

Soundings



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

OCTOBER 2010

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

DATE: THURSDAY, OCTOBER 28, 2010

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

**Speaker: Panel Discussion featuring Jack Ames of the
California Department of Fish and Game, Andrew Johnson
of the Monterey Bay Aquarium and other Aquarium Sea
Otter Experts.**

**Subject: California Sea Otter Research: A Cooperative
and Coordinated Effort by Public and Private Agencies
and Organizations.**

The California sea otter is among the most studied of the marine mammals of the world. Otters are many things to the marine ecosystem: as apex predators, they are at the top of their food webs; as sentinels, with a similar biology to humans, they “watch” the near shore habitats for conditions which could be harmful to humans; as an indicator species they tell us about the overall health of the near shore ecosystems; and, as a keystone species, over a rocky substrate, they have an important impact on species not in their food web.

The study of sea otters is a time intensive and costly process which is supported by a coordinated effort by many entities, some are governmental and others are non-governmental non-profit corporations. It is also a process that is supported by a well coordinated volunteer effort.

Jack Ames, a seasoned veteran of the CDF&G will tell us about the process of capturing selected wild otters for research purposes and their return to the wild after the medical work-up has been completed. Andy Johnson, the manager of the Aquarium’s Sea Otter Research and Conservation (SORAC) program for more than a decade, and other Aquarium experts will review the medical procedures these otters undergo and the extensive, volunteer driven, post release data collection process that is essential to the overall research program.

Please join us for what promises to be an informative discussion about the California sea otter research program which, in a very large part, occurs right here in our own “back yard”

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**REGISTER NOW FOR THE 12TH
INTERNATIONAL AMERICAN
CETACEAN SOCIETY
CONFERENCE TAKING PLACE IN
MONTEREY, NOVEMBER 12-14,
Whales 2010: Inspiring a New
Decade of Conservation**



2:45pm - Porpoises & Places in Peril Effects of the BP Spill On Marine Mammals of the Gulf of Mexico - Teri Rowles
Vaquita Status and Conservation - Lorenzo Rojas-Bracho
Finless Porpoise Fitness and Conservation - John Wang

Full day, single day and half day registrations available.

**Register online at www.acsonline.org
Embassy Suites Hotel – Monterey Bay, 1441
Canyon Del Rey, Seaside, CA 93955.
November 12-14, 2010**

CONFERENCE SCHEDULE

FRIDAY

Daytime whale watching, kayaking, and hiking field trips (see ticket information)

6:30-9:30 pm Welcome Reception, Embassy Suites Ballroom

7:30 pm - In the Eye of the Whale, featuring an exhibit of his life-size, high-resolution photographs of whales - Bryant Austin, Photographer & Conservationist

8 pm - The Adventures of a Whale Painter: 50 Years in Pursuit of Cetological Correctness - Artist/author, Richard Ellis

SATURDAY

8:30 am - Welcoming Remarks - ACS president, Kathy Zagzebski

8:35 am – Whales in 2010 – Where We Are
Whales of the World – John Calambokidis
Small Cetaceans of the World - Thomas A. Jefferson
The World's Most Endangered Cetaceans – Bernd Wursig

10:20 am - Large Whale “Hotspots” – 2010-2020
Right Whales - Status in the N. Atlantic and N. Pacific – Brenda Rone

Humpbacks-Recovering or Recovered?–Mason Weinrich

Sperm Whales - Carrying the Culture of the Oceans – Hal Whitehead

1:00 pm - Dolphins in Distress
False Killer Whales in Hawaii - The Newest Endangered Cetacean – Robin Baird
Cook Inlet Belugas – Barbara Mahoney
River Dolphins Around the World - Randy Reeves

4:45 - Poster session, art show, book signings

7:00 pm - BANQUET - Sponsored by Pacific Life Foundation - with guest speaker, Randy Wells - Small Cetaceans in a Rapidly Changing World. Presentation of first John Heyning Award for Lifetime Achievement in Marine Mammal Science.

