00-104.00. For more info call 310-548-7821

Sat. August 15th 8 am-4: ACS National Blue Whale Watch , Aboard the Condor Express in Santa Barbara, CA. For info please call trip chair at 310-548-7821.

Thu Aug 27th: Monthly ACSMB meeting with Daniela Maldini, PhD, who will discuss her work with bottlenose dolphins in Monterey Bay. Hopkins Marine Station, 7pm refreshments, 7:30pm talk.

Sat Sept 12th 9am-1:30pm: Blue Whale Fundraiser for ACS Monterey Bay Chapter. Join cetacean experts with Monterey Bay Whale Watch for a half day of whale watching in one of the most productive marine ecosystems in the world, in search of the largest animal that has ever existed. We will also be on the lookout for humpback whales, killer whales, dolphins, leatherback sea turtles and other marine life. Cost is \$45 for members, \$55 for non-members. Send checks to ACSMB, PO Box HE, Pacific Grove, CA, 93950 or contact Tony Lorenz at 831-901-7259.

American Cetacean Society-Monterey Bay

Sat Sept 12th Noon-5: MBARI's Open House. Open house will feature science and technology exhibits, research presentations, children's activities, ocean science career info and much more.

Saturday, September 19th : 25th Annual California Coastal Cleanup Day. See You at the Beach

Sept. 24-27: Monterey Bay Birding Festival "Bridging the Americas". Watsonville Civic Plaza, Watsonville, CA

Oct 10th and 11th: Mammalogy 18th Biennial Conference on the Biology of Marine Mammals in Quebec City, QC, Canada. 2 Day Workshop. For more info go to www.marinemammalogy.com

Nov 7, 2009-Feb 28, 2010: Darwin: Evolution/ Revolution. San Diego Museum of Natural History.

Feb 17-20, 2010: Pacific Seabird Group 37th Annual Meeting. Long Beach, CA

Sept 7-11, 2010: 1st World Seabird Conference Hosted by: Pacific Seabird Group Victoria Conference Center Victoria, B.C.

SUMMER CLASSES & SEMINARS

Marine Science Courses at UCSC:

Marine Science Illustration: Scientific Communication 126

Session Two: July 22-August 28.

For more info go to summer.ucsc.edu

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www.starrsites.com/acsmb/

EUROPE TO HUNT MORE WHALES THAN JAPAN, FIGURES SHOW

Europeans are killing whales in increasing numbers as Norway, Denmark and Iceland propose to hunt 1,478 whales compared to Japan's 1,280 in 2009

Europe plans to hunt more whales than Japan for the first time in many years, dividing EU countries and dismaying conservationists who say that whaling is escalating in response to the worldwide recession.

Figures seen by the Guardian before a meeting of more than 80 countries next week, show that Norway, Denmark and Iceland propose to hunt 1,478 whales compared to Japan's 1,280 in 2009. This would be an increase of nearly 20% by Europe on last year.

"Europe likes to point the finger at Japan as a rogue whaling nation but Europeans are killing whales in increasing numbers in their own waters. Europe has become whale enemy number one", said Kate O'Connell, campaigner for the Whale and Dolphin Conservation Society (WDCS).

Iceland – which today began its 2009 hunt by killing the first two of 150 fin whales – and Norway, are the only two countries to hunt whales commercially. This breaches a 23-year-old worldwide moratorium introduced to preserve critically endangered whale populations.

This year, Norway proposes to kill 885 minke whales, and Iceland 350 whales in total. Denmark will apply to hunt 245 on behalf of indigenous Inuit hunters in its semi-autonomous territory Greenland. Most of the whale meat caught in European waters will be sold to Japan.

Japan, which practises thinly disguised commercial whaling under the guise of scientific research, plans to kill 850 whales in Antarctic waters this season, as well as more than 400 in the Pacific. It wants to kill fewer whales than last year but is seeking permission to hunt more in its coastal waters.

Britain today increased diplomatic pressure on Iceland to stop its whaling, warning that it intended to make it a condition of the

country's expected application to join the EU that it abandon commercial whaling. Fisheries minister Huw Irranca-Davies said: "If Iceland were to join Europe then Britain would expect they would be obliged to end their whaling operation. We would urge renegotiation."

A spokesman for the new Iceland government said: "The government has said it will honour this year's quota but will reassess the whaling situation by the end of the year. A study is being done by the economic institute of the University of Iceland. Whaling will obviously be part of the talks when Iceland negotiates its entry to the EU."

An independent economic report commissioned by conservation groups WWF and WDCS released today in advance of the International whaling commission (IWC) summit in Madeira, concludes that whaling is no longer economically viable.

Japan, it claimed, has spent \$164m (£100m) backing its whaling industry since 1988, and Norwegian subsidies equal almost half of the gross value of all whale-meat landings. Sales of whale meat, blubber, and other whale products in Japan "have made financial losses for most of the last 20 years", it said.

The research says that killing more whales will only hurt the growing whale-watching industry, and damage the international image of Norway and Japan. "Norway and Japan are hurting tourism, a potential growth industry in both countries in order to spend millions of dollars obtaining whale meat, the sale of which makes no profit. How much longer are they going to keep wasting their taxpayer's money?" said a spokeswoman for WWF.

Earlier this year more than 115,000 people pledged to visit Iceland as soon as the government announced an end to whaling.

The number of pro- and anti-whaling countries are finely balanced within the IWC, with both sides continuing to recruit as many countries as possible to boost their positions. Japan in the past has offered many small countries development aid to vote with them, but

Britain and other countries have also leaned on eastern European countries to join.

Australia and New Zealand said this week that they would mount a non-lethal whale research expedition to the Antarctic, as a direct challenge to Japan's research programme, which maintains it must kill whales to study them. The six-week expedition aims to prove that whales needn't be killed for study, the two governments said in a joint statement.

The IWC meeting is being held amidst fears that environmental groups are stepping up campaigns to stop whaling. A previously unknown Norwegian group called Agenda 21 attacked a whaling ship in April, bringing to six the number of whaling boats sabotaged in Norway.

Sea Shepherd, a radical California-based group which has admitted sabotaging whalers in Iceland and elsewhere, has also threatened to return to Europe.

Today, the Icelandic whaling ship Hvalur 9 returned to the Hvalfjord whaling station to process its first catch.

FLASHPOINTS

GREENLAND: The semi-autonomous Danish territory wants to hunt 50 endangered fin whales for indigenous consumption, but most of the meat will be sold to Japan

RUSSIA: Oil companies on the Sakhalin peninsula in the far east of Russia threaten feeding grounds of critically endangered whales

NORWAY: The Lofoten islands are the centre of Norwegian whaling, but also target of anti-whaling groups

ANTARCTICA: The entire sea around Antarctica has been declared a whale sanctuary but Japan regularly hunts whales there

ICELAND: Government may be forced to stop whaling if it wants to join EU

UN CALLS FOR GLOBAL BAN ON PLASTIC BAGS TO SAVE OCEANS by Jeremy Hance

The UN's top environmental official called for a global ban on plastic bags yesterday. "Single use plastic bags which choke marine life,

should be banned or phased out rapidly everywhere. There is simply zero justification for manufacturing them anymore, anywhere," said Achim Steiner, executive director of the U.N. Environment Program.

Steiner's call comes after the U.N. Environment Program released a comprehensive report on litter in the world's ocean, which identified plastic as the most common form of ocean litter. When plastic enters the marine food-chain it can devastate marine life and even affect humans when they consume seafood that have eaten plastic debris.

The plastic problem is so bad that a floating island of plastic debris has been discovered in the northern Pacific which is double the size of the United States.

China and Bangladesh have both banned plastic bags, while Ireland has reduced plastic bag consumption by 90 percent by levying a fee on each bag. Such measures have only just reached the United States: San Francisco is the only city to ban plastic bags, although Los Angeles will have a ban in place next year. New York City rejected such a fee on bags last year, but Washington D.C. is considering a 5-cent-fee this week.

'BYCATCH' WHALING A GROWING THREAT TO COASTAL WHALES

ScienceDaily — Scientists are warning that a new form of unregulated whaling has emerged along the coastlines of Japan and South Korea, where the commercial sale of whales killed as fisheries "bycatch" is threatening coastal stocks of minke whales and other protected species.

Scott Baker, associate director of the Marine Mammal Institute at Oregon State University, says DNA analysis of whale-meat products sold in Japanese markets suggests that the number of whales actually killed through this "bycatch whaling" may be equal to that killed through Japan's scientific whaling program — about 150 annually from each source.

Baker, a cetacean expert, and Vimoksalehi Lukoscheck of the University of California-Irvine presented their findings at the recent scientific meeting of the International Whaling Commission (IWC) in Portugal. Their study found that nearly 46 percent of the minke whale products they examined in Japanese markets originated from a coastal population, which has distinct genetic characteristics, and is protected by international agreements.

Their conclusion: As many as 150 whales came from the coastal population through commercial bycatch whaling, and another 150 were taken from an open ocean population through Japan's scientific whaling. In some past years, Japan only reported about 19 minke whales killed through bycatch, though that number has increased recently as new regulations governing commercial bycatch have been adopted, Baker said.

Japan is now seeking IWC agreement to initiate a small coastal whaling program, a proposal which Baker says should be scrutinized carefully because of the uncertainty of the actual catch and the need to determine appropriate population counts to sustain the distinct stocks.

Whales are occasionally killed in entanglements with fishing nets and the deaths of large whales are reported by most member nations of the IWC. Japan and South Korea are the only countries that allow the commercial sale of products killed as "incidental bycatch." The sheer number of whales represented by whale-meat products on the market suggests that both countries have an inordinate amount of bycatch, Baker said.

"The sale of bycatch alone supports a lucrative trade in whale meat at markets in some Korean coastal cities, where the wholesale price of an adult minke whale can reach as high as \$100,000," Baker said. "Given these financial incentives, you have to wonder how many of these whales are, in fact, killed intentionally."

In Japan, whale-meat products enter into the commercial supply chain that supports the nationwide distribution of whale and dolphin products for human consumption, including

products from scientific whaling. However, Baker and his colleagues have developed genetic methods for identifying the species of whale-meat products and determining how many individual whales may actually have been killed.

Baker said bycatch whaling also serves as a cover for illegal hunting, but the level at which it occurs is unknown. In January 2008, Korean police launched an investigation into organized illegal whaling in the port town of Ulsan, he said, reportedly seizing 50 tons of minke whale meat.

Other protected species of large whales detected in market surveys include humpbacks whales, fin whales, Bryde's whales and critically endangered western gray whales. The entanglement and death of western or Asian gray whales is of particular concern given the extremely small size of this endangered populations, which is estimated at only 100 individuals.

It will be published in a forthcoming issue of the journal *Animal Conservation*.

POLAR BEAR AND WALRUS POPULATIONS IN TROUBLE, STOCK ASSESSMENT REPORT SUGGESTS

ScienceDaily — The U.S. Fish and Wildlife Service has released reports documenting the status of polar bears and Pacific walrus in Alaska. The reports confirm that polar bears in Alaska are declining and that Pacific walrus are under threat. Both species are imperiled due to the loss of their sea-ice habitat due to global warming, oil and gas development, and unsustainable harvest.

"Polar bears and walrus are under severe threat, and unless we act rapidly to reduce greenhouse pollution and protect their habitat from oil development, we stand to lose both of these icons of the Arctic," said Brendan Cumming, oceans program director at the Center for Biological Diversity.

The reports, issued pursuant to the Marine Mammal Protection Act, summarize information on population abundance and trends of polar bears and walrus, threats to the species, and

include calculations of human-caused mortality and whether that mortality is sustainable.

There are two polar bear populations in Alaska: a Southern Beaufort Sea stock, which is shared with Canada, and a Chukchi/Bering Sea stock which is shared with Russia. The Pacific walrus occurs in the Bering and Chukchi seas and is shared with Russia.

For the Southern Beaufort Sea polar bear stock, the Fish and Wildlife Service estimated a minimum population of 1,397 bears and an annual human-caused mortality of 54 animals, well above the calculated sustainable rate of 22 animals per year. The stock assessment states that “the Southern Beaufort Sea population is now declining.”

For the Chukchi/Bering Sea polar bear stock, the Service estimated a minimum population of 2,000 bears and an annual human-caused mortality of 37 animals from Alaska and between 150-250 bears killed per year in Russia. The calculated sustainable rate of harvest is 30 animals per year. The stock assessment states that “the population is believed to be declining” and is “reduced based on harvest levels that were demonstrated to be unsustainable.”

