CENSUS OF MARINE LIFE
U.S. Program Office

U.S. CoML Newsletter

Census of Marine Life Program Office

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1201 New York Ave. Suite 420
Washington D.C. 20005 USA

Upcoming Events/Meetings:

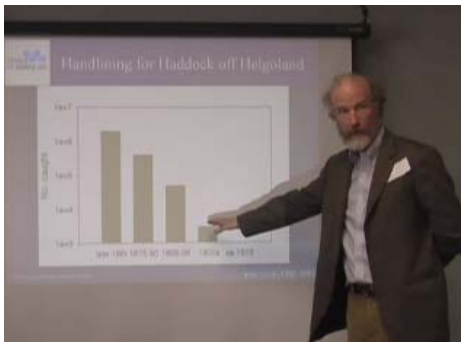
Capitol Hill Oceans Week
June 5-7
Washington, DC

USNC Fall Meeting
October
Portsmouth, NH

CoML All-Program Meeting
November 14-16
Auckland, New Zealand

Inside this issue:

NOAA Hosts Census of Marine Life Seminar Series



Dr. Jeff Bolster, of the University of New Hampshire, discusses the History of Marine Populations (HMAP) project.

On April 16th, the US CoML Committee Chair, Dr. Andy Rosenberg, with the assistance of Dr. Reg Beach of NOAA's office of Ocean Exploration, kicked off a series of lectures for a NOAA audience highlighting the valuable contributions that the CoML is making to assess and explain the diversity, distribution and abundance of marine life in the oceans-past, present and future. In all, the full series will consist of twenty CoML marine scientists presenting on topics from pole-to-pole, shore to the abyss and from microbes to coral reefs to top predators, covering every CoML project. In addition to great pictures of new species, discoveries and insight, each speaker discusses the relevance of their project to NOAA. Each talk has been webcast and digitally recorded to be compiled into an accurate snapshot of the progress of CoML research within the US to date.

There are still a few talks left! All talks take place from **11:45 AM to 12:45 PM** at NOAA in Silver Spring, MD. If you can't make it out to Silver Spring, MD, live video webcast feed is available at http://www.explore.noaa.gov/about/seminar.html, so be sure to tune in (all past talks are also available for download). Below is a schedule for the rest of the series:

6/5/2007
Dr. Mike Sinclair, Department of Fisheries and Oceans, Canada
The Canadian Census of Marine Life
1305 East-West Highway, Silver Spring, MD Rm. 8150

6/6/2007
Dr. Ian Jonsen, Dalhousie University, Canada
Future of Marine Animal Populations
1315 East-West Highway, Silver Spring, MD Rm. 11836

6/7/2007
Dr. Mitch Sogin, Marine Biological Laboratory
International Census of Marine Microbes
1315 East-West Highway, Silver Spring, MD Rm. 13836

EXPLORE

CENSUS OF MARINE LIFE
UNITED STATES

USNC Holds Spring Member's Meeting

The U.S. National Committee

The U.S. National Committee (USNC) of the Census of Marine Life (CoML) recently held its biannual meeting May 9-10, 2007 at the Consortium for Oceanographic Research and Education in Washington, DC. Led by chair Dr. Andy Rosenberg, the major theme of this meeting revolved around the future of CoML, not only in the United States, but as a global program, beyond 2010.

CORE President RADM (ret) Richard West kicked the meeting off by talking about the importance of promoting CoML and its biodiversity research value to the entire US marine community. Members spent a significant amount of time discussing the structure, location, and mechanism in which a sustained CoML program might be possible. Other key issues discussed included a presentation by Dr. Jo-Ann Leong on the difficulties and challenges to undertaking research in Hawaii, an update on the US Regional OBIS node (RON) and a new OBIS strategy document, and a status report on the planned 2007 workshop on the importance of biological ocean observing. In addition, the entire U.S. National Committee was invited to a reception for the public launch of the on-line Encyclopedia of Life Project at the National Academy of Science Building (http://www.eol.org for more information).