SUNDAY

9:00am – Announce winners of poster session, photo contest

9:15am - Keynote Speaker - Monica Medina
U.S. Commissioner to the International Whaling Commission (IWC) and Principal Deputy Undersecretary for Oceans and Atmosphere, National Oceanic and Atmospheric Administration (NOAA).

10:30am –The Next Decade of Cetacean Conservation
Climate Change and Cetaceans- Ian Dutton
IWC and Politics - Sue Fisher
Beaked Whales, Strandings & Sonar - Robert Brownell
Ship Strike Issues – Chris Clark

1:30 pm – The Next Decade of Cetacean Conservation, cont'd
Marine Spatial Planning and Whale Conservation – Pat Halpin
One Health – Conservation Medicine – Rosalind Rolland

2:45pm – "The Cove" – Short Screening and Q&A Session - Ric O'Barry

4:15pm – What Can ACS Do? What Can We Do? – ACS executive director, Cheryl McCormick and president, Kathy Zagzebski

5:00pm – Adjourn

* Full conference registration tickets - Include Friday night reception, all plenary sessions, panels, poster sessions, book signings, art show, and lunch on both Saturday & Sunday. **Banquet is NOT included in conference ticket price. It must be purchased separately.

ANOTHER DEADLY CHALLENGE FOR THE SEA OTTER

By Kenneth R. Weiss, Sept. 23

A number of the playful marine mammals are being poisoned by an ancient microbe that appears to be on an upsurge in warmer, polluted waters around the world.

Pity the poor sea otter.

It's been a struggle for the furry, button-nosed critter to make a comeback since being hunted nearly to extinction along California's coast.

They get chomped by great white sharks. They must scrounge in overexploited waters to find enough shellfish to eat. Their immune systems are weakened by polluted runoff and under attack by parasites that wash into coastal waters from the feces of domestic cats and opossums.

Now it turns out that some of these playful marine mammals are also being poisoned by an ancient microbe — a type of cyanobacteria — that appears to be on an upsurge in warmer, polluted waters around the world.

The discovery was made by Melissa Miller, a state wildlife veterinarian and scientific sleuth investigating the multitude of things killing otters faster than they can reproduce. The Southern Sea Otter population has dropped for two years in a row, the U.S. Geological Survey announced last month. An estimated 2,711 otters remain in Central and Southern California waters.

The first clues came when nearly a dozen otters mysteriously died in Monterey Bay in 2007. Their carcasses were taken to the California Department of Fish and Game laboratory in Santa Cruz, where Miller and others do postmortem analyses.

"I started getting otters that were clearly jaundiced, with bright yellow gums and yellow in the whites of their eyes," Miller said.

Performing necropsies, she found swollen livers that fell apart in her hands. She initially suspected a bacterial infection, leptospirosis, known for outbreaks in sea lions and found occasionally in sea otters as well. Yet all the tests turned up negative.

"I sat down and said, 'I'm seeing a new problem. I've got to back to the basics.'" She began to rule out potential causes. Poisonous mushrooms? No. Poisonous plants? No. Iron toxicity? No. Drug overdose? None of these made sense.

Then she dredged something out of her memory from veterinary school. The damaged livers were like those of a dog or a cow that died after drinking out of a scum-choked farm pond. The culprit

in those cases was a toxin, microcystin, produced by a type of cyanobacteria called *Microcystis*.

She found a lab to run tests and, sure enough, the liver sample tested positive for the *Microcystis* toxin. Yet it raised a question: How could a toxin produced in fresh water poison a sea otter?

Miller called the State Water Quality Control Board and learned that *Microcystis* blooms seemed to be occurring more often in lakes and estuaries. One was Pinto Lake, about five miles inland from Monterey Bay, where some of the yellow deceased otters had been found.

"I sent a lab tech to look at this lake," Miller said. "She called me on her cell and said, 'This is gnarly. I'm going to take pictures.'" She also took some samples.

"The best way to describe it? The lake turns the color of automobile antifreeze with chunks of broccoli floating in it," said Robert Ketley, water quality manager for the nearby city of Watsonville. "It's that grotesque. When the scum dries, it has a turquoise color to it."