For the Pacific walrus, the Service estimated a minimum population of 15,164 animals and an annual human-caused mortality of between 4,963 and 5,460 animals. The calculated sustainable rate of harvest is 607 animals per year.

Of the three population estimates, only the estimate for the well-studied Beaufort Sea polar bears is considered reliable. The Chukchi/Bering Sea polar bear population is based on incomplete data and could be an overestimate, while the walrus estimate is an underestimate as it only represents surveys in about half of the walrus habitat and does not account for walrus not counted because they were in the water rather than hauled out on ice.

“These reports publicly confirm what scientists have known for several years: Polar bear and walrus populations in Alaska are in trouble,” added Cummings. “And even if the population numbers are not precise, we know that

without their sea-ice habitat they are likely doomed.”

The Marine Mammal Protection Act requires that the secretary of the interior and the secretary of commerce prepare stock assessments for marine mammals. The assessments are meant to be used as the basis for management decisions such as permitting the killing or harassment of the animals from commercial fisheries, oil and gas exploration, boating and shipping, and military exercises.

To ensure that decision-makers have the most accurate information, stock assessments are supposed to be revised every year for endangered marine mammals and every three years for other species. While the National Marine Fisheries Service – the agency responsible for whales, dolphins, and seals – has largely complied with this requirement, the Fish and Wildlife Service, responsible for polar bears, walrus, sea otters, and manatees, had completely ignored it.

In 2007 the Center sued the Wildlife Service and obtained a court order requiring the release of updated reports. Stock assessments for the Florida manatee were released last week, while sea otter reports were issued last year.

The polar bear is currently listed as threatened under the Endangered Species Act as a result of a petition and litigation by the Center for Biological Diversity. The Fish and Wildlife Service is under court order to make a finding on the Center’s petition to protect the Pacific walrus under the Endangered Species Act by September 10, 2009.

A copy of the stock assessments released June 18 can be found at <http://alaska.fws.gov/fisheries/mmm/reports.htm>

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

Date	#	Type of Animal(s)
7/4 p.m.	3	Humpback Whales
	2	Blue Whales
	30	Risso's Dolphins
7/4 a.m.	2	Humpback Whales

	1	Blue Whale	6/24	5	Humpback Whales
	75	Risso's Dolphins		20	Pacific White-sided Dolphins
7/3 p.m.	4	Humpback Whales		800	Risso's Dolphins
7/3 a.m.	2	Humpback Whales		12	Northern Right Whale Dolphins
	4	Killer Whales !	6/23 p.m.	2	Humpback Whales
	3	Minke Whales		200	Risso's Dolphins
	45	Risso's Dolphins		35	Northern Right Whale Dolphins
7/2 p.m.	2	Humpback Whales	6/23 a.m.	4	Humpback Whales
	60	Pacific White-sided Dolphins	6/22 p.m.	9	Humpback Whales
	150	Risso's Dolphins		12	Pacific White-sided Dolphins
7/2 a.m.	4	Humpback Whales		35	Risso's Dolphins
	1	Minke Whale	6/22 a.m.	8	Humpback Whales
	550	Risso's Dolphins		30	Risso's Dolphins
	100	Northern Right Whale Dolphins	6/21	3	Humpback Whales
	5	Harbor Porpoise		15	Risso's Dolphins
7/1 p.m.	2	Humpback Whales	6/20	3	Humpback Whales
	50	Risso's Dolphins	6/19	4	Humpback Whales
7/1 a.m.	350	Pacific White-sided Dolphins		15	Pacific White-sided Dolphins
	60	Risso's Dolphins		45	Risso's Dolphins
	20	Northern Right Whale Dolphins		100	Northern Right Whale Dolphins
6/30 p.m.	3	Humpback Whales			
	30	Pacific White-sided Dolphins			
	80	Risso's Dolphins			
6/30 a.m.	2	Humpback Whales			
	6	Risso's Dolphins			
6/29 p.m.	1	Blue Whale			
	1	Minke Whale			
	30	Pacific White-sided Dolphins			
	50	Risso's Dolphins			
6/29 a.m.	2	Blue Whales			
	1	Minke Whale			
	500	Risso's Dolphins			
	70	Northern Right Whale Dolphins			
6/28 p.m.	5	Humpback Whales			
	70	Pacific White-sided Dolphins			
	50	Risso's Dolphins			
6/28 a.m.	1	Humpback Whale			
	350	Pacific White-sided Dolphins			
	450	Risso's Dolphins			
	250	Northern Right Whale Dolphins			
6/27 p.m.	2	Humpback Whales			
	80	Pacific White-sided Dolphins			
	25	Risso's Dolphins			
6/27 a.m.	150	Pacific White-sided Dolphins			
	160	Risso's Dolphins			
6/26 p.m.	1	Humpback Whale			
	30	Pacific White-sided Dolphins			
	40	Risso's Dolphins			
6/26 a.m.	7	Humpback Whales			
	25	Pacific White-sided Dolphins			
	30	Risso's Dolphins			
6/25	4	Humpback Whales			
	1	Minke Whale			
	80	Pacific White-sided Dolphins			
	1000	Risso's Dolphins			
	30	Northern Right Whale Dolphins			

Skipped dates indicate no trip

* predation on gray whale

! transient type

NOTABLE BOOKS

Whales and Dolphins: Revised and Updated by Maurizio Wurtz and Nadia Repetto. 2009 White Star Guides

Prehistoric Life Murals by William Stout
An astonishing look at prehistoric marine mammals, marine reptiles, and dinosaurs that inhabited California's marine environment from the late Cretaceous to the Pleistocene.

The Link: Uncovering our Earliest Ancestors-by Colin Tudge. Also available on DVD

Evolution: The Story of Life by Douglas Palmer
Illustrated by Peter Barrett. 2009 U.C. Press

Whales and Dolphins of the Southern African Sub-region. by Peter Best- Illustrated by Peter Folkiens

Call To The Rescue: The Story of the Marine Mammal Center. Available at the newly renovated marine mammal center in Sausalito CA

American Cetacean Society
Monterey Bay Chapter
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Soundings



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

AUGUST 2009

**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, August 27, 2009

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

Speaker: Daniela Maldini, Ph.D., CEO and Chief Scientist for OKEANIS:
Research and Conservation for a Sustainable Ocean.

Subject: Coastal Dolphin Project

What a lucky day it is to see *DOLPHIN* swimming in the ocean! Whether you are on the beach seeing dolphin swimming just beyond the surf line or on a boat watching them “bow ride” dolphin always seem to conjure up pleasurable feelings of delightful enthusiasm. But if you look closer, you will find that some of these beautiful and graceful cetaceans, including the California coastal bottlenose dolphin (*Tursiops truncatus*) have serious challenges with which to contend.

The California coastal bottlenose dolphin are truly coastal, living their lives within 1 km of the coast. This group is generally considered distinct with a total of about 450 to 500 individuals and about 200 of these spend a lot of time in the Monterey Bay National Marine Sanctuary (“MBNMS”).

Living so close to the shore, California bottlenose dolphin can be affected by coastal contaminations. For example, dead strandings of this dolphin species have had alarmingly high concentrations of PCBs and DDT. However, such strandings are not that common. To make significant findings, research needs to be done on living dolphin in their natural habitat. Such research could also be helpful to others, including the human population.

Recent findings reveal that, among other things, the California bottlenose population is suffering a high rate of skin disease which could be related to near shore contamination. This is also an area of concern for our speaker. Daniela has been studying this dolphin species for nearly 10 years and so is very familiar with them. In addition to contributing to a catalog for identification of individual members of this group of dolphins she is involved in the investigation of near shore contamination in the MBNMS and its effects on the California bottlenose dolphin. Please join us for a revealing and informative presentation about this on going cetacean research in the Sanctuary.

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CALENDAR

Sat. August 15th 8 am-4: ACS National Blue Whale Watch , Aboard the Condor Express in Santa Barbara, CA. For info please call trip chair at 310-548-7821.

Thu Aug 27th: Monthly ACSMB meeting with Daniela Maldini, PhD, who will discuss her work with bottlenose dolphins in Monterey Bay. Hopkins Marine Station, 7pm refreshments, 7:30pm talk.

Sat Sept 12th 9am-1:30pm: Blue Whale Fundraiser for ACS Monterey Bay Chapter. Join cetacean experts with Monterey Bay Whale Watch for a half day of whale watching in one of the most productive marine ecosystems in the world, in search of the largest animal that has ever existed. We will also be on the lookout for humpback whales, killer whales, dolphins, leatherback sea turtles and other marine life. Cost is \$45 for members, \$55 for non-members. Send checks to ACSMB, PO Box HE, Pacific Grove, CA, 93950 or contact Tony Lorenz at 831-901-7259.

Sat Sept 12th Noon-5: MBARI's Open House. Open house will feature science and technology exhibits, research presentations, children's activities, ocean science career info and much more.

Saturday, September 19th : 25th Annual California Coastal Cleanup Day. See You at the Beach

Sept. 24-27: Monterey Bay Birding Festival "Bridging the Americas". Watsonville Civic Plaza, Watsonville, CA

September 26th, and October 3rd, Oceanic Society Cordell Bank Wildlife Adventure. Departs from Bodega Bay aboard the 'New Sea Angler'. Cost-\$150.00. Contact Oceanic Society for more info-1-415-474-3385

Oct 10th and 11th: Mammology 18th Biennial Conference on the Biology of Marine Mammals in Quebec City, QC, Canada. 2 Day Workshop. For more info go to www.marinemammalogy.com

American Cetacean Society-Monterey Bay

Nov 6-8, Sitka Whale Festival
Sitka, Alaska. 2009 keynote speaker will be Richard Ellis, one of the world's great marine artist and a prolific author of all things marine

Nov 7, 2009-Feb 28, 2010: Darwin: Evolution/ Revolution. San Diego Museum of Natural History.

Feb 17-20, 2010: Pacific Seabird Group 37th Annual Meeting. Long Beach, CA

February 26-28, 2010 Whale Trust 2010 Ritz Carlton, Kapalua, Maui, Hawaii
More info about speakers will be forthcoming

Sept 7-11, 2010: 1st World Seabird Conference
Hosted by: Pacific Seabird Group Victoria Conference Center Victoria, B.C.

SPONSORED BY UCMP AND THE NATIONAL CENTER FOR SCIENCE EDUCATION. THINK EVOLUTION: A SUMMER INSTITUTE FOR SCIENCE EDUCATORS

Calling all middle and high school science teachers! Put on your evolution eyeglasses and your nature of science thinking cap and join us for a fun-filled four days of evolutionary explorations with biologists and educators from the University of California. The Think Evolution Summer Institute will combine lectures by prominent biologists with sessions focused on hands-on activities for the middle and high school classroom. Hear about the most recent developments in evolution and have an opportunity to explore how to integrate these topics into your curriculum. Follow up with biologists and participating educators at the Evo-Picnic to be held the following February

Tuesday through Friday, August 11-14, 2009
UC Museum of Paleontology, Valley Life Sciences Building, UC Berkeley. 9:00 am to 3:00 pm
\$75.00 for four days (college credit available for additional cost); includes lots of free resources distributed to participating teachers plus morning and afternoon snacks.

www.starrsites.com/acsmf/

WHY NOAA IS BANNING KRILL HARVEST OFF THE WEST COAST

By Moises Velasquez-Manoff

On Monday, the National Oceanic and Atmospheric Administration (NOAA) prohibited krill harvesting off the US West Coast. The ban goes into effect Aug. 12.

Krill are tiny shrimp-like creatures. They eat algae and, occasionally, other little critters. Ultimately, we all rely on photosynthetic organisms for our daily bread – they're the only organisms able to use the sun's energy to directly create carbohydrates.

In the marine realm, it's krill that play the important role of converting plant matter into flesh. Anything that's not a vegetarian – and that includes whales, seals, and many, many fish – relies on krill, or similar shrimp-like creatures (like copepods), to convert plant matter into animal protein and fat.

Salmon eat them, that's how they get their characteristic orange-ish color. So does the blue whale. That tells you something about the little shrimp's abundance. There are enough to support the largest animal ever to have existed.

Indeed, judged by sheer biomass – the combined weight of all living individuals – Antarctic krill are the single most successful animal on the planet. And they support large, both literally and figuratively, quantities of life. If you were to put all the world's marine mammals on a scale, you'd find half that mass came from the krill-rich waters surrounding Antarctica. That includes one-fifth of the world's whales. All that is because of krill.

