

What's New with CoML?
March – April 2004

- **All Program Meeting.** The Second CoML All Program Meeting will be held 30 October – 4 November 2005 (preliminary dates) in Frankfurt, Germany. It will be held in conjunction with the 2005 International Senckenberg Conference on marine biodiversity, which will be organized by CeDAMar project manager, Pedro Martinez. The goals of the All Program Meeting will likely be a mid-term synthesis of the research and identification of needs for the latter half of the program. The meeting will focus on integration of projects and working groups based on the *ocean realms* (of the Research Plan). More information on the conference and meeting will be available shortly... Please mark your calendars!
- **Scientific Steering Committee (SSC).** The SSC met 11-13 February 2004 in Penang, Malaysia, hosted by the WorldFish Center. The SSC elected Victor Ariel Gallardo of Chile as Vice Chair of the SSC, a new position created in light of the ever-growing demands of the Census. The SSC agreed that to manage the rapid growth of CoML, the SSC and other leadership elements (National and Regional Committees, Secretariat) need to evolve rapidly, with clearer authorities and responsibilities. A subcommittee of the SSC formed under Ian Poiner to make proposals for stronger management structures. There is also a need for more stringent tracking (personnel, funding effort and success) of the various program Elements (e.g., OBIS, HMAP, FMAP, Ocean Realm Field Projects, Education & Outreach). The SSC and Secretariat have been working hard on their own operational plans for the next 2-3 years and are consulting the leaders of CoML projects and national/regional committees to make sure we all move forward in concert.

The next SSC meeting will take place on 1-2 July 2004 in Horta, Azores in conjunction with the port call of the MAR-ECO *G.O. Sars* cruise. On 1-2 December 2004, the SSC will meet in Paris, France, hosted by Patricio Bernal and the IOC. Representatives from all CoML National and Regional Committees (both formed and under organization) are requested to attend the Paris meeting.

- **Secretariat.** The CoML International Secretariat at CORE has hired two new Research Assistants who will be assisting with the CoML program. We would like to welcome Kelly Droney and Ben Chicowski to the team.
- **Education and Outreach.** URI's Office of Marine Programs, coordinator of the Education & Outreach network, has made a number of improvements to CoML's portal (<http://www.coml.org/>) that have enhanced the information available on the site, while giving it a more "human" feel. Some of the more noticeable changes include: photos of Census researchers engaged in Census work and a quick links section that provides direct access to projects on the home page; contact information and brief project descriptions are now at the beginning of the project pages; and a media contact list has been added to the media section, so reporters

have direct and easy access to project spokespersons, who can guide them to the appropriate person to interview. This contact list is in addition to the Expert List, which can be sorted by field of expertise, country and language.

Even more resources are now available on the Census Partners Resource to help projects establish a visual identity for the Census. From this password-protected site, it is possible to download everything from Census logos, in multiple color configurations, to new press release stationery, to PowerPoint templates, to a spiffy leafy dragon seahorse Census folder. Also, in this section, is an archive listing all media coverage received to date, with PDFs of each article/interview available for downloading from the FTP site. These are only a few of the improvements that have been made to make the portal more useable and user-friendly. For a complete look, check out <http://www.coml.org/>.

The E&O Team at URI has received funding to promote awareness of the Census of Marine Life globally via public service announcements on CNN International.

The Outreach Liaison Network will hold its next meeting in Paris, France on 1-2 December 2004.

- **Ocean Biogeographic Information System (OBIS).** A new OBIS Portal is now online (<http://www.iobis.org/>). At the end of March, OBIS registered 2.84 million species with the Global Biodiversity Information Facility (GBIF – <http://www.gbif.org/>). In the race for the position of largest data contributor, early this month this new count made OBIS the provider serving the most records to GBIF (i.e. more than all terrestrial and other sources of data from all countries). It is currently second to the Swedish Museum.

OBIS – in partnership with the IOC International Oceanographic Data and Information Exchange, the International Association for Biological Oceanography (IABO), and the Flanders Marine Institute – will hold a major international workshop on Ocean Diversity Informatics in Hamburg, Germany, 29 November – 1 December 2004. Abstracts are due 31 May 2004. For more information, contact the Conference Secretariat (obi@vliz.be) or visit: <http://www.vliz.be/obi/>.