The city owns much of the 100-acre lake and used to draw on it for water — but no longer. Ketley now posts signs warning people to avoid contact and to keep their pets away.

The city is investigating what's prompting the toxic bloom. A nearby pig farm is gone. Yet other farm fields drain into the lake, which also has shoreline homes that rely on septic tanks for sewage disposal.

Wayne Carmichael, professor emeritus of aquatic biology and toxicology at Wayne State University, calls *Microcystis* a premier organism. "We find it everywhere you have nutrient enrichment: nitrogen and phosphorous in warm, stagnant water. It's been documented in every country in the world."

It's a type of cyanobacteria, an ancestor of modern-day bacteria and algae, which dominated the planet more than 2.5 billion years ago. Scientists have found that different strains are reemerging with the buildup of pollution and nutrients from expanding agriculture and the modern industrial society.

The samples collected by Miller's lab tech found a super-bloom underway in Lake Pinto, with highly toxic readings. Miller teamed with Fish and Game chemists and UC Santa Cruz biologist Raphael Kudela to follow the toxic trail from Lake Pinto and other local lakes down rivers that reach Monterey Bay. Some of the toxins were also detected in ocean waters at Santa Cruz wharf.

But the results didn't explain how otters might ingest a lethal dose.

So Miller and her colleagues designed a lab experiment to test a hypothesis. With the lab reeling from state budget cuts, Miller shelled out money to buy six heaping shopping bags of live oysters, mussels and crabs to place in seawater tanks. Then they added some contaminated water from Lake Pinto.

Most shellfish filter the seawater to feed themselves, gathering microscopic food and anything else in the water. Tissue samples revealed the shellfish in the tanks had accumulated the toxin in their digestive tracts at concentrations that were 107 times higher than in the surrounding water.

The study, published by the Public Library of Science's peer-reviewed journal, documented the first case of a freshwater toxin poisoning of a marine mammal. The toxin was responsible for the death of at least 21 sea otters, a species listed as threatened with extinction.

The study also suggests that humans may be at risk if they consume shellfish harvested from river mouths, especially after the first fall rains flush toxins built up in the lakes. Public health officials do not test shellfish for freshwater toxins, only for marine toxins such as the one that causes paralytic shellfish poisoning.

Carmichael, the expert on *Microcystis*, isn't too concerned about acute human poisonings because the dose would be too small. Sea otters consume about 25% of their body weight a day in shellfish, creating perfect conditions for toxic poisoning.

CRITICALLY ENDANGERED WHALES MAY BE FLEEING RUSSIAN OIL AND GAS BOOM, OBSERVERS FEAR

ScienceDaily (Sep. 7, 2010) — Russian oil and gas company Rosneft is conducting oil and gas exploration work that may have caused the critically endangered western gray whale to flee its main feeding ground.

Tests and offshore installment of equipment by Rosneft for a major seismic survey began in late August, despite repeated calls from 12 governments, NGOs, scientists and the public to postpone the survey because of potential risks to the whales.

Rosneft started preparations for the survey last month near Sakhalin Island even though a small number of western gray whales mothers and calves were feeding in the area. Only an estimated 130 western North Pacific grey whales are left in the world, with around 30 breeding females.

Seismic surveys are done by blasting the water with acoustic noise to detect oil and gas deposits under the ocean floor.

Observers from WWF and other NGOs began monitoring Rosneft's activities and the whales in mid-

July. It appears that as of Aug. 20, only weeks after Rosneft's activities started, whales feeding in the area had already been affected.

Before those activities began, observers registered 10 to 15 of the whales feeding in the area. Now whales have only been seen migrating across the area -- not feeding.

"This is a critical problem as the whales have only a short time in

which to consume enough food to last them through the year when they migrate to their breeding and calving grounds," said Wendy Elliott, WWF's whale expert.

The company also has twice conducted seismic surveys at night, which is in violation of international standards, and even Rosneft's own guidelines.