Greenpeace says of krill: It is currently the largest fishery in the Southern Ocean (Everson 2000). The market for krill is expected to grow in line with increasing demand globally for aquaculture feed (Nicol & Foster 2003). Previous difficulties related to rapid spoiling of the catch and high levels of fluoride leaching from the shells into the meat have largely been overcome by improved and more rapid on-board processing techniques. Some facilities exist aboard vessels to manufacture bio-diesel from

krill. The decline in sea ice in the south-western Atlantic has enabled the krill fishery to operate year round (Smetacek & Nicol 2005). This and the improved processing methods have effectively removed the last constraints that were limiting growth of this fishery. In addition, the development of new products is taking place, including the production of krill oil rich in omega-3 fatty acids as a human dietary supplement.

There are no krill fisheries yet in the 200-mile wide exclusive economic zone off the US West Coast. But, as Greenpeace points out, demand for krill is on the rise. Usually, harvested krill are ground and squeezed into meal or oil that goes to feed livestock or fish. But some foresee a fish food shortage.

There's already talk that rising fishmeal prices will spark a krill war in the Southern Ocean. And a 2002 report by the UN's Food and Agriculture Program used the term "fish meal trap" to refer to that moment when supply of the limited resource (fish meal) would no longer meet demand — a peak fish moment.

A later FAO report says: Even with stable (neither increasing nor decreasing) supplies of raw fish for fishmeal production, it is also argued that the growing demand for fishmeal will continue to drive the price of fishmeal and fish oil upwards. Upon reaching a certain price level, the use of fishmeal and fish oil may no longer be financially viable.

It goes without saying that environmentalists would rather avoid that scenario. By the time market prices respond to a scarcity in fish and/or krill meal, who knows how many marine animals will have starved to death. So more than anything, the NOAA krill ban may be a proactive step toward protecting the California food web – especially large, slow-breeding animals such as whales that already suffer from low numbers.

And that's how many are hailing it: Mother Jones says, "Today's rule is a rare instance of foresight in fisheries management, designed to preserve the foundation of a healthy

marine foodweb in the California Current ecosystem, including its five National Marine Sanctuaries.”

Oceana’s Ben Enticknap tells the AP: “It’s proactive and precautionary taking action now before there is a crisis, rather than waiting for a big problem to occur and then having to deal with it.”

The West Coast has seen firsthand what happens when krill stocks collapse. In 2003, rockfish populations off California tanked, reports the AP. Then, in 2005, sea birds and other marine life began showing signs of starvation. Scientists eventually blamed a plummeting krill population.

It wasn’t from overfishing, though: 2004-’05 was an El Nino year, a periodic warming of the eastern Pacific. That’s when warm surface waters halt the upwelling of cooler, nutrient-rich waters from the deep. Primary productivity slows, and so does everything that depends on it

BONE BED TELLS OF LIFE ALONG CALIFORNIA’S ANCIENT COASTLINE

By Robert Sanders, BERKELEY — In the famed Sharktooth Hill Bone Bed near Bakersfield, Calif., shark teeth as big as a hand and weighing a pound each, intermixed with copious bones from extinct seals and whales, seem to tell of a 15-million-year-old killing ground.

Yet, new research by a team of paleontologists from the University of California, Berkeley, the University of British Columbia in Vancouver, Canada, and the University of Utah paints a less catastrophic picture. Instead of a sudden die-off, the researchers say that the bone bed is a 700,000-year record of normal life and death, kept free of sediment by unusual climatic conditions between 15 million and 16 million

years ago.

Shark tooth Teeth such as this from the extinct 40-foot-long shark *Carcharocles megalodon* are common in the Sharktooth



American Cetacean Society- Monterey Bay

Hill Bone Bed because, like modern sharks, these extinct sharks also shed teeth throughout their lives.

The team's interpretation of the fossils and the geology to establish the origins of the bone bed, the richest and most extensive marine deposit of bones in the world, are presented in the June 2009 issue of the journal *Geology*.

The mix of shark bones and teeth, turtle shells three times the size of today's leatherbacks, and ancient whale, seal, dolphin and fish skeletons, comprise a unique six-to-20-inch-thick layer of fossil bones, 10 miles of it exposed, that covers nearly 50 square miles just outside and northeast of Bakersfield.

Since the bed's discovery in the 1850s, paleontologists have battled over an obvious question: How did the bones get there? Was this a killing ground for megalodon, a 40-foot version of today's great white shark? Was it a long-term breeding area for seals and other marine mammals, like Mexico's Scammon's lagoon is for the California gray whale? Did a widespread catastrophe, like a red tide or volcanic eruption, lead to a massive die-off?

The new and extensive study of the fossils and the geology of Sharktooth Hill tells a less dramatic story, but an important one, for understanding the origin of rich fossil accumulations, said Nicholas Pyenson, a former UC Berkeley graduate student who is now a post-doctoral fellow at the University of British Columbia.

"If you look at the geology of this fossil bed, it's not intuitive how it formed," Pyenson said. "We really put together all lines of evidence, with the fossil evidence being a big part of it, to obtain a snapshot of that period of time."

Pyenson and his colleagues, totaling five UC Berkeley Ph.D.s and UC Berkeley integrative biology professor Jere Lipps, hope that the study will draw renewed attention to the bone bed, which Lipps said needs protection even though a small portion of it was added to the National Natural Landmark registry in 1976.

One 12-foot-long fossil seal skeleton that Lipps helped excavate during the 50 years he has visited the bone bed was mounted and displayed for decades at the Natural History Museum of Los Angeles County (NHM), which houses thousands of fossils excavated from the Sharktooth Hill deposits during expeditions in the 1960s and 1980s. Other collections are in the California Academy of Sciences, San Diego Natural History Museum, Buena Vista Museum of Natural History in Bakersfield, and UC Berkeley's Museum of Paleontology (UCMP), where students over the years have made studies of the bone bed's extinct sea turtles, sharks, marine mammals and seabirds. Lipps is a faculty curator in the UCMP.

The paper's other coauthors - all of whom obtained their Ph.D.s from UC Berkeley - are Randall B. Irmis, now an assistant professor of geology and geophysics at the University of Utah, and Lawrence G. Barnes, Edward D. Mitchell Jr. and Samuel A. McLeod of NHM's Department of Vertebrate Paleontology.

When the bone bed formed between 15,900,000 and 15,200,000 years ago, the climate was warming, sea level was at a peak, California's Central Valley was an inland sea dubbed the Temblor Sea and the emerging Sierra Nevada was shoreline. By closely studying the geology of the Sharktooth Hill area, the paleontologists determined that it was part of an underwater shelf in a large embayment, directly opposite a wide opening to the sea.

Pyenson and Irmis examined some 3,000 fossilized bone and teeth specimens in the collections of many museums, including the NHM and UCMP, and they and Lipps also cut out a meter-square section of the bone bed, complete with the rock layers above and below, and transported it to UC Berkeley for study.

Below the bone bed, they found several feet of mudstone interlaced with shrimp burrows, typical of ocean floor sediment several hundred to several thousand feet below the surface. The

bone bed itself averaged 200 bones per square meter, most of them larger bones, with almost no sediment. Most were disarticulated, as if the animal carcasses had decayed and their bones had been scattered by currents.

"The bones look a bit rotten," Lipps said, "as if they lay on the seafloor for a long time and were abraded by water with sand in it." Many bones had manganese nodules and growths, which form on bones that sit for long periods in sea water before being covered by sediment.

Toward the top of the bone bed, some articulated skeletons of seals and whales were found, while in the layer above the bone bed, most skeletons were articulated and encased in sediment.

The team's conclusion is that the climatic conditions were such that currents carried sediment around the bone beds for 100,000 to 700,000 years, during which time bones remained exposed on the ocean floor and accumulated in a big and shifting pile.

Given the rarity of bones marked by shark bites, plus the occurrence of terrestrial animals such as tapirs and horses that must have washed out to sea, predation by sharks like *Carcharocles megalodon* seems unlikely to have been the major source of the bone bed, the authors wrote. Because of few young or juvenile specimens, the team also discounted the hypothesis that this was a breeding ground for early seals such as *Allodesmus*. The absence of volcanic ash makes a volcanic catastrophe unlikely, while the presence of land mammal fossils makes red tide an unlikely cause.

"These animals were dying over the whole area, but no sediment deposition was going on, possibly related to rising sea levels that snuffed out silt and sand deposition or restricted it to the very near-shore environment," Pyenson said. "Once sea level started going down, then more sediment began to erode from near shore."

Pyenson noted that, while bone beds around the world occur in diverse land and



A reconstructed skeleton of the extinct seal Allodesmus from the Sharktooth Hill Bone Bed, now on display at the San Diego Natural History Museum.

marine environments, the team's analysis of the Sharktooth Hill Bone Bed could have implications for other fossil-rich marine deposits.

The work was funded by UCMP and UC Berkeley's Department of Integrative Biology, as well as by grants from the Geological Society of America and the American Museum of Natural History, and graduate fellowships from the National Science Foundation.

FISHING PUTS A THIRD OF ALL OCEANIC SHARK SPECIES AT RISK OF EXTINCTION

The first International Union for the Conservation of Nature (IUCN) red list of oceanic sharks names 64 species as endangered. Sharks are vulnerable because they take decades to mature and produce few young.

Over-fishing threatens to drive a third of the world's open-ocean shark species to extinction, say conservationists. Hammerheads, giant devil rays and porbeagle sharks are among 64 species on the first ever red list for oceanic sharks produced by the International Union for Conservation of Nature (IUCN).

Sharks are vulnerable because they can take decades to mature and they produce few young. The scalloped hammerhead shark, which has declined by 99% over the past 30 years in some parts of the world, is particularly vulnerable and has been given globally endangered status on the red list, which means it is nearing extinction. In the Gulf of Mexico, the oceanic whitetip shark has declined by a similar amount.

Scientists estimate that shark populations in the north-west Atlantic Ocean have declined by an average of 50% since the early 1970s.

Announcing the red list of open-ocean or "pelagic" sharks and rays today, scientists called on governments to set limits for catching the animals on the high seas and to enforce strict bans on "finning" – the practice of catching sharks, cutting off their fins and throwing the bodies back in the water.

"Despite mounting threats, sharks remain virtually unprotected on the high seas," said

Sonja Fordham, deputy chair of the shark specialist group at the IUCN and policy director for the Shark Alliance. "The vulnerability and lengthy migrations of most open-ocean sharks call for coordinated, international conservation plans. Our report documents serious over-fishing of these species in national and international waters, and demonstrates a clear need for immediate action on a global scale."

Pelagic sharks are usually caught on the high seas in tuna or swordfish fisheries. In 2007, 21 shark-fishing nations reported catching more than 10,000 tonnes of shark. The top five – Indonesia, India, Taiwan, Spain and Mexico – accounted for 42%.

At one time, sharks were considered worthless bycatch, but they are increasingly being fished on purpose to serve emerging markets for their meat and fins, which are used in soups and can fetch more than £100 per kilogram. In places such as China, shark-fin soup could once only be afforded by the elite, but the growing numbers of middle-class people in the country has driven up demand.

To satisfy the growing market, some fishermen have taken to finning sharks. There are bans on this practice in operation around the world, but Fordham said the coverage is patchy and, in any case, enforcing the bans is difficult due to a lack of policing on the high seas.

"The overarching problem for sharks is that, for a variety of reasons, they've been considered low priority and they're traditionally low value compared with something like the tuna," said Fordham. "Also public image feeds into that – I don't know if there are people clamouring for their conservation."

Most species of pelagic shark take many years to mature and have relatively few young when they do reproduce. The IUCN's report highlights a study by scientists in Canada which showed that the population of porbeagle sharks, classified as vulnerable in the red list, has been so affected by fishing that it will take at least 100 years to recover. Yet the government still allows the animal to be fished in its waters.

The global dusky shark population, also classed as vulnerable by the IUCN, could take up to 400 years to recover because the animals are not sexually mature until around 20 years of age and usually raise only one offspring at a time.

Fordham said that because many of the sharks on the red list are at the top of the food chain, their extinction could also cause major local ecological problems. "We know that most of these species are top predators and we know that removing the top predators usually has negative consequences to the system as a whole."

In 2007, Julia Baum of the Scripps Institution of Oceanography in California, who is also a member of IUCN shark specialist group, published a study showing how a major decline in the numbers of predatory sharks in the north Atlantic after 2000 had allowed populations of cownose rays, which are their prey, to explode. The rays in turn decimated the populations of bay scallop off North Carolina. "There was a fishery for bay scallops in North Carolina that lasted over a century uninterrupted and it was closed down in 2004 because of cownose rays," she said last year.