A major goal for the next 2-3 years is to establish an international network of national and regional nodes with common data access through the OBIS Portal. This network of Regional Nodes is developing in conjunction with national organizations such as: Fisheries and Oceans Canada and Centre of Marine Biodiversity (Canada); NaGISA and Japan GTI (Japan); CSIRO and the National Oceans Office (Australia); National Institute of Water and Atmospheric Research (New Zealand); the National Oceanic and Atmospheric Administration's National Ocean Data Center, National Marine Fisheries Service, and the National Biodiversity Information Infrastructure (USA); and, in Europe, through cooperation among national data centers and EU projects (MARBEF/EurOBIS, EuroCAT/Species 2000 Europa, BioCASE, BIOMARE, MarLIN, SAHFOS, and the Flanders Marine Data and Information Centre). OBIS Regional Nodes are also

proposed for South America, Southern Africa, and the Indian Ocean. On March 13-14, the OBIS International Steering Committee (ISC) convened a workshop of representatives from countries that have put forward proposals to host a Regional node. The workshop was the first opportunity for all potential OBIS node representatives to meet in person and was considered the foundation meeting of the global OBIS network. The aim was to develop a management plan supported by all the participants as to how OBIS could be effectively globalized and how the network could achieve growth over the next few years. The objective is that OBIS becomes a self-funded, independent global marine biological information system that will be one of the major legacies of CoML.

The management and administrative structure necessary to run a Federated system of OBIS Nodes was discussed at length at the workshop. The current structure under consideration consists of the OBIS ISC as the over-arching governance forum, with a Nodes “management committee” below the ISC that has the role of managing the OBIS regional nodes and development of the network. In addition it is also proposed that there be several sub-committees, also reporting to the OBIS ISC, which would include a Taxonomic; Technical; Outreach-Education and Partnerships sub committee. It is envisaged that there will be overlap in membership the committees to ensure continuity between the activities of the ISC, its various sub-committees and the Nodes Management Committee. The tentative OBIS technical goals and management plans for the next 2 years have been shared with all CoML program leaders for feedback.

The OBIS Secretariat/Portal (Rutgers) plans to recruit a full-time General Manager to help coordinate worldwide development of OBIS. A job description should be posted at the CoML Secretariat site soon.

The Ocean Research Advisory Panel, the advisory body to the leaders of US government agencies concerned with the oceans, convened a workshop entitled “Stakeholder Workshop On USA Priorities for the Ocean Biogeographical Information System” on 24-25 March 2004 in Washington DC. The workshop was aimed at addressing priorities for the development of OBIS within U.S. waters and integration with the Integrated Ocean Observing System. Participants received the event enthusiastically and offered strong input on all issues covered. Under guidance from workshop chair Andy Clark, participants articulated those OBIS services that should first be developed for the U.S. EEZ, discussed a regionally-based strategy for U.S. OBIS development that would operate smoothly at a national level, and tackled the issue of how to integrate activities between those building regional observing systems and those developing biological data services. The workshop also sought to define financial and governance models for the sustained operation of OBIS in the U.S. Participants addressed the potential applications of OBIS from the user perspective, such as the use of OBIS data in environmental impact statements and the requirements for strong quality control on data for these purposes. Finally, the group made recommendations on steps to move OBIS forward that will be presented to the

ORAP at its June meeting, including bolstering outreach to potential users. A report will be available shortly. For more information on the workshop, visit: <http://www.coreocean.org/Dev2Go.web?id=258660> or contact the NOPP Program Office at nopp@coreocean.org.

- **History of Marine Animal Populations (HMAP).** The first HMAP Modeling workshop will take place in Esbjerg the 21-23 April with 19 participants from Denmark, US, UK, Russia, South Africa, Belgium. More information will be available at the HMAP web site (<http://www.hmapcoml.org/>).

Planning of the annual HMAP workshop the 11-13 August has started and invitations have been sent to HMAP Project Leaders. Information will available shortly at the HMAP web site.

The HMAP Open Science Conference, Oceans Past – Multidisciplinary Perspectives on the History of Marine Animal Populations, will take place from 24-27 October 2005 at Hotel Comwell in Kolding, Denmark.

- **Future of Marine Animal Populations (FMAP).** FMAP is beginning to plan its next major network meeting, probably in Japan in early 2005.

The FMAP team has received funding from the Pew Charitable Trusts to support a new project: The Global Shark Assessment. The aims of this project are threefold: 1) to locate data and develop analysis techniques that demonstrate the magnitude of the declines in shark populations on a global scale; 2) to effectively communicate the results; and 3) to force conservation action.

FMAP has also participated in two recent papers:

Myers, R.A., S.A. Levin, R. Lande, F.C. James, W.W. Murdoch, and R.T. Paine. 2004. Hatcheries and endangered salmon. *Science* 303:1980.