On August 23, WWF-Russia issued a letter of concern to Russian environmental authorities, requesting an immediate stop to Rosneft's testing.

As part of a WWF initiative, more than 10,000 people have sent Rosneft emails requesting that the surveys be postponed. However, Rosneft continues to shut out public opposition to its actions with some WWF members reporting that their emails to Rosneft's outgoing President Sergei Bogdanchikov had been blocked.

Scientists from the Western Gray Whale Advisory Panel (WGWAP), a group of eminent whale scientists, have also repeatedly asked the company to postpone the surveys until the whales have left the area. A letter sent from 12 governments to the Russian government asking them to make Rosneft postpone the survey also went unheeded.

"Rosneft is irresponsibly insisting on conducting this survey when they could easily postpone the survey until next year and hold it before the whales arrive," said Aleksey Knizhnikov, Oil &



Gas Environmental Policy officer, WWF Russia. "Rosneft may be ignoring public outcry but their negligent behavior will not be forgotten, and they will have to be held responsible for any harm that comes to the whales as a result of these surveys."

Postponing the surveys would also enable Rosneft to develop the precautionary monitoring and mitigation measures that are essential to minimize the impact of the seismic survey on the whales. Monitoring and mitigation measures have already been developed by the WGWAP, and are being used by another company in the same area.

WWF and other NGOs have dozens of observers and boats on Sakhalin Island this year and will be monitoring the test and how it affects the feeding whales.

In addition, WWF is planning to approach Rosneft's new president about postponing the seismic surveys.

WHOLE FOODS MARKET® EMPOWERS SHOPPERS TO MAKE SUSTAINABLE SEAFOOD CHOICES WITH COLOR-CODED RATING SYSTEM

Partners with Monterey Bay Aquarium and Blue Ocean Institute to launch science-based wild-caught seafood rating program; plans to phase out red-rated species

AUSTIN, Texas (Sept. 13, 2010) – Whole Foods Market (NASDAQ: WFMI) today launches the first in-store color-coded sustainability rating program for wild-caught seafood and commits to phasing out all red-rated species by Earth Day 2013.

Partnering with Blue Ocean Institute and Monterey Bay Aquarium, Whole Foods Market is the first national grocer to provide a comprehensive science-based sustainability rating system for wild-caught seafood. The system's green, yellow, and red ratings make it easy for shoppers to make informed choices at the seafood case. Green or "best choice" ratings indicate a species is relatively abundant and is caught in environmentally friendly ways; yellow or "good alternative" ratings mean that some concerns exist with the species' status or catch methods; and red or "avoid" ratings mean that for now the species is suffering from overfishing, or that current fishing methods harm other marine life or habitats. The new initiative expands upon the sustainable seafood program that Whole Foods Market has had with the Marine Stewardship Council (MSC) since

1999, and the new ratings apply only to non-MSC-certified fish.

"At the end of the day, it's a team effort. Our customers, buyers, fishermen and fishery managers can all make smart decisions that move us in the direction of greater seafood sustainability," said Carrie Brownstein, Whole Foods Market seafood quality standards coordinator. "The new color-coded rating system is a transparent way to provide sustainability status information. This new program, along with our promise to phase out red-rated species, deepens our commitment to having fully sustainable seafood departments."

With the Food and Agriculture Organization of the United Nations reporting that 80% of fisheries are fully exploited, over-fished, or depleted, Whole Foods Market's is combining the passion of its customers, the commitment of its skilled seafood buyers, and the dedication of its many seafood suppliers to help reverse this trend.

"We're delighted to help Whole Foods Market expand its commitment to offering seafood from sustainable sources," said Michael Sutton, vice president of the Monterey Bay Aquarium, who oversees its Seafood Watch program, montereybayaquarium.org. "Whole Foods Market is a leader in the field, and its decision will have a real impact on seafood suppliers and other retailers. Its in-store education and commitment to phase out red-rated seafood will help raise awareness and improve fishing practices around the world."