Conserving threatened shark species might not be difficult. Last year, Peter Klimley of the University of California, Davis, found that scalloped hammerhead sharks migrate along fixed "superhighways" in the oceans, speeding between a series of "stepping stone" sites near coastal islands ranging from Mexico to Ecuador. Focusing marine reserves around these hotspots might be a cost-effective way to conserve the species.

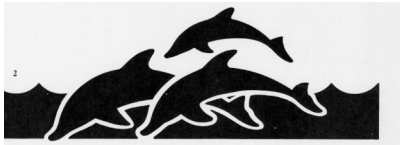
The IUCN sharks red list is published a few days before Spain is due to host an international meeting of the managers of tuna fisheries, where many of the sharks are caught. Scientists are also meeting in Denmark this week to produce advice for authorities on how to manage populations of Atlantic porbeagle sharks. "The completion of this global assessment of pelagic sharks and rays will provide an important baseline for monitoring the status of these keystone species in our oceans," said Roger

McManus, vice-president for marine programmes at Conservation International.

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

Date	#	Type of Animal(s)
7/29 p.m.	26	Humpback Whales
	700	Risso's Dolphins
	200	Northern Right Whale Dolphins
7/29 a.m.	48	Humpback Whales
	30	Risso's Dolphins
	5	Dall's Porpoise
7/28 p.m.	25	Humpback Whales
	700	Risso's Dolphins
	500	Northern Right Whale Dolphins
7/28 a.m.	30	Humpback Whales
	2000	Risso's Dolphins
	800	Northern Right Whale Dolphins
7/27	5	Humpback Whales
	10	Pacific White-sided Dolphins
	15	Risso's Dolphins
	20	Northern Right Whale Dolphins
7/26 p.m.	1	Humpback Whale
	120	Long-beaked Common Dolphins
7/26 a.m.	2	Humpback Whales
	175	Long-beaked Common Dolphins
7/25 p.m.	8	Humpback Whales
	300	Pacific White-sided Dolphins
	80	Northern Right Whale Dolphins
7/25 a.m.	22	Humpback Whales
	75	Pacific White-sided Dolphins
	200	Risso's Dolphins
	1000	Northern Right Whale Dolphins
7/24 p.m.	2	Humpback Whales
	60	Pacific White-sided Dolphins
	150	Risso's Dolphins
	120	Northern Right Whale Dolphins
7/24 a.m.	3	Humpback Whales
	2	Minke Whales
	400	Risso's Dolphins
	150	Northern Right Whale Dolphins
	2	Dall's Porpoise
7/23 p.m.	1	Humpback Whale
	1	Blue Whale
7/23 a.m.	1	Humpback Whale
	40	Pacific White-sided Dolphins
	120	Risso's Dolphins
	150	Northern Right Whale Dolphins
7/22	1	Humpback Whale
	35	Pacific White-sided Dolphins
	700	Risso's Dolphins
	600	Northern Right Whale Dolphins
7/21	4	Humpback Whales
	180	Pacific White-sided Dolphins
	350	Risso's Dolphins

American Cetacean Society
Monterey Bay Chapter
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Soundings



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

SEPTEMBER 2009

**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, September 24, 2009

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

**SPEAKER: ALLEN HIA ANDREWS, PH. D.,
MOSS LANDING MARINE LABORATORIES.**

**SUBJECT: FISHES AND THEIR LIVING HABITAT:
HOW THE "GARDEN" GROWS**

Understanding the age and growth of fishes and the living habitat in which they reside is an important part of forming effective fisheries management strategies. Under-estimation of longevity has played a significant role in the collapse of major commercial fisheries and it is increasingly common to find that deep-water fishes and corals are long-lived. Thus, accurate age estimates are essential to understand the life histories of exploited organisms and the habitats in which they live.

Our speaker works in the Age and Longevity Research Laboratory at Moss Landing Marine Laboratories. His research focuses on determining the age, growth rates and longevity of marine organisms. Methods include analysis of the patterns and the effects of naturally occurring and man-made radioactivity. Since 1992 Allen has been working on this research with fishes and more recently, deep-sea corals. This work has taken him to sites such as the Farallon Islands, Southeastern Alaska, New Zealand and the Davidson Sea Mount, right off the Big Sur coast of Central California.

Please join us to learn about these exciting new insights into age and growth estimation and to enjoy revealing photographic imagery of infrequently seen deep-water fishes and corals.

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CALENDAR

Saturday Sept 12th 9am-1:30 pm Blue Whale Fundraiser for ACS Monterey Bay Chapter

Join cetacean experts with Monterey Bay Whale Watch for a half-day of whale watching in one of the most productive marine ecosystems in the world, in search of the largest animal that has ever existed. We will also be on the lookout for humpback whales, killer whales, dolphins, leatherback sea turtles and other marine life. Cost is \$45 for members, \$55 for non-members. Send checks to ACSMB, PO Box HE, Pacific Grove, CA, 93950 or contact Tony Lorenz at 831-901-7259.

Saturday Sept 12th Noon-5: MBARI's Open House. Open house will feature science and technology exhibits, research presentations, children's activities, ocean science career info and much more.

Saturday, September 19th: 25th Annual California Coastal Cleanup Day. See You at the Beach!

Sept. 20-24 - The Wildlife Society's 16th Annual Meeting: Monterey Conference Center Conference includes seminars, field trips, and book signings.

Sept. 24-27: Monterey Bay Birding Festival "Bridging the Americas". Watsonville Civic Plaza, Watsonville, CA

September 26th, and October 3rd, Oceanic Society Cordell Bank Wildlife Adventure. Departs from Bodega Bay aboard the 'New Sea Angler'. Cost - \$150.00. Contact Oceanic Society for more info: 1-415-474-3385

Oct 10th and 11th: Mammology 18th Biennial Conference on the Biology of Marine

Mammals in Quebec City, QC, Canada. 2 Day Workshop. For more info go to www.marinemammalogy.com

Nov 6-8, Sitka Whale Festival Sitka, Alaska. 2009 keynote speaker will be Richard Ellis, one of the world's great marine artists and a prolific author of all things marine

Nov 7, -Feb 28, 2010- Darwin: Evolution/ Revolution. San Diego Museum of Natural History.

Nov 12-15 - 90th Annual Meeting of the Western Society of Naturalists: 2009 Annual Meeting. Embassy Suites Hotel, Seaside, CA.

Feb 17-20, 2010: Pacific Seabird Group 37th Annual Meeting. Long Beach, CA

February 26-28, 2010 Whale Trust 2010 Ritz Carlton, Kapalua, Maui, Hawaii
More info about speakers will be forthcoming

Sept 7-11, 2010: 1st World Seabird Conference Hosted by: Pacific Seabird Group Victoria Conference Center Victoria, B.C.

Notable Media

Now Showing: The Cove

Filmed covertly, The Cove is a powerful film about the dolphin industry that is currently playing at the Osio Cinema in Monterey. Although heartbreaking at times, it is an important movie to convey the tragic consequences of annual dolphin harvesting, and everyone is encouraged to attend a showing.

On Thin Ice: The Changing World of the Polar Bear. By Richard Ellis. 2009 Knopf Publishing]

2009 BALDRIDGE AWARD

Daniela Maldini has recently returned to this area following a spell on the east coast where she was Director of research at Earthwatch Institute and an Adjunct Professor at the Univ. of Massachusetts.

She received her Master's degree in Marine Science at the Moss Landing Marine Labs in 1996 on the ecology of Bottlenose Dolphins. ACS/MB helped fund her research. She then went to the University of Hawaii gaining a Ph. D. on Odontocetes.

She now heads up the organization Okeanis based in Moss Landing and has resumed her long-term study of the local Bottlenose population.

In her research she has recently discovered disfiguring skin lesions in this population and has approached ACS/MB in helping to fund this work.

She is a very experienced researcher, and the Board felt that this study is well worthy of our support. We need to know the source of this disease, and Daniela is committed to finding it.

We are happy to present Daniela Maldini with the 2009 Baldrige Award of \$1000 to continue her research.

OCEANA POLL SHOWS OVERWHELMING SUPPORT FOR PROTECTION OF MARINE MAMMALS

Republican voters in Ohio – a bellwether state for everything from political elections to consumer products -- overwhelmingly declared their support for protection of the oceans and its marine mammal inhabitants in a new poll sponsored by Oceana. The survey of 500 likely voters found that 90 percent agree that it is important to protect both the health of the oceans and marine mammals, such as dolphins and whales. And, more than three-quarters of those surveyed believe that the U.S. Congress has a responsibility to protect the oceans as well as the marine mammals that live there.

The poll also found broad support (79%) for the Marine Mammal Protection Act, a

landmark statute enacted by Congress more than 30 years ago to protect dolphins and whales from harm by human activities, and in particular, for the part of that law requiring commercial fishing operations to reduce their catch, injury, and kill of marine mammals (76%).

Ironically, these findings come at the same time that the Marine Mammal Protection Act is under attack by some members of Congress. H.R. 4075, sponsored by House Resources Committee Chairman Richard Pombo (R-CA.) would eliminate the "Dolphin Deadline" and weaken other existing provisions in the Marine Mammal Protection Act. Consideration of these proposals by the U.S. House of Representatives is expected prior to the August Congressional Recess, which begins July 31.

(The poll of 500 likely Republican voters in Ohio was conducted from June 22-25, 2006. The margin of error is +/- 4.38.)

SEAL BAN SEEN AS THREAT TO NEW-FOUNDLAND VILLAGE

By Nina Lex

TORONTO (Reuters) - Hundreds of villages in Atlantic Canada that depend on seal hunting for much of their livelihood are already feeling a sharp economic pinch from a European ban on seal products that went into effect last month.

For more than 20 years Eldred Woodford has taken part in the annual seal "harvest" on the ice floes along the coast of Newfoundland and Labrador, home to more than 80 percent of the country's sealing industry. But the hunt now brings in much less money than it did only a few years ago, he says.

To be sure, there are still plenty of seals to hunt, but they are worth a lot less.

In April Woodford and his crew killed about 1,200 harp seals over 10 days in an annual hunt that usually accounts for about a third of his yearly income. But depressed prices for pelts mean this year's catch will sell for thousands of dollars less than in the past.

"When you talk about an income between C\$30,000 (\$28,000) and C\$35,000 a year and you

lose a potential income on sealing of C\$8,000 to C\$10,000, that's a substantial loss," said Woodford.

While the drop in pelt prices partly reflects the impact of the global recession on demand, the European Union's ban is also a big reason, says Frank Pinhorn, director of the Canadian Sealers Association.

In 2008 pelt prices were selling at C\$30 each, while several years ago they were going for C\$100. This year some pelts were selling for as little as C\$15.

With the financial incentive waning, many hunters didn't bother to venture out on the ice this year. All told, only 72,156 harp seals were taken, a quarter of this year's quota of 280,000 animals.

"This year there wasn't very many boats that did go sealing because of the lower prices," said Woodford.

SEAL HUNT CALLED INHUMANE

On July 27 the EU gave the final go-ahead to ban all seal products after years of pressure from animal rights campaigners who view the annual hunt as inhumane.

The Canadian government continues to defend its sealing policies and will challenge the EU's decision at the World Trade Organization.

"It seems that 25 to 30 percent of (seal) exports initially go to Europe. A lot of it goes to Norway or Finland to be processed. But then is transited through Europe to our main markets," said Alain Belle-Isle, media spokesman at the federal Fisheries and Oceans Department. "It's not clear how much of it actually stays in Europe."

The main markets for seal products are in Russia and China. But the ban means Canada has lost a huge potential market in Europe.

"We know that there are growing markets for seal oil products like Omega 3 supplements in the EU, and that potential cannot be realized because we can't ship seal products as a source for Omega 3 to the EU any more," said David Barry, co-ordinator for the Seal and Sealing Network, an industry lobby group.

Over the last couple of years seal exports totaled C\$10 million to C\$12 million a year. "In smaller communities that's a lot of money," said Belle-Isle.

"For the average Newfoundland and Labrador fishing family, 15 to 50 percent of their income originates from sealing," said the Sealers Association's Pinhorn. "And the income per family here in rural Newfoundland and Labrador is already the lowest in Canada."

Woodford lives in Herring Neck, a coastal village in northern Newfoundland with just 150 residents, including 25 sealers. The money he makes from the hunt is vital to his livelihood, he says. He uses it to buy or repair boats and equipment for the rest of the fishing season.

FUEING AN EXODUS

The EU ban will also affect the Inuit people in Canada's Arctic. The ban exempts seal products from traditional hunts carried out by aboriginal peoples, and they can still export products to the EU, but only on a non-profit basis.