Members of the USNC were joined in discussion by a number of federal representatives, including special presentations by Dr. Bonnie J. Ponwith, Deputy Director of NOAA's National Marine Fisheries Service, to discuss common goals of NOAA and CoML, and by Dr. Julie Morris, Director of the Division of Ocean Sciences of The National Science Foundation, who talked about the Ocean Research Priorities Plan and other activities of the Joint Subcommittee on Ocean Science and Technology (JSOST). Other meeting participants included representatives from the US RON, NOAA's office of Ocean Exploration, NOAA's IOOS Program Office, NSF's Office of Polar Programs, Ocean.US, CoML Education and Outreach, the CoML Scientific Steering Committee, and the CoML Secretariat.

The meeting adjourned early on the second day so as to provide an opportunity to go up to Capitol Hill to visit with the staff of each USNC members' local Senatorial Representative. Concluding a long day, USNC members had six meetings in all, to educate Senate staff on the importance and the scope of the science that Census of Marine Life program undertakes. Overall, the spring meeting helped build momentum for the CoML program within the United States while developing the foundation for the future of the entire CoML program post 2010. The next meeting of the USNC will be held in the fall in New Hampshire, hosted by Chair Andy Rosenberg.

Capitol Hill Oceans Week
June 5, 6, 7

Every year Capitol Hill Oceans Week brings together a wide-range of stakeholders to discuss current ocean and coastal issues. CoML will be hosting a luncheon panel on June 6 entitled *Incorporating Biological Data in Ocean Observatories.* For more information, go to http://www.nmsfocean.org/chow2007/

Biodiversity Workshop Report Available

The USNC is pleased to announce that the official report from the US National Committee workshop entitled *Approaches for Researching the Roles of Marine and Coastal Biodiversity in Maintaining Ecosystem Services* is now available. The workshop, held in September 2006, was sponsored US Census of Marine Life, NOAA's Oceans and Human Health Initiative, NOAA Fisheries, NOAA Office of Ocean Exploration and the Sloan Foundation. More than 70 scientists and program managers from all over the US and Canada gathered to discuss the effect of marine diversity as a predictor of ecosystem function. To read about this in more detail, download our final workshop report at http://www.coml.us/Dev2Go.web?Anchor=2006_biodiversity_workshop

2007 CORE Public Policy Forum a Success

On March 7, 2007, The Consortium for Oceanographic Research and Education (CORE), the institutional home of the USNC Program Office, successfully sponsored the annual Public Policy Forum on Capitol Hill. CORE's annual Public Policy Forum is an excellent opportunity to represent the ocean research community on Capitol Hill, as well as receive updates on the status of ocean research with in the federal government.

The day began with a keynote address by Representative Madeleine Z. Bordallo, Chairwoman of the subcommittee on Fisheries, Wildlife and Oceans. There was great participation and attendance by federal agency leadership, Congress, industry and the academic and private ocean research and education community. The panel format was well received and informative with standing-room-only for most of the forum. Climate change/global warming was discussed several times during the day as Congress and federal agencies grapple with the need to both monitor and manage the environment. One of the highlights of the day was a lunchtime panel that featured the Co-Chairs of the Joint Ocean Commission Initiative (JOCI), Jim Watkins and Leon Panetta, and Co-Chairs of the House Ocean Caucus (HOC), Congressmen Sam Farr (CA) and Tom Allen (ME). Senator John Warner (VA) also dropped-in. Following the forum, a Coastal and Ocean Celebration and Reception, jointly sponsored by CORE and the Coastal States Organization, took place in the Hart Senate Office Building. Later that week, representatives from the CORE Membership met with various Representatives, Senators and their staffs from key committees to discuss the future of ocean research within the US Government.

CoML Senior Scientist Ron O'Dor Receives Grants for OTN Project

CoML Senior Scientist, Dr. Ron O'Dor

CoML Senior Scientist, Ron O'Dor was happy to announce in February that he has received over $35 million in grants for the Ocean Tracking Network (OTN) from the Canada Foundation for Innovation (CFI) and the Natural Sciences and Engineering Research Council (NSERC).

The Ocean Tracking Network, headquartered at Dalhousie University brings together top marine scientists from around the world, in the most complete examination of marine life and ocean conditions to date. This project grew out of the successful technologies demonstrated over the last five years by the Census of Marine Life (CoML) Pacific Ocean Shelf Tracking project at the Vancouver Aquarium and the Tagging of Pacific Pelagics project at Stanford and UC Santa Cruz Universities. OTN will be essentially uniting both of these technologies into one project.