Baum, J.K., and R.A. Myers. 2004. Shifting baselines and the decline of pelagic sharks in the Gulf of Mexico. *Ecology letters* 7(2):135-145.

Ocean Realm Field Projects

- **Gulf of Maine Area Program: GoMA.** On April 23, the Gulf of Maine Census, in cooperation with the Gulf of Maine Ocean Observing System (GoMOOS), convened the first meeting of the Gulf of Maine Ocean Data Partnership. A year in the making, the partnership will help join the missions of the Census of Marine Life and the Integrated Ocean Observing System. It is bringing together diverse agencies and organizations from the U.S. and Canada to create a system of dynamic exchange of databases relating to the biology, oceanography, geology, and human use of the Gulf of Maine. To date, 15 federal, state and nonprofit organizations, all of which generate or manage ocean data on a routine basis, have signed a Memorandum of Understanding agreeing to the Partnership. The Partnership will be hosted by GoMOOS and governed by an independent board representing the partners. The fruits of the Partnership will be a key component in

a Dynamic Atlas of the Gulf of Maine.

At a joint meeting of the GoMA Science Steering and Policy Advisory committees in Woods Hole, March 25-26, the Committees articulated the core purpose of the Gulf of Maine Census: to understand what generates biodiversity in the Gulf of Maine area, how it is maintained, what causes it to change, and how it contributes to biological production. This knowledge is intended to contribute to the goal of ecosystem-based management in the Gulf of Maine. Science Working Groups are working toward an end-of-year deadline for preparing the framework for the research needed to reach this goal. The meeting also endorsed the participation of the Gulf of Maine Census in the Discovery Corridor, a concept inspired by the Department of Fisheries and Oceans – Canada. The Corridor, not yet finally defined, will stretch from the intertidal zone to the deep waters and the New England Seamounts, crossing multiple habitats. The Corridor will serve as an organizing tool to focus the attention of many resources on a complete description of biodiversity and physical characteristics within its boundaries. In addition, the committees agreed that the Gulf of Maine Census, in cooperation with the World Wildlife Fund-Canada, should seek to incorporate into its Gulf of Maine Biogeographic Information System (GMBIS) the benthic and pelagic “seascapes” WWF has defined as units of ecological analysis.

GoMA also has several cruises scheduled for the (northern hemisphere) spring:
May 7-25, OE/NURP Seamount (PIs: Watling/Babb/Auster), Ron Brown
May 17-28, Slope biodiversity (PI: Fogarty), Delaware II
June 2-11, Bear Seamount biodiversity (PI: Vecchione), Delaware II

- **Mid-Atlantic Ridge: MAR-ECO.** The MAR-ECO cruise on the G.O. Sars sets sail from Bergen, Norway, 5 June 2004. On 3-4 July, the ship will dock in Horta in the Azores, where the CoML Secretariat and Scientific Steering Committee will greet the research teams. While the crew changes, there will be an open ship opportunity for interested members of the public. The cruise is divided into two one-month “legs”; the first travelling south along the mid-Atlantic Ridge from south of Iceland to the Azores, the second travelling north along the same route, but particularly concentrating in two sub-areas, one just north of the Azores (approx 43°N), the second near the Charlie-Gibbs Fracture Zone (approx 52°N). The exciting two-months will end in Bergen on 4 August. Details of the cruise and day-to-day highlights will be available on MAR-ECO’s ship-to-shore web site, <http://www.mar-eco.no/ship>.

The MAR-ECO team has revamped its website at <http://www.mar-eco.no/>. The new public site is more user-friendly with direct links to information cruises, news and contacts. There is also a new learning section featuring backgrounders on oceanographic concepts as well as the components of the MAR-ECO project. Multidisciplinary classroom activities are also under development.

An international MAR-ECO poster is now available in nine different languages.

- **Chemosynthetic Ecosystems: ChEss.** The ChEss -WUN (Worldwide University Network, <http://www.wun.ac.uk/>) proposal for the ChEss SE Pacific field programme is gaining momentum since the workshop in Scripps last January. Between 15-19 April, Chris German (SOC), Chuck Fisher (Penn State/Ridge 2000), Lisa Levin (Scripps) and David Pilsbury (chief executive of WUN) will be in Washington for meetings with NSF and with the global WUN, where the SE Pacific proposal will be presented and discussed.

The web page for the SE Pacific field programme (www.soc.soton.ac.uk/chess/se_pacific.html) has been updated with the results of January workshop and the last month's discussions.