"History has shown that the entire market collapses when countries talk about banning seal products. Inuit in Nunavut will be affected by this decision, whether or not an exemption is in place, and that is not right," Premier Eva Aariak of the vast northern territory of Nunavut said in a release.

Canada's seal hunt is the largest in the world. Even so, less than 5 percent of the 6 million seals living in the North Atlantic are killed each year, said Barry.

Nationally, there are still 6,000 active sealing licenses, but that number could decline sharply in coming years.

The industry has already come under pressure as older sealers retire, and few younger people step forward to take their places on the ice floes.

Many prefer to leave Newfoundland and Labrador to find lucrative jobs in Western Canada's rich energy industry. With the potential income from sealing dropping sharply, the trend is only likely to accelerate.

"Sealers in their 30s are in the minority. Sealers in their 40s, 50s and 60s are the majority. One of the major issues in the sealing industry will be recruitment in the next 10 years, trying to get younger people into it and interested," said the Sealing Network's Barry.

"In Canada, we are one of the few places left that has a strong seal population that feeds into a commercial industry," Barry said. "That's not going to stop but it's just a matter of, will there be an end use? Will there be an industry around it or will there be a government subsidized cull?"

SOUTHERN RIGHT WHALES RETURN TO BREED IN TASMANIA

By Sophie Tedmansoz

Endangered Southern Right whales have returned to give birth in waters in southern Australia for the first time in 200 years.

Australian scientists confirmed yesterday what they have suspected for years — that the waters around the southern island of Tasmania have once again been turned into a nursery for Southern Right whales, which became scarce after excessive whaling in the early 1800s.

Two weeks ago a mother and newborn calf were spotted in Great Oyster Bay near Swansea on Tasmania's east coast. Scientists examined the photographs and confirmed yesterday that the calf was no more than two days old, which meant that it had been born in local waters.

Earlier yesterday there was another report of a Southern Right whale giving birth at Cape Barren Island in the Bass Strait to the north of Tasmania; however this is yet to be confirmed by scientists.

Marine biologist David Pemberton said the confirmation that the recently sighted calf was born in Tasmanian waters was critical to the ongoing recovery of the species,

of which there are approximately 1,500 that migrate to Australia each year out of the estimated 60,000 in the world.

"After the thylacine (the extinct Tasmanian tiger), they are the second rarest mammal in Tasmania," Mr Pemberton told *The Times*.

"There have been mother-calf pairs reported for quite a few years, but we needed scientific proof they were breeding in this area. We finally got that today, so it is very exciting."

Tasmanian waters were once a key breeding ground for Southern Rights during the early days of European settlement. However approximately 1,000 Southern Rights were killed in the island's bays every year during the early 1800s and by 1842 they had become commercially extinct.

Illegal whaling continued until the 1960s, however the Southern Right whale population, which became an internationally protected species in 1935, had all but disappeared.

Like the Eastern Australian humpback, the Southern Right whales migrate to northern Australia from Antarctica during the southern hemisphere's winter months to mate, breed and nurse their young. In spring they then return south to feed on krill.

While the population of Southern Rights which migrates to southwestern coast of Australia has recently been on the increase, the numbers in the southeast have failed to keep up.

Mr. Pemberton said that now it has been confirmed that the whales have returned to nurse in Tasmanian waters, scientists will be able to better protect their birthing locations. He said he hopes one day Tasmania will again be a popular breeding ground for hundreds of whales.

“Now that we know this we can start to find the areas where they are hanging around and which bays they are nursing in, and we can help manage them and help to augment their recovery,” Mr. Pemberton said.

BLUEFIN TUNA ARE THE NEW WHALES

By: Alex Mitchell

A last-ditch campaign to save the bluefin tuna is fast gathering support in Britain and will soon become a political and environmental issue in Australia where the species is being fished with indiscriminate abandon for super profits.

London’s celebrity chefs are taking the endangered fish off their menus and Waitrose supermarket has banned its sale. Fishmongers and restaurateurs throughout the country are being assailed - or so we read - by customers asking, “Do you source your fish sustainably?”

Bluefin tuna is on the brink of extinction through over-fishing, and the issue is now so critical that both Britain and France are supporting a resolution by Monaco to ban fishing of the species when the Convention on International Trade in Endangered Species (CITES) meets in Doha in October.

Japan, where a single fish can command more than \$120,000, is expected to oppose the move. Let’s see what that gallant protector of the whale, Peter Garrett, decides to do.

The issue of over-fishing has come to the fore in the past month thanks to the release of the critically acclaimed documentary *The End of the Line*, based on the award-winning book by London Daily Telegraph journalist Charles Clover. “Everybody knows there’s no fish left in the sea,” says Clover. “They probably caught them while we were filming it.”

Mature spawners are fished out in UK waters, and are fast disappearing in the Mediterranean, where bluefin are still being landed at a rate of at least 60,000 tonnes a year - three times the legal limit, with organized crime with Mafia links said to be involved.

Public concern has led to a significant shift in policy in Britain and France. Although France has Europe’s biggest bluefin fishing fleet, President Nicholas Sarkozy last month spoke out for the need to protect fishing stocks. “Ours is the last generation with the ability to take action before it’s too late,” he said.

British fisheries minister Huw Irranca-Davies followed suit, saying he will lobby the United States and other countries to support the ban on sales of bluefin.

The End of the Line, which premiered to critical acclaim at this year’s Sundance Film Festival, documents not only the bluefin issue but such cases of over-fishing as the catastrophe of Newfoundland, home to the world’s most abundant supply of cod, which has been decimated since the early 1990s.

The film also shows how African coastal people, long dependent on fish, are losing their food supply to big commercial fisheries. And it demonstrates that fish farming, with its need for massive supplies of fish food, is no solution to the problem.

Scientists interviewed in the documentary predict that if fishing continues unchecked, the population of the oceans will be wiped out by 2048.

The End of the Line is an independent film made with the support of organizations including WWF, the Marine Conservation Society, Channel 4’s Britdoc Foundation and charitable foundations, and backed nationally by Waitrose.

It initiated a citizens' campaign to change fish sales practices through consumer action. Jamie Oliver didn't take tuna off his menus until clients started raising the issue. Japanese chain Nobu attracted spirited protests when it refused to stop serving tuna sushi in its London outlets.

The film-makers themselves are leading the campaign. Producer Claire Lewis, who says working on the project changed her life, doesn't eat anywhere without first asking: "Can you tell me where your fish comes from?"

Author Charles Clover has been campaigning on the issue for five years now. "We must stop thinking of our oceans as a food factory," he says, "and realize that they thrive as a huge and complex marine environment.

"We must act now to protect the sea from rampant over-fishing so that there will be fish in the sea for our grandchildren and great-grandchildren."

This documentary, which has the hard-hitting quality of Michael Moore's movies, deserves to be released in Australia but no distributor has yet stepped forward.

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

Date	#	Type of Animal(s)
8/31 p.m.	1	Humpback Whale
	1	Blue Whale
8/31 a.m.	1	Humpback Whale
	8	Killer Whales (transient type)
	400	Risso's Dolphins
	50	Northern Right Whale Dolphins
8/30	3	Humpback Whales
	1600	Pacific White-sided Dolphins
	80	Risso's Dolphins
	1700	Northern Right Whale Dolphins
8/29	10	Humpback Whales
	20	Risso's Dolphins
8/28 p.m.	8	Humpback Whales
	2	Blue Whales
	25	Risso's Dolphins

8/28 a.m.	18	Humpback Whales
	2	Blue Whales
	45	Risso's Dolphins
8/27 p.m.	8	Humpback Whales
	2	Blue Whales
	5	Dall's Porpoise
	1	Leatherback Sea Turtle
8/27 a.m.	17	Humpback Whales
	4	Blue Whales
8/26 p.m.	5	Humpback Whales
	3	Blue Whales
	300	Risso's Dolphins
	10	Northern Right Whale Dolphins
8/26 a.m.	7	Humpback Whales
	3	Blue Whales
	1	Minke Whale
	150	Risso's Dolphins
8/25 p.m.	6	Humpback Whales
	12	Risso's Dolphins
8/25 a.m.	5	Humpback Whales
	1	Minke Whale
	10	Pacific White-sided Dolphins
	50	Risso's Dolphins
8/24 p.m.	6	Humpback Whales
	12	Killer Whales (transient type)
8/24 a.m.	6	Humpback Whales
	1	Minke Whale
	15	Pacific White-sided Dolphins
	75	Risso's Dolphins
8/23 p.m.	5	Humpback Whales
8/23 a.m.	13	Humpback Whales
	250	Risso's Dolphins
	3	Dall's Porpoise
8/22 p.m.	11	Humpback Whales
8/22 a.m.	4	Humpback Whales
	15	Risso's Dolphins
	20	Northern Right Whale Dolphins
8/21 p.m.	8	Humpback Whales
	1	Blue Whale
	50	Pacific White-sided Dolphins
	350	Risso's Dolphins
	120	Northern Right Whale Dolphins
8/21 a.m.	4	Humpback Whales
	11	Killer Whales (transient type)
8/20 p.m.	5	Humpback Whales
	450	Pacific White-sided Dolphins
	800	Risso's Dolphins
	400	Northern Right Whale Dolphins
8/20 a.m.	8	Humpback Whales
	400	Pacific White-sided Dolphins
	1200	Risso's Dolphins
	600	Northern Right Whale Dolphins
	6	Dall's Porpoise
	5	Killer Whales*
8/19 p.m.	8	Humpback Whales
	15	Risso's Dolphins
8/19 a.m.	25	Humpback Whales
	5	Killer Whales (transient type)
	4	Harbor Porpoise
	6	Dall's Porpoise
	20	Risso's Dolphins

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Tony Lorenz, Mary K. Paul, *Editors*
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Soundings



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

OCTOBER 2009

**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, October 29, 2009

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

**SPEAKER: JERRY LOOMIS
NATURALIST AND CHAPTER BOARD MEMBER**

**SUBJECT: THE ULTRA FRIENDLY GRAY WHALES OF
SAN IGNACIO LAGOON**

The Monterey Chapter of the ACS was founded in 1980 and since that time Jerry has served the equivalent of 4 two-year terms as President. His first term was from 1988 to 1989. His second, third and fourth terms ran consecutively from 2002 through 2008.

If you talk to Jerry about our Chapter he will often say that ...“we are a small organization but I like to think we make a difference.” While we are a locally organized Chapter Jerry has been instrumental in making the “difference” international in scope.

As a naturalist, he has made several trips to San Ignacio Lagoon in Mexico. Not only did he study and observe the gray whales there he also became involved with some of the locals in the village of San Ignacio. He along with Chapter Board members Carol Maehr and Esta Lee Albright initiated an outreach program which purchased educational supplies for the students at the village school. The people there already had a strong conservation ethic with regard to the gray whales that calve and breed there. Jerry felt that if the Chapter helped the children of San Ignacio they would be better able to continue whale protection in the future.

Please join us for an interesting presentation about gray whales by someone who has a special connection and understanding with the people and the gray whales of San Ignacio lagoon and a creative approach to gray whale conservation.

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CALENDAR

Thru Oct 24, 2009 The Otter Zone: Sea Otters in their Habitat. Santa Cruz Museum of Natural History. A Celebration of Sea Otters and their Coastal Community

Oct 10th and 11th: Mammology 18th Biennial Conference on the Biology of Marine Mammals in Quebec City, QC, Canada. 2 Day Workshop. For more info go to www.marinemammalogy.com

October 22-25: California Science Education Conference. Palm Springs, CA. Keynote Speaker is Ira Flatow from Talk of the Nation Science Friday

October 31: Science Saturday at the P.G. Museum of Natural History. Bats and Spiders 11am-3pm in the museums education room

Nov 6-8: Sitka Whale Festival Sitka, Alaska. Keynote speaker will be Richard Ellis, one of the world's great marine artists and a prolific author of all things marine

Nov 7 2009 -Feb 28, 2010- Darwin: Evolution/ Revolution. San Diego Museum of Natural History.

Nov 12-15 - 90th Annual Meeting of the Western Society of Naturalists: 2009 Annual Meeting. Embassy Suites Hotel, Seaside, CA.