A global monitoring system will track the movement and behavior of diverse marine species. The network will establish 'listening curtains,' integrating innovative Canadian-made acoustic and archival tracking technology, in 14 ocean regions covering the Earth. The results will provide the most comprehensive data ever available to inform marine management practices. Learn more about OTN at www.oceantrackingnetwork.org

OCEAN TRACKING NETWORK

Census of Marine Life Database Up and Running!

The CoML Secretariat was pleased to announce in March that the new Census of Marine Life Database is up and running. Of the four-component database, both the community section (information about CoML projects, researchers and staff) and the bibliographic section (includes publications or links to publications associated with CoML) are fully operational. The two additional components, CoML Milestones and Schedules, will become operational later in the year. The database is continually being populated, so check back often. You can find the database at http://db.coml.org/

Education Corner

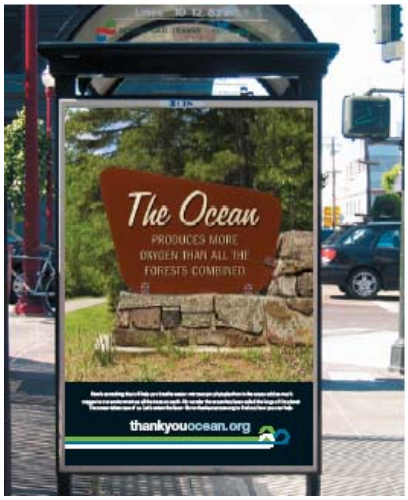
Welcome to the first installment of the "Education Corner" of the US CoML newsletter. The US CoML recognizes that education is and should be a very important part of what we do with all of our projects. The "Education Corner" will highlight some of the great education activities our census scientists are involved with, as well as other interesting and relevant education information we find. You can also view our new education page on the US CoML website at http://www.coml.us/?anchor=coml_us_ed.

PROGRAM OF THE QUARTER

The Tagging of Pacific Pelagics (TOPP) program teamed up with Yahoo! to create an interactive website solely dedicated to sea turtles. One of the main themes of the website is the tracking of eleven leatherback sea turtles as they travel from the beaches of Costa Rica to the Galapagos Islands in their annual migration. Over a 14 day period in April, users of the site could choose a favorite sea turtle and track its movement. Students at a charter school in Los Altos, California tracked one of the sea turtles and even went to Costa Rica to find out more about the turtles and their nesting behavior. These students were featured on ABC, and the news clip can be viewed on the website. The website also offers an extensive amount of educational resource information for teachers and students about sea turtles including activities for students of all ages. Way to go TOPP on a great educational effort! Please visit www.greatturtlerace.com, to see what a wonderful educational tool this is!

Spotlight on the "Thank-You Ocean" Campaign

The state of California recently launched a new ocean awareness and literacy campaign called "Thank-you Ocean". The campaign features a public service announcement and billboard ads that direct viewers to their comprehensive website. "The 'Thank You Ocean' campaign was designed to instill in Californians a sense of personal connection and responsibility to our ocean and coast," reads the website. A phrase from the public service announcement explains the campaign concept: "The ocean takes care of us. Let's return the favor". The website offers interesting facts and conservation information about the ocean, as well as ways to "make a difference". The statewide campaign is organized by NOAA National Marine Sanctuary Program and the State of California Resources Agency and implemented by the California Ocean Communicators Alliance. It receives funding from the National Marine Sanctuary Foundation, NOAA, the California Ocean Protection Council and the David and Lucile Packard Foundation. To see what it's all about, go to www.thankyouocean.org.



Examples of the Thank-you Ocean advertising campaign: left, bus shelter advertisement, below, example of a bulletin board ad, right, magazine/ newspaper print. Go to the website to see the Public Service Announcement!

Seven Questions with Dr. James Baker

A regular feature of the US CoML Newsletter, we ask a member of the CoML Community seven questions This edition features former administrator of NOAA and member of the CoML Scientific Steering Committee, Dr. James Baker.

HM: How did you originally get involved with the Census of Marine Life?