"Blue Ocean Institute applauds Whole Foods Market's continued commitment to consumer education. Our rankings represent authoritative science that examines the key factors affecting the health of ocean populations," said Dr. Carl Safina, MacArthur Fellow and founder of Blue Ocean Institute. "The rankings on the Whole Foods Market signs reflect the efforts of seafood science experts. Each also represents information consumers can understand and trust. This partnership will give seafood lovers the tools they need, where they need them—at the seafood counter—to make informed choices on behalf of ocean-friendly seafood."

Blue Ocean Institute and Monterey Bay Aquarium are both highly respected for the strength of their science-based seafood programs, which evaluate species and fisheries on life history, abundance, habitat impacts, management

practices and bycatch. Both organizations provide customers with information on the sustainability status of fisheries that are not certified by the MSC. Whole Foods Market continues its ongoing partnership with the MSC, the world's leading certification body for sustainable wild-caught seafood. It uses a multi-stakeholder, international market-based approach to provide incentives for fisheries to address key issues such as overfishing and bycatch. The blue MSC ecolabel identifies wild-caught seafood products that are MSC-certified.

Whole Foods Market previously stopped selling especially vulnerable red-rated species such as non-MSC-certified Chilean sea bass, orange roughy, bluefin tuna, sharks, and marlins (with the exception of Hawaii-caught blue marlin, sold only in Hawaii stores). All swordfish and tuna from red-rated fisheries will be eliminated from seafood counters by Earth Day 2011. By Earth Day 2012, all other seafood from red-rated fisheries will be discontinued with the exception of Atlantic cod and sole, which will be sold through Earth Day 2013.

The company's new wild-caught seafood rating program and partnerships will complement its existing farmed seafood standards, which remain the highest in the industry. Whole Foods Market requires third-party audits and traceability from hatchery to market, and they prohibit use of antibiotics, added growth hormones, added preservatives like sulfites and phosphates, genetically-modified seafood and land animal by-products in feed. Farmed seafood at Whole Foods Market carries the "Responsibly Farmed" logo to indicate that it meets these high standards.

WHALE AND DOLPHIN CONSERVATION SOCIETY PROTEST DOLPHIN DRIVE HUNTS IN JAPAN

The fishermen who hunt the dolphins have already made more than one attempt to catch dolphins and last Friday, 20 bottlenose dolphins were brought into the infamous killing cove, where some were taken alive for display in aquaria.

As we brace ourselves for more reports from the field, we are forced to reflect on the complexity of this issue, and our efforts to ultimately stop these brutal hunts. The dolphin drive hunts occur every year from September through April, and are a brutal

reminder that we have a very long way to go towards securing a safe and humane future for all cetaceans. This devastatingly cruel practice involves the corralling of dolphins at sea and driving them into the confines of the cove in Taiji. Here they are slaughtered for meat or kept alive for sale to marine parks and aquaria across the globe. Yearly quotas for these drive hunts reach into the thousands, where small cetaceans of several species including bottlenose dolphins, striped dolphins, spotted dolphins, false killer whales and short-finned pilot whales, are taken.

There is also news that the village of Futo will restart its drive hunts this season. The last drive hunt in Futo was conducted in 2004 where 14 bottlenose dolphins were sold to aquariums, 5 were killed for research purposes and distributed for local consumption and one dolphin was released after attaching transmitters. And at least 5 dolphins died of shock.

Since the release and worldwide distribution of the Academy award-winning documentary, *The Cove*, WDCS was hopeful that shining a light on these hunts would be the first step towards their end. Unfortunately, both the government and the fishermen remain steadfast in their commitment to kill these animals for their meat or as a means of pest control, or to sell them alive to marine parks. We are hopeful that through continuing awareness and commitment to education and outreach in Japan that the tide will turn and this archaic practice will be abandoned.