Feb 17-20, 2010: Pacific Seabird Group 37th Annual Meeting. Long Beach, CA

February 26-28, 2010 Whale Trust 2010 Ritz Carlton, Kapalua, Maui, Hawaii
More info about speakers will be forthcoming

Sept 7-11, 2010: 1st World Seabird Conference Hosted by: Pacific Seabird Group Victoria Conference Center Victoria, B.C

NEW EXECUTIVE DIRECTOR FOR AMERICAN CETACEAN SOCIETY ANNOUNCED

Carmel Valley resident, Cheryl McCormick, PhD, has accepted the position of Executive Director of the American Cetacean Society. A dynamic leader and environmentalist, Cheryl brings energy and much-needed leadership to our national organization. Relocating to San

American Cetacean Society-Monterey Bay

Pedro to be near ACS National headquarters, Cheryl has extensive fundraising experience and is dedicated to building the profile and strength of our national organization, as well as assisting the four local chapters achieve their goals.



¡VIVA VAQUITA!
Local ACS chapter representatives and members of Save Whales met with Dr. Tom

Jefferson to formulate a plan to help save the endangered vaquita from extinction on 9/9/09 at the home of Randy and Gail Puckett. Many solid suggestions and plans for implementation came out of the meeting, with education about the charismatic vaquita a priority. Dr. Jefferson was presented with a \$1000 grant by ACS Monterey Bay to continue his vaquita research in the Gulf of California. Randy Puckett has already started work on a vaquita sculpture to raise necessary funds, a new brochure has been developed to spread awareness, a new website, www.vivavaquita.com has been set up, and a network of organizations that are concerned with the vaquita are connecting. ACS MB board members working on the ¡Viva Vaquita! project include Alan and Sheila Baldrige, Randy Puckett, Rene Rodriguez, Dida Kutz, Sally Eastham, and Diane Glim, along with Tom Kieckhefer and Maris Sidenstecker from Save the Whales and vaquita researcher Tom Jefferson.

Chapter President, Diane Glim, and Conservation Chair, Carol Maehr, attended one of six national Ocean Task Force Meetings called by President Obama to identify priorities for ocean and Great Lakes conservation. Distinguished panelists representing the federal government in science, the military, finance and education offered their ocean policy views and then accepted comments from the large audience. Representing the Monterey Bay Chapter of the ACS, Carol Maehr delivered our comments (see page 6).

www.starrsites.com/acsmb/

DOLPHIN SLAUGHTER TURNS SEA RED AS JAPAN HUNTING SEASON RETURNS

Taiji's annual cull of bottlenose dolphins and pilot whales continues despite growing international condemnation. The tarpaulin covers have been meticulously erected, but they can't completely mask the brutality of the slaughter unfolding below. Even from the clifftop, it is possible to hear the hunters' voices and the thrashing of tail fins as their prey make a final, fruitless bid for freedom.

Occasionally a hunter emerges into the gaps between the covers, grimacing as he plunges his knife into the water. Minutes earlier the sea around him was emerald green. Now it is turning a deep crimson, the morning air tainted with the stench of freshly drawn mammal blood.

The gruesome spectacle of dolphins being slaughtered for profit has returned to Taiji, just as international condemnation of the Japanese

town's annual cull reaches a crescendo. At least 100 bottlenose dolphins and 50 pilot whales have been taken in the first hunt of the season, which began on 1 September.

Over the next six months the town's fishermen will catch about 2,300 of Japan's annual quota of 20,000 dolphins. The meat from a single animal fetches up to 50,000 yen (£330), but aquariums are prepared to pay up to £90,000 for certain types.

In a typical hunt the fishermen pursue pods of dolphins across open seas, banging metal poles together beneath the water to confuse their hypersensitive sonar. The exhausted animals are driven into a large cove sealed off by nets to stop them escaping and dragged backwards into secluded inlets the following morning to be butchered with knives and spears. They are then loaded on to boats and taken to the quayside to be

cut up in a warehouse, the fishermen's work hidden from the outside by heavy shutters.

Taiji officials said all the pilot whales caught on this expedition had been killed and their meat put on the market, but added that half of the bottlenose catch would be sold to aquariums and the remainder "set free", in an apparent attempt to mollify international opinion.

It is impossible to verify those claims. The bottlenose dolphins were still penned in close to the shoreline more than 24 hours after they had been captured.

Guardian photographs taken covertly during the cull show what appears to be a young bottlenose floating, motionless and belly up, just beyond the slaughter zone.

What is clear is that a siege mentality has taken hold in Taiji, an isolated town of 3,500 on the Pacific coast of Wakayama prefecture.

Tensions have been rising and the culls conducted in near-secrecy since 2003, when two members of the conservation group

Sea Shepherd released several dolphins that were being kept in an enclosure ready to be slaughtered.

During our visit we were followed at almost every turn, ordered not to take photographs and questioned by the police, who seem to view every foreign visitor as a potential hunt saboteur. None of the residents who agreed to talk would reveal their names, and requests for comments from the town office were ignored.

Criticism of the dolphin hunts intensified this summer with the release of the award-winning US documentary *The Cove*, whose makers used remote-controlled helicopters and hidden underwater cameras to record the hunters at work.

The film, with its graphic footage of the dolphin slaughter, sparked outrage after its release in the US and Australia. Last month councillors in the Australian coastal town of



Fisheries workers guide what appear to be pilot whales at a cove in Taiji, Japan. Photograph: Robert Gilhooly

Broome suspended its 28-year sister-city relationship with Taiji after receiving thousands of emails protesting at the culls.

Taiji is regarded as the spiritual home of Japan's whaling industry. The first hunts took place in the early 1600s, according to the town's whaling museum, but the industry went into decline after the introduction of a global ban on commercial whaling in 1986. The town, a six-hour train ride from Tokyo, is dotted with restaurants serving whale and dolphin sashimi and cetacean iconography appears on everything from the pavements and bridge balustrades to road tunnels and a wind turbine.

Yet in other respects it does not have the feel of a town that takes pride in its traditions. Last week's pilot whale cull was conducted in inlets shielded on three sides by steep cliffs and dense undergrowth to deter campaigners and journalists. Barriers have been hastily erected along coastal paths that run through publicly owned land.

Local fishermen point out that the dolphins and other small cetaceans are not covered by the whaling moratorium. What critics regard as the senseless slaughter of intelligent creatures they see as a legitimate exercise in pest control, blaming dolphins for decimating fish stocks.

"People say dolphins are cute and smart, but some regions have a tradition of eating dolphin meat," said Toshinori Uoya, a fisheries official. "Dolphin-killing may be bad for our international image, but we can't just issue an order for it to stop."

The hero of the film is Ric O'Barry, a 69-year-old activist who has waged a one-man campaign against Taiji's dolphin culls for more than a decade. "We have to keep Taiji in the

news," said O'Barry, who trained dolphins for the 1960s TV series Flipper before devoting himself to their conservation. "There is an international tsunami of attention.

"I've been working with dolphins for most of my life. I watched them give birth. I've nursed them back to health. When I see what happens in this cove in Taiji, I want to do something about it."

To many Taiji residents, O'Barry's comments typify the hypocrisy they say lies at the heart of mounting fury at their centuries-old tradition of killing whales and dolphins.

"I think we are the victims of a form of racism," said one, as we watched the pilot whales being herded out of sight to be killed.

"Westerners slaughter cattle and other animals in the most inhumane ways imaginable, but no one says a word. Why is it that only Japan gets this kind of treatment?"

The Cove will be released in the UK on 23 October.



*This undated image released by the American Association for the Advancement of Science (AAAS) shows an Arctic Fox near Kangerlussuaq, Greenland
Photo by AFP, Getty Images*

LIST OF THREATENED ARCTIC ANIMALS IS GROWING

By Margaret Munro, Canwest

Polar bears may be the most iconic Arctic creature threatened by climate change, but they've got plenty of company.

Hooded and ringed seals, Arctic foxes, ivory gulls, narwhals and Pacific walruses are also faring poorly as temperatures climb, say leading northern researchers, who report that climate change has "severely perturbed" Arctic ecosystems.

Just this week, thousands of walruses are congregating on Alaska's northwest coast having abandoned the retreating ice, the latest in a growing list of peculiar events unfolding in the North.

Rapid and widespread changes have occurred across Arctic terrestrial, freshwater and

marine systems, the scientists say in a report--to be published in the journal *Science*--that takes stock of the ecological consequences of recent climate change.

Southern creatures such as the red fox are expanding northward, they say, while many animals that depend on the ice are in trouble and some could be headed for extinction.

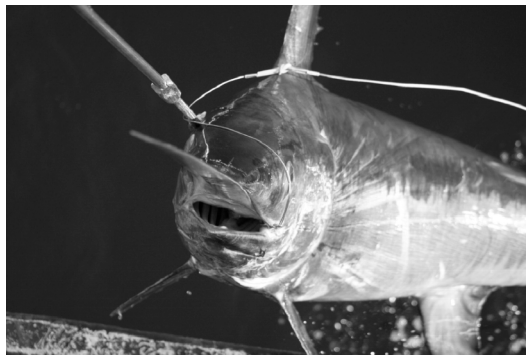
Early spring rains in the Canadian Arctic has seen ringed seals' birthing dens collapse, "leaving newborn pups exposed on bare ice," the international team reports. Polar bear cubs have been suffering a similar fate, it says, noting that denning in the Alaskan Beaufort is down 50 per cent, while the number of bears in Hudson Bay is down 22 per cent.

The Pacific walrus, which uses ice as a feeding and breeding platform, has been hit so hard that the U. S. government has been asked to list it as a threatened or endangered species. Thousands of walrus abandoned retreating ice floes--and in some cases their pups -- during 2007's remarkable melt, and headed for rocky shores in Alaska. The same phenomenon appears to be unfolding again this fall.

"It seems no matter where you look--on the ground, in the air, or in the water -- we're seeing signs of rapid change," says lead author Eric Post, a biologist at Penn State University. He's heading a study of the biological responses to climate change for International Polar Year, currently wrapping up.

Red foxes are also moving north, displacing Arctic foxes. "They're chasing them out," says co-author David Hik, a biologist at the University of Alberta and executive director of the Canadian International Polar Year Secretariat.

Hik says the impacts of the changing ecological dynamics can be far-reaching, and in many cases are still poorly understood.



CALIFORNIA LEGISLATURE URGES BAN ON SWORDFISH IMPORTS TO PROTECT WHALES, DOLPHINS AND MARINE MAMMALS

(SACRAMENTO, CA) - Yesterday, the California Legislature urged an immediate ban on imports of swordfish caught in gear that does not protect whales, dolphins and other marine mammals as required under the U. S. Marine Mammal Protection Act (MMPA).

State lawmakers passed Assembly Joint Resolution (AJR) 8, authored by Assembly-member Bill Monning (D-Carmel), requesting that National Marine Fisheries Service provide proof as required by law from any country that sells fish products to the United States that their fishing practices do not harm or kill marine mammals. The U.S. government has failed for 35 years to document this proof, despite evidence showing that foreign fishing fleets capture and kill hundreds of thousands of marine mammals every year.

"By enforcing existing law, the federal government will not only encourage importers of swordfish to reduce their marine mammal by-catch but will also level the playing field for domestic swordfish fishermen who must follow our laws," said Assembly-member Monning. "AJR 8 sends a strong message to the federal government to do the right thing." The bill was supported by Democrats and some Republicans.

"There's no reason for whales, dolphins, and seals to die so we can eat swordfish," said Teri Shore, Program Director of Turtle Island Restoration Network, the sponsor of AJR 8. "Swordfish fleets can use better gear and reduce the death toll."

The legislation supports the need for action on a pending petition to the government requesting the ban under the MMPA by Turtle Island Restoration Network that attracted more than 45,000 responses to a public comment period that ended in March 2009.

Scientists estimate that global fisheries catch about 300,000 marine mammals, including whales, dolphins, seals, and sea lions, each year. Foreign swordfish fleets, which generally use gillnets and long-lines, are particularly deadly to marine mammals.

The MMPA was designed to ensure that U.S. fishers are not put at a competitive disadvantage to poorly-regulated foreign fleets, and to put market pressure on foreign nations to reduce impacts on marine mammals. Nevertheless, the U.S. government has allowed the importation of swordfish from more than 40 countries without requiring any proof of impacts on marine mammals. AJR 8 was approved with the goal of building momentum to change federal policy and allow domestic swordfish fishermen and women to compete on an even playing field with foreign importers of swordfish, as well as to protect marine mammals around the world.

COMMENTS TO OCEAN TASK FORCE, FOCUSING ON NATIONAL POLICY

President Obama has set the executive branch on course to achieve a new era of effective ocean management. The American Cetacean Society of Monterey Bay congratulates him on his leadership. Many comments will be made regarding national policy to ensure protection, maintenance, and restoration of our oceans, coast and the Great Lakes. We would like to add our comments to the growing list of concerns that you are receiving from interested parties.