JB: In the late 1990s, when I was the Administrator of NOAA, I was approached by Jesse Ausubel and Fred Grassle who talked with me about their idea of a Census of the Fishes. I was intrigued by the idea and thought it had real merit, having had a long history with developing large cooperative programs in oceanography, and with a special interest in fishery management because of my NOAA job. As I recall, the leadership of the National Marine Fisheries Service was less enthusiastic than were their fisheries scientists. But they all took it under advisement and came along as the community developed the program into a Census of Marine Life. I stayed involved, and after I left NOAA, my colleague Sue Fruchter and I helped Fred Grassle as he developed the OBIS concept. Later I joined the international steering committee.

You have an illustrious career working for the oceans: JOI, NOAA, GOOS, etc. What originally attracted you to the ocean and marine life?

JB: I grew up in Long Beach, California with sea captains living on either side of our house and spent a lot of time at the beach – so I knew something of the world of the sea from an early age. But I didn't get really involved until I was in graduate school in physics at Cornell, and my roommate's brother got a summer fellowship at Scripps to "go to the South Seas." That sounded like fun – so I arranged for one, too. We didn't go to the South Seas, just south of San Diego. But I was fascinated with the world of science at sea – especially the interdisciplinary aspect where we all worked together catching and preserving specimens, titrating sea water samples, and making echo soundings. I stayed with it after graduate school and ended up making measurements of ocean currents all around the world from Harvard and the University of Washington. In the early 1980s I moved to Washington, D.C., to head up Joint Oceanographic Institutions Inc. to get more involved in establishing and promoting large scale programs – like ocean satellites and the Global Ocean Observing System (GOOS). I helped get some more funding for some of these programs when I was head of NOAA. Now, in addition to my Census of Marine Life assignments, I am consulting for UNESCO's Intergovernmental Oceanographic Commission in Paris on GOOS and related projects, and strengthening ties to the Census and to the Global Earth Observation (GEO) program. So I've kept up the global aspect of my interests.

> "THE CENSUS HAS BROUGHT TOGETHER THE MARINE LIFE COMMUNITY IN A WAY NEVER BEFORE ACHIEVED. "
> -J. BAKER

What do you think is the Census of Marine Life's greatest accomplishment to date? What still needs to be done?

JB: The Census has brought the marine life community together in a way never before achieved. Biology in general is a field where broad synthesis has not been rewarded as much as intellectual depth in a specific topic. The Census has succeeded in enabling scientists to cooperate on a large scale, and to pull out the deep science at the same time so that relationships as well as detail are examined. I'm also impressed with the overall structure, which was put in place in the beginning, with a focus on past, present, and future. The striking results from the history reconstructions, and the sobering conclusions of the future studies give the Census a depth not seen in most scientific programs. Yet there is much to be done, particularly in synthesizing results. A focus on synthesis and laying the groundwork for post-2010 will be important in the next two or three years.

Continued on next page

Seven Questions with Jim Baker, continued

A priority of the US National Committee is planning for CoML after 2010, what is your vision of CoML in the future?

JB: Just as the Ocean Drilling Program has transformed itself every 15 years or so, the Census will do the same, and the new program will build on what has been discovered in the past. I expect that the tagging programs will show us much new information that will guide future programs. I'm also intrigued by the marine microbiology – as the famous physicist Richard Feynman once said, "there's plenty of room at the bottom," referring to the "nano" world, the same could be said of marine microbiology. I'm pleased with the links to DNA bar coding which will expand the scope of studies. I also see a major connection building with climate change – the role of ocean biology in climate change is clearly important, but little understood. The new Census will have to take on this challenge.

What advice would you have for CoML project leaders and scientists to help better educate the public on CoML research?

JB: The Census has used traditional media well, and taken advantage of new technology to get the message out. But still, the competition for attention gets stronger each year, and the more attention we can pay to outreach the better. At a recent Partnership for Observations of the Global Ocean (POGO) meeting, I suggested that we spend as much for outreach in ocean programs as we spend for ships. That may be exaggerated, but is not too far off the mark in today's distracted world. I'm impressed with what Al Gore has done for the issue of global climate change. He has followed the film *An Inconvenient Truth* by a book for the general public, a book for children, and a training program so that the message is conveyed widely by many people. This is a good example to follow. I'd also like to see us use the Census as a way to introduce science into school classes around the world.

> "THE MEDICAL COMMUNITY HAS DONE WELL BRINGING IN PRIVATE MONEY— WE NEED TO THINK ABOUT HOW WE CAN DO THIS IN OCEANOGRAPHY"
> -J. BAKER

Federal funding for NOAA has dropped over the last few years. As a former administrator of NOAA, is there anything NOAA or the ocean community can do to improve the situation?