Until then, WDCS will continue to work for an end to these brutal drive hunts. We have been active in confronting the dolphin drive hunts in Japan on a number of levels, from raising awareness of the hunts, taking part in peaceful protests and visiting Japan to bear witness to them. We have worked with the marine mammal scientific community to garner a public statement against these hunts, and helped secure a congressional resolution condemning the practice. WDCS has also worked to procure the growing acknowledgement from the public display industry of its complicity in fueling the dolphin drive hunts through the demand generated by marine parks and aquaria that either directly, or indirectly, source live dolphins from these hunts. And within Japan, we have developed an educational campaign with our Japanese colleagues to educate the public about whales, dolphins and their suffering in drive and other hunts. In the next few years, WDCS will seek to expand its education program within Japan and

continue its outreach work on location in Taiji. See our report, *Driven by Demand*.

Things that you can do!

* Watch for our web campaign and video updates from the ground in Taiji and elsewhere in Japan to air in October!

* Join us for the annual International Day of Protest against the dolphin drive hunts! Details will be forthcoming as the time and locations are announced for Embassies and Consulates around the world.

* Sign the Petition to encourage the village of Futo not to return to the drive hunts and end them for good <http://www.thepetitionsite.com/takeaction/886/322/136/>

* Send a letter to your nearest Japanese Embassy or Consulate to the following contacts:

Mr. Naoto Kan

Prime Minister of Japan

Fax: +81-3-3581-3883

E-mail:

<http://www.kantei.go.jp/foreign/forms/comment.html>

Ambassador Ichiro Fujisaki

Embassy of Japan in Washington D.C.

2520 Massachusetts Ave., N.W.

Washington D.C. 20008-2869

Fax: 202-328-2187

E-mail: jicc@embjapan.org

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

Date	#	Type of Animal(s)
9/23 a.m.	4	Humpback Whales
	100	Risso's Dolphins
9/22 p.m.	1	Humpback Whales
	50	Risso's Dolphins
	1	Tufted Puffin
9/22 a.m.	15	Humpback Whales
9/21 a.m.	30	Humpback Whales
	150	Pacific White-sided Dolphins
	50	Northern Right Whale Dolphins
9/20 a.m.	22	Humpback Whales
	50	Risso's Dolphins
	80	Northern Right Whale Dolphins
	2	Harbor Porpoise
9/19 p.m.	30	Humpback Whales
	4	Blue Whales
9/19 a.m.	3	Humpback Whales
	20	Risso's Dolphins
9/18 p.m.	2	Humpback Whales
	1	Blue Whale

	4	Killer Whales
9/18 a.m.	2	Blue Whales
	7	Killer Whales
9/17 p.m.	3	Blue Whales
	1	Unidentified Shark
9/17 a.m.	1	Humpback Whale
	2	Blue Whales
	800	Pacific White-sided Dolphins
	500	Northern Right Whale Dolphins
	2	Dall's Porpoise
	1	Harbor Porpoise
9/16 a.m.	5	Humpback Whales
	7	Killer Whales
	1	Fin Whale
9/15 p.m.	1	Humpback Whale
	7	Killer Whales
9/15 a.m.	4	Humpback Whales
	2	Blue Whales
9/14 a.m.	15	Humpback Whales
	3	Blue Whales
	1	Fin Whale
	850	Pacific White-sided Dolphins
	800	Northern Right Whale Dolphins
9/13 p.m.	8	Humpback Whales
	1	Fin Whale
		Pacific White-sided Dolphins
		Risso's Dolphins
		Harbor Porpoise
9/13 a.m.	7	Humpback Whales
	5	Blue Whales
	250	Risso's Dolphins
	200	Northern Right Whale Dolphins
	20	Harbor Porpoise

BOOK RECOMMENDATIONS

The Death and Life of Monterey Bay: A Story of Revival. By Stephen Palumbi (Hopkins Marine Station)

Field Guide to Marine Mammals of the Pacific Coast: Baja, California, Oregon, Washington, and British Columbia. Written by Sarah Allen, Joe Mortenson, and Sophie Webb. 2010 UC Press

The Flooded Earth: Our Future in a World Without Ice Caps. By Peter Ward

Almost Chimpanzee: Searching For What Makes Us Human In Labs, Rain Forests, Sanctuaries and Zoos. By Jon Cohen

American Cetacean Society
Monterey Bay Chapter
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ACSMB

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