We believe it is important to:

1. Support educational efforts to alert our citizenry of the importance of healthy oceans.
2. Support the International Whaling Commission (IWC) in all its efforts to achieve compliance from all nations to abide by IWC rules for numbers of cetaceans that may be harvested.
3. Do all possible to reduce the threat of lethal sonar. "Even the Navy estimates that increased sonar training will significantly harm marine

mammals more than 10 million times during the next five years off the U.S. coast alone." <http://www.nrdc.org/wildlife/marine/sonar.asp>

4. Preserve or enlarge National Marine Sanctuary Boundaries.
5. Support and enlarge Marine Protected Areas.
6. Continue the ban of oil drilling off the California coast and the Eastern Pacific Ocean.
7. Do whatever is needed to avoid ship strikes of cetaceans.
8. Continue the ban on gill nets and drift nets.
9. Continue to monitor the fishing industry, setting limits as needed, to prevent depletion of species (important sources of nutrition for humans and cetaceans). Promote sustainable fisheries only. Protect grunion spawning areas.
10. Continue and improve monitoring of oil leaks from private and commercial vessels, and fine accordingly.
11. Ensure that cruise ships, container ships, tankers, etc. are disposing of their waste in an environmentally sound manner.
12. Reduce the use of plastics and encourage their recycling.
13. Endeavor to clean up the Great Pacific Garbage Patch of marine litter, a gyre estimated to be twice the size of Texas, with high concentrations of very small pieces of suspended plastic and other debris.
14. Continue to monitor and legislate to decrease agricultural, industrial and residential run-off into the ocean.
15. Fund research on health and survival of cetaceans, especially the vaquita, the world's smallest porpoise. They live in the northern part of the Gulf of California and are disappearing because they are getting caught in nets set for shrimp. Scientists estimate that 150 of them remain and will go extinct unless we act now. Also needing attention are the skin lesions that Monterey Bay bottlenose dolphins are exhibiting and the heavy metal concentrations in orcas.

Thank you for the opportunity to share our concerns with the President Obama's Ocean Task Force. We urge President Obama to issue an Executive Order ensuring a long overdue comprehensive National Ocean Policy that

maintains and restores oceans, coasts and Great Lakes; and protects the long-term survival of whales, sea turtles, sea otter, salmon, polar bears, and all marine life.

We wish you great success in developing this policy, implementing reforms to safeguard the ocean's living resources. OUR FUTURE DEPENDS ON IT!

Sincerely,
 American Cetacean Soc., Monterey Bay Chapter
 Carol Maehr
 Conservation Chair
 c.maehr@att.net

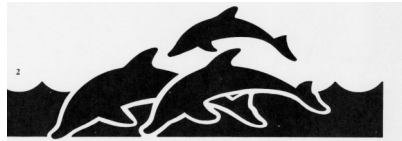
SIGHTINGS compiled by Monterey Bay Whale Watch. For complete listing and updates see www.gowhales.com/sighting.htm

Date	#	Type of Animal(s)
9/30	2	Blue Whales
	60	Long-beaked Common Dolphins
	250	Pacific White-sided Dolphins
	30	Risso's Dolphins
	125	Northern Right Whale Dolphins
9/28	2	Humpback Whales
	60	Killer Whales (offshore type)
	25	Pacific White-sided Dolphins
9/27	3	Humpback Whales
	6	Killer Whales (transient type)
9/26	1	Humpback Whale
	600	Pacific White-sided Dolphins
9/26	2	Humpback Whales
	200	Long-beaked Common Dolphins
9/25	2	Blue Whales
9/23	2	Humpback Whales
	2	Blue Whales
	150	Risso's Dolphins
9/21	3	Humpback Whales
	60	Risso's Dolphins
9/21	13	Killer Whales
	1	Pacific White-sided Dolphin
	75	Risso's Dolphins
	5	Harbor Porpoise
	6	Dall's Porpoise
9/20	5	Killer Whales
9/20	5	Killer Whales
9/19	2	Humpback Whales
9/19	5	Humpback Whales
	40	Risso's Dolphins

9/18	2	Humpback Whales
	1	Blue Whale
	1	Dall's Porpoise
9/18	1	Blue Whale
	50	Risso's Dolphins
9/17	2	Humpback Whales
	1	Blue Whale
	200	Long-beaked Common Dolphins
	40	Risso's Dolphins
9/17	1	Humpback Whale
	4	Harbor Porpoise
9/16	1	Blue Whale
9/16	2	Humpback Whales
	1	Blue Whale
9/15	3	Humpback Whales
	6	Killer Whales*
9/14	8	Humpback Whales
	1	Blue Whale
	4	Harbor Porpoise
9/13	2	Humpback Whales
	5	Harbor Porpoise
9/13	11	Killer Whales (transient type)
	8	Harbor Porpoise
	1	Leatherback Sea Turtle
9/12	5	Killer Whales (transient type)
9/12	12	Killer Whales (transient type)
	10	Harbor Porpoise
9/11	12	Killer Whales (transient type)
	60	Pacific White-sided Dolphins
	15	Northern Right Whale Dolphins
	3	Harbor Porpoise
9/10	4	Humpback Whales
	25	Pacific White-sided Dolphins
	55	Risso's Dolphins
	10	Dall's Porpoise
9/9	4	Humpback Whales
	250	Pacific White-sided Dolphins
9/9	1	Blue Whale
	60	Risso's Dolphins
	13	Harbor Porpoise
9/8	1	Blue Whale
9/8	1	Blue Whale
	15	Pacific White-sided Dolphins
9/7	4	Humpback Whales
	2	Blue Whales
	900	Pacific White-sided Dolphins
	700	Northern Right Whale Dolphins
	7	Dall's Porpoise
	6	Blue Whales

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Soundings



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

November-December 2009

**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, December 3, 2009
Time: 7:30 PM. **PLEASE JOIN US AT 7:00 FOR
REFRESHMENTS**

**SPEAKER: ELIN KELSEY, PH. D,
CONSERVATION SCIENTIST AND AUTHOR**

**SUBJECT: DISCUSSION OF SELECTED READINGS FROM
WATCHING GIANTS: THE SECRET LIVES OF WHALES**

Cetaceans, whales, dolphin and porpoises, have always had an exceptional ability to inspire people in many different ways. They inspire art in many forms, they can be archetypal cultural symbols and always seem to evoke wonderment and joy when we see them in person.

In the past, the cetaceans were also hunted and humans were among the hunters. Humans became the best hunters, so good in fact, that many species of cetaceans were driven to near extinction and some to actual extinction by human activities like commercial whaling.

And yet we now hear about gray whales hugging pongas with people on board in San Ignacio Lagoon and about so many other encounters between cetaceans and humans where the frailty of a human in the marine environment is understood, respected and safe-guarded by the cetaceans involved. Have the cetaceans forgotten about the hunting, have they forgiven the hunters...? There must be something to this connection between humans and cetaceans....

Our speaker this month has explored this connection and shares her insights into the world of cetaceans in her book WATCHING GIANTS: The Secret Lives of Whales. This book is ... “personal, anecdotal and highly engaging. Watching Giants opens a window on a world that seems quite like our own, yet is so different that understanding it pushes the very limits of our senses. Elin’s ... colorful first-person account, drawing from her rich, often humorous, everyday experiences as a mother, a woman and a scientist takes us to the incredibly productive waters of the gulf of California and beyond, to oceans around the world.” Please join us for what promises to be an engaging and insightful peek into the world of whales and the world of marine conservation itself. Watching Giants will be available at the meeting for purchase and signing.

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CALENDAR

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

Nov 21-22 (Sat-Sun): "Feathered Friends" at the Monterey Bay Aquarium. Meet Makana the Laysan Albatross and learn about Pacific Seabirds and what you can do to help them.

LOOKING AHEAD TO 2010

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 Folkens. 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. More info will be included in the January newsletter.

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

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

HAPPY HOLIDAYS FROM THE AMERICAN CETACEAN SOCIETY!

Wishing our members and friends of whales a wonderful and peaceful holiday season. Catch the holiday spirit at the ACS meeting on December 3. Sculptor Randy Puckett will be on hand to unveil his new bronze vaquita sculpture, with proceeds benefitting ¡Viva Vaquita!. Save the Whales will be offering their inspiring CD, "Songs to Heal our Planet". Elin Kelsey's book, Watching Giants – The Secret Lives of Whales, will be available for purchase and signing. Give an ACS Monterey Bay membership to a friend, sign up for the Jan. 16 whale watching trip, or simply decide to make an end-of-the-year donation to the Monterey Bay chapter to further our mission of education, conservation and research of whales and dolphins. See you in 2010.

SPERM WHALES ACT AS CARBON SINK

BY Susan Milius, SCIENCE NEWS

Oct. 20, 2009 -- Sperm whales in the Southern Ocean deserve credit for their fine work pumping iron for climate change, researchers say.

These whales have been falsely accused of breathing out enough carbon dioxide to contribute to the greenhouse gas build-up causing climate change, says Trish J. Lavery of Flinders University in Adelaide, Australia.

Of course the whales breathe, but earlier calculations overlooked the potential for whales to offset their emissions by introducing extra iron into the upper zone of water, Lavery said October 13 at the Biennial Conference on the Biology of Marine Mammals in Quebec City, Canada. The extra iron that whales bring up from their deep feeding encourages plankton growth. That growth traps carbon, much as human-run iron-enrichment experiments in the ocean might, Lavery and her colleagues contend.

According to the team's calculations, sperm whales in the Southern Ocean should rank as carbon neutral at least. The animals may even be capturing a net 5 million metric tons of carbon from the atmosphere per year, Lavery says.

Some 210,000 of the world's sperm whales swim around the Southern Ocean during a year, Lavery says. Whale numbers inspire a lot of debate, so she averaged results of several estimates.

The first analysis of whales' effect on greenhouse gases determined that warm-blooded residents -- with whales as the dominant force -- might be respiring 25 percent of the carbon fixed in the Southern Ocean, she says. Later estimates have revised their share downward, and the most

recent calculation puts their contribution at 0.3 percent. That's not huge compared to global output, but it's still 17 million tons of carbon a year.

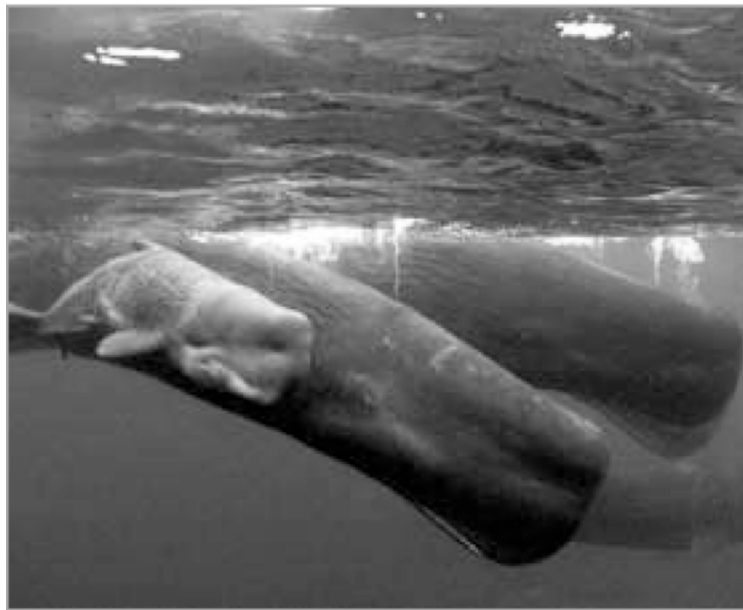
Sperm whales, however, feed by diving for squid in the cold depths of the Southern Ocean. This zone normally acts as deep storage for nutrients, Lavery says. So anything the whales bring up effectively introduces something new to the upper waters.

Skimpy levels of iron in the Southern Ocean limit growth of the floating meadows of plankton there, Lavery says. This limitation has inspired human experiments in adding iron to trigger a big plankton bloom. A burst of iron-fed organisms would draw in carbon dioxide and then trap some of it as a portion of the bloom dies and sinks into deep cold storage.

Using numbers from studies of feeding and nutrition, Lavery and her colleagues calculate that each whale brings

up about 10 grams of iron a day from the depths and then defecates it at the surface. The beauty of this sperm whale output is that it takes the form of drifting liquid plumes that can feed life in the upper ocean, Lavery says. She notes that experiments with iron have struggled with iron fertilizers that clump and sink before upper-water plankton can eat all of the goodies. Yet, she says, those experiments document measurable carbon trapping with even less iron fertilizer than sperm whales contribute.