JB: The current administration has not been kind to NOAA, and the lack of funds only emphasizes all the things that are not being done. When I came to NOAA in 1993, I said that it was an agency with a $4 billion mission stuffed into a $2 billion budget. And during the Clinton Administration we were able to raise the budget from below $2 billion to well over $3 billion. But it's not nearly enough. As I look at the challenges as outlined by the two recent ocean commissions, I would say that NOAA needs more like $10 billion to do the jobs assigned to it. And other ocean-related programs are similarly squeezed. The ocean commissions and the follow up now in Congress are very effective in making the point that more funding is needed for oceans programs in general. But we are constrained by the overall federal budget – I expect that funding for research and development in general will not change much from the approximately 10% of the discretionary budget that it has been for the last 30 years. The only way to break out of this constraint is to find new sources of funding. Today there is enormous wealth in the private sector, which has not been tapped for oceanography. The medical community has done well in bringing in private money – we need to think about how we can do this in oceanography.

Is there any new ocean technology or movement that you are most interested in or you think has a lot of promise?

JB: There are two areas of technology that excite me – satellites and communications. Satellites give us a global coverage not available any other way, and we are far from exploiting their capabilities. Sadly, even when we have shown what they can do, as with altimetry and scatterometry, we haven't found a way to continue these measurements for the indefinite future. So there is much to be done there. I'm impressed with the progress of the Venus and Neptune programs as they begin to wire up the sea floor for data transmission – that plus robotic and animal carried instruments is leading us towards a fully observed ocean. I'm also intrigued by the new internet-based means of communication from Wiki sites to ocean data-rich Google-like systems to interactive video games. We've really just begun to scratch the surface of this transformative technology.

Program Office News

Check out our Video Clip of the Quarter!

New Feature

Global Warming, 1958

Al Gore's popular film, *An Inconvenient Truth,* isn't the first documentary to be made about global warming. Click on the link below to watch a clip from *The Unchained Goddess*, a documentary made in 1958. http://www.youtube.com/watch?v=0lgzz-L7GFg

USNC Program Office Welcomes New Staff Member

The USNC Program Office is pleased to welcome Melissa Brodeur to the staff. Melissa comes to the Census of Marine Life from the University of New Hampshire, where she worked as a Laboratory Technician at Jackson Estuarine Laboratory, situated on the scenic Great Bay Estuary. Melissa received her MS in Earth Sciences and Oceanography from the University of New Hampshire. She is very excited about joining the staff as a Research Assistant and hopes that her experience in conducting research in estuarine, coastal and shelf environments can be a benefit to the research staff and CoML.

Melissa Brodeur

US CoML Committee Members

Dr. Andy Rosenberg (USNC Chair), University of New Hampshire, Durham, NH

Dr. Vera Alexander (SSC Liaison), University of Alaska, Fairbanks, AK

Dr. Judith Connor, Monterey Bay Aquarium Research Institute, Monterey, CA

Ms. Penelope Dalton, University of Washington, Washington Sea Grant, Seattle, WA

Dr. Sylvia Earle, Conservation International, Oakland, CA

Dr. Daphne Fautin, University of Kansas, Lawrence, KS

Dr. Daniel Finamore, Peabody Essex Museum, Salem, MA

Mr. Terry Garcia, National Geographic Society, Washington, DC

Dr. Pat Halpin, Duke University, Durham, NC

Dr. Jo-Ann Leong, Hawai'i Institute of Marine Biology, Kaneohe, HI

Mr. Paul Kelly, Ret. from Rowan Industries,

Dr. Judith Kildow, Monterey Bay Aquarium Research Institute, Monterey, CA

Dr. Clarence Pautzke, North Pacific Research Board, Anchorage, AK

Dr. Shirley Pomponi, Harbor Branch Oceanographic Institution, Fort Pierce, FL

Dr. Paul Sandifer, Hollings Marine Laboratory, Charleston, SC

Dr. George Sedberry, Marine Resources Research Institute, Charleston, SC

Dr. John W. "Wes" Tunnell, Harte Research Institute, Corpus Christi, TX

For member's biographies visit our website at:
http://www.coml.us/dev2go.web?anchor=coml_us_leadership