The first draft of the ChEss database has been sent to the ChEssBase committee for a first revision and comments. We hope to have a first online draft on line before the end of spring, as previously planned.

ChEss will be involved in the Organising Committees for the 3rd Hydrothermal Vent Symposium (Scripps, 2005) and 11th Deep-Sea Symposium (SOC, 2006).

A proposal has been submitted to the European Science Foundation (ESF) for a EUROCORES programme on "Deep-sea biodiversity and ecosystem functioning". The main partners are Eva Ramirez and Paul Tyler (ChEss, UK), Carlo Heip (Euro-CoML, Netherlands), Odd Aksel Bergstad (MAR-ECO, Norway), Pedro Martinez (CeDAMar, Germany), Myriam Sibuet (proposed Margins project, France) and a number of representations from other European countries (Portugal, Ireland, Spain, Italy, Greece, Iceland, Denmark and Belgium).

Paul Tyler and Eva Ramirez submitted an Expression of Interest based on the aims of ChEss to the ESF call on the topic "Investigating Life in Extreme Environments". The submitted expression of interest will be evaluated in April. The main purpose of this Call is to identify key challenging topics from any discipline in this area and investigate the best ways to explore them. The most engaging ideas will be pursued in a collaborative way through ESF-managed workshop(s) to be held in 2004/2005.

Chris German will be talking about chemosynthetic systems and ChEss to the UN's International Seabed Authority in Jamaica in May 2004.

- **Tagging of Pacific Pelagics: TOPP.** It has been a busy time for the TOPP program. TOPP PIs and working group leaders have been finalizing the scientific plan for Phase II, organizing the first international Scientific Steering Committee meeting, and continuing the process of obtaining funding. In Phase II, efforts will be focused on multi-species and multi-disciplinary projects in three areas: 1) Identifying zones of high biological activity in the eastern North Pacific and the corresponding physical oceanography that characterizes pelagic "hot spots" and migratory corridors, 2) Using a select group of TOPP species as animal ocean

samplers, and 3) Working as a coordinated team towards the conservation of leatherback sea turtles.

The first TOPP International Scientific Steering Committee (SSC) meeting took place March 14-16, 2004 in Monterey, California where 10 members from 5 countries came to advise the TOPP team. The role of the SSC committee is to oversee TOPP's development in an advisory capacity. The committee was updated on accomplishments to date and presented with the scientific plan outlining the next phase. The TOPP Steering Committee led by Dr. George Boehlert will present a report to the CoML Scientific Steering Committee.

Exciting results are coming in from the first large-scale TOPP leatherback sea turtle satellite tag deployment and release Costa Rica. Led by Scott Eckert, Frank Paladino, Jim Spotila, Peter Dutton and their students the team successfully placed a total of 30 satellite tags on leatherback sea turtles. While several of the tags monitored only the inter-nesting period, 27 tags were placed on sea turtles that headed out for the Pacific migration. Tag performance is superb with all 27 tags transmitting on a regular basis, allowing TOPP scientists to track the turtles real-time. Oceanographic data such as depth temperature profiles and depth movements are being uplinked daily from the sea turtles. The turtles spent varying amounts of time in the waters offshore of Costa Rica before heading to the southwest. The tracking efforts are critical to the future of these leatherback populations, which have declined 90% in the last 10 years and are under a severe threat of extinction.

The TOPP seabird team is focused on the long-term deployment of electronic tags on pink-footed shearwaters. Tracking data has yet to be collected on the migratory paths of these birds as they make their impressive migrations from Chile to the sub-arctic waters of the Northern Hemisphere. Peter Hodum and Michelle Wainstein just returned from a field site in the Juan Fernandez Islands, Chile where they recovered 3 of the 12 tags deployed last year. Stay tuned for the exciting results in the next update.

Similar to elephant seals, salmon sharks are proving to be incredible platforms for satellite tags. SPOT (Smart Position and Temperature) satellite tags deployed on sharks in Alaska have exceeded the researchers' expectations. Presently 7 tags continue transmitting after almost 8 months since their 2003 deployments. Even more impressive are that 4 tags have transmitted for almost 21 months and are still providing data on the movements of the sharks. The data suggest that female salmon sharks migrate south each winter and travel as far south as Hawaii before returning to Alaska.

The TOPP data management team is moving forward with their live access server development incorporating in the first of three major projects: the large archival data set coming in from the TOPP tagging of bluefin and yellowfin tuna. To date over 40 tags from the tunas have been recaptured with more than 6000

days of data. By ingesting the archival data the TOPP data management team will soon be serving up the data via the web-based system to oceanographers and biologists working with