Lavery points out that her calculations can show sperm whales as either a net carbon sink or



A sperm whale calf swims next to its mother and a pod of sperm whales about four miles off the coast of the Agat Marina in Guam. New estimates suggest sperm whales' feeding habits help take in carbon.
AP Photo

as carbon-neutral depending on which numbers go into the model. Finding the exact values will take more research, she says, but she wants to call attention to an overlooked mechanism.

Asked if he's ready to believe sperm whales could be carbon neutral, Ari Friedlaender of the Duke University Marine Lab in Beaufort, N.C. says, "Of course!"

He adds that is he is now thinking about the flip side of whales and climate change: what impact climate change will have on them.

BLUE WHALE DEATHS OFF THE CALIFORNIA COAST by David Gurney

On August 31, 2009 an appeals judge lifted an existing ban on Navy sonar, and ruled against a lawsuit that would have prevented the U.S. Navy from resuming sonar training exercises off Southern California. The training exercises thus commenced on September 11, 2009 off San Diego. Within two weeks at least three great blue whales were reported floating dead off the Southern California coast.

Another blue whale was found October 12th off Big Sur.

And on Monday, October 19th yet another blue whale washed ashore, this time at Fort Bragg in Northern California.

The latest incident has raised serious questions of whether or not the sonar used by the survey vessel confirmed to have hit the whale might have been responsible. According to some scientists, the type of sonar used by the 78 foot Pacific Star was not powerful enough to have contributed to the injury and death of the Fort Bragg blue whale. The vessel was reportedly engaged in mapping for the controversial Marine Life Protection Act (MLPA) now being enacted on the North Coast. But the Act only covers waters under the jurisdiction of the State of California - 3

miles off the coast. According to Joe Cordaro, spokesman for the NOAA operation, the Pacific Star was 7.5 miles out, at the coordinates 39 degrees 22 minutes North, 123 degrees 50 minutes West.

Mr. Cordaro downplayed the incident in the local press, saying that whales "aren't paying attention in the open ocean" when they are "feeding, eating, or coming up for air." But basic research into whale behavior will tell you otherwise.

In an interview with Mr. Cordaro, he said that according to a statement provided to him by the Pacific Star, they were "doing seafloor mapping, and were contracted by the Hydrographic Survey Division of NOAA to supply data for nautical chart updates, and the identification of dangers to navigation." But what kind of "dangers to navigation" were they expecting to find seven miles out to sea?

Mr. Cordaro could not identify the type of sonar being used, and said he is awaiting that information.

According to a reliable source, the Pacific Star was just completing its mapping operations for the California State Marine Life Protection Act that very weekend.

Some have openly expressed the fear that the Pacific Star was engaged in exploration for natural gas and oil. The type of sonar used to penetrate deep layers of the earth's crust would most definitely seriously injure a blue whale. This is not the type of sonar used to map variations of underwater topography. Such pinging sonar is similar to a depth finder, and though certainly an annoyance to whales, it is not enough to make them engage in suicidal frenzy. The deeply penetrating sonar used to for minerals exploration, however, could cause panic and severe injury to the extremely sensitive hearing of a blue



whale. This reporter has heard first-hand accounts of persons who claim to have heard from shore the loud sonar pulses of offshore geological exploration.

Does the Pacific Star have onboard the type of sonar used to conduct such geological exploration? If so, was it in use at the time they struck the blue whale? If their mapping exercises for the MLPA were to have concluded just before this incident occurred, what were they really doing seven miles out? Officials promoting the marine Life Protection Act are still working out the legal language regarding areas outside the 3 mile limit of their protected zones, and to this date have not even officially addressed the issue. So what was a survey vessel doing four miles outside the jurisdiction claimed by MLPA advocates?

The Pacific Star is an independent for-charter survey vessel, not owned by the U.S. government. Such survey vessels can and do work directly for oil companies.

It is entirely possible, however improbable, that the whale collision was strictly an accident. The whale could have struck the ships propellers by its own blundering ineptitude. Or she might have been disoriented by the ship's sonar. Maybe she had been previously injured by Navy sonar, or was simply ill and disoriented.

The intuition and common sense of concerned coastal residents tell them otherwise. Scientists have already said that judging by fat content and other indicators, this whale was a healthy female who had given birth.

Only the captain and crew of the Pacific Star know the truth of what they were doing and what happened out there that day. But according to Joe Cordaro of NOAA, the chartered vessel for the MLPA will be investigated by the Enforcement Division of, you guessed it, NOAA. Unless the public demands a full inquiry and investigation, we may never know.

<http://www.oceanprotection.org>

TUNA BAN 'JUSTIFIED' BY SCIENCE

By Richard Black

Banning trade in Atlantic blue-fin tuna is justified by the extent of their decline, an analysis by scientists advising fisheries regulators suggests.

The International Commission for the Conservation of Atlantic Tunas' (ICCAT) advisers said stocks are probably less than 15% of their original size.

The analysis has delighted conservation groups, which have warned that over-fishing risks the species' survival.

ICCAT meets to consider the report in 10 days' time.

The analysis was triggered by Monaco's recent proposal to ban international trade in the Atlantic blue-fin under the Convention on International Trade in Endangered Species (CITES) - a proposal that has gathered support from several other European countries.

"What's needed to save the stocks is a suspension of fishing activity and a suspension of international commercial trade," said Sergi Tudela, head of fisheries with the environmental group WWF for the Mediterranean region.

"We must stop mercilessly exploiting this fragile natural resource until stocks show clear signs of rebound and until sustainable management and control measures are firmly put in place."

The body charged with regulating catches of the southern blue-fin, a closely related species, has just approved 20% quota cuts across the board.

QUOTA EXCESSES

For a number of years, ICCAT has set quotas higher than scientists' recommendations.

The pressure this puts on stocks has been compounded by illegal fishing for this valuable species, which according to some estimates adds 30% to the official quota.

Last year, an independent report concluded that ICCAT's management of tuna was a "disgrace", blaming member countries for not accepting scientific advice and for turning a blind eye to their fleets' illegal activities.

The report recommended interim closure of the Mediterranean fishery, where most blue-fin are caught - a measure that won backing from the US.

Frustrated by what it saw as ICCAT's inability to control the problem, Monaco's government - supported by conservation groups - submitted its CITES proposal.

The proposal will be heard at the CITES meeting in March. If enacted and enforced, it would severely hamper the trade.

Atlantic blue-fin tuna are mainly caught from countries around the Mediterranean Sea, but most of the meat is consumed in Asia, particularly Japan.

Japan has previously argued that commercial fish species should be controlled by bodies like ICCAT rather than CITES.

"The right thing would be to impose a zero quota," said Sue Lieberman, director of international policy for the Pew Environment Group.

"It wouldn't be forever - stocks will recover, but not at current rates of catch."

ICCAT's scientific committee considered different ways of analysing the decline - whether to start from estimates of how many blue-fin there were before industrial fishing began, or from the largest stocks reliably recorded, and according to different rates of reproduction.

They concluded that whichever way the data is cut, it is 96% likely that numbers in the east Atlantic and Mediterranean are now less than 15% of their pre-industrial-fishing size.

CITES guidance suggests this would trigger a trade ban for a slow-reproducing fish species.

For the western Atlantic stock, subject to much smaller catches, the figure is 93% likely.

At its forthcoming meeting in Brazil, ICCAT delegates will decide whether to place new restrictions on catches.

"ICCAT's track record isn't too good," commented Dr Lieberman, "but they could surprise us."

Usually, ICCAT makes reports such as this one publically available.

But because of its "controversial and politically-charged nature", the commission asked members to "consider refraining from distributing this report" before the Brazil meeting, and it is not clear if and when it will be posted on the organisation's website.

BAN ON SLICING FINS FROM LIVE SHARKS

Britain is to ban shark-finning, the fishermen's practice of slicing off a shark's fins and discarding the body at sea. The move is aimed at preserving the UK's remaining sharks from destruction by fishermen exploiting Asia's booming market for shark-fin soup.

British-licensed boats kill thousands of the animals each year, targeting species such as hammerheads, mako, threshers and blue sharks, prized for their long tails.

Typically, the fishermen cut the fins off the shark and discard the rest of it into the sea. Conservationists say many are still alive and die later in agony.

Huw Irranca-Davies, the fisheries minister, said Britain could no longer tolerate the trade and would revoke permits for fin removal.

He said: "I want the UK to lead the way in helping protect these vulnerable species. By stopping these permits we will ensure that the wasteful practice that sees fins cut from sharks and the bodies left at sea does not happen."

Fishermen would be required to bring the sharks intact to land before removing their fins, drastically reducing the number they could catch on each trip.

Conservationists have long questioned Britain's support for a practice widely viewed as abhorrent and cruel, especially since the European Union introduced legislation to ban it in 2003.

Those rules reduced the trade a little but industry lobbying left it full of loopholes. One clause allowed EU members to grant their vessels special permits to slash fins from the majority of sharks caught, provided a few were landed intact.

Irranca-Davies's predecessors then issued 15 boats with permits to fin sharks. Since then, those vessels have killed tens of thousands of

sharks, a destruction that has coincided with sharp population declines in most species.

One mystery, however, is which vessels and fishermen are involved. The trade is regarded as so sensitive that Irranca-Davies's department, Defra, refuses to name the vessels or even the ports they operate from. One is understood to be Newlyn in Cornwall while the others are in Scotland and Wales.

A Defra spokesman said: "These fishermen would be threatened and harassed if they were identified."

The trade is driven by the high price of shark fins compared with other fish products. The fins can sell for more than £100 for 1lb. Ali Hood of the Shark Trust, which has led the fight to ban finning, said the British move was welcome but long overdue.

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

Date	#	Type of Animal(s)
10/19 a.m.	2	Humpback Whales
	50	Long-beaked Common Dolphins
	330	Risso's Dolphins
	10	Dall's Porpoise
10/18 a.m.	3	Humpback Whales
10/17 a.m.	1	Humpback Whale
	55	Risso's Dolphins
10/16 p.m.	3	Blue Whales
10/16 a.m.	2	Blue Whales
	25	Risso's Dolphins
	6	Dall's Porpoise
10/15 p.m.	15	Pacific White-sided Dolphins
	300	Long-beaked Common Dolphins
	200	Risso's Dolphins
	100	Northern Right Whale Dolphins
10/15 a.m.	4	Humpback Whales
	30	Long-beaked Common Dolphins
	200	Risso's Dolphins
10/14 p.m.	100	Northern Right Whale Dolphins
	1	Humpback Whale
10/14 a.m.	15	Pacific White-sided Dolphins
	250	Long-beaked Common Dolphins
	75	Risso's Dolphins
10/11 p.m.	25	Northern Right Whale Dolphins
	3	Blue Whales
	200	Long-beaked Common Dolphins
	2	Blue Sharks

10/11 a.m.	1	Blue Whale
	500	Long-beaked Common Dolphins
	200	Risso's Dolphins
	300	Northern Right Whale Dolphins
10/10 a.m.	20	Dall's Porpoise
	6	Killer Whales
	1000	Long-beaked Common Dolphins
	300	Dall's Porpoise
	50	Harbor Porpoise
10/9	3	Northern Elephant Seals
	1	Northern Fur Seal
	2	Blue Whales
	5	Killer Whales
10/8 p.m.	600	Risso's Dolphins
	120	Dall's Porpoise
	2	Blue Whales
	15	Pacific White-sided Dolphins
10/8 a.m.	100	Risso's Dolphins
	50	Northern Right Whale Dolphins
	200	Northern Right Whale Dolphins
10/6	5	Dall's Porpoise
	2	Humpback Whales
	50	Long-beaked Common Dolphins

¡VIVA VAQUITA!

The ¡Viva Vaquita! task force has been busy trying to spread the word about the world's most endangered cetacean, the vaquita. Visit the new website at vivavaquita.org to learn more about this little porpoise that resides just 4 hours south of San Diego.

BOOK RECOMMENDATIONS

The Greatest Show On Earth: The Evidence For Evolution. By Richard Dawkins.

Eye Of The Whale. By Douglas Abrams.

Galapagos: Preserving Darwin's Legacy
An up-to-date photographic natural history of the Galapagos Islands. By Tui De Roy.

'The World Is Blue' How Our Fate And The Oceans Are One by Dr. Sylvia Earl. A National Geographic Publication.

For Young Readers:
Billy Twitters and His Blue Whale Problem.
By Mac Barnett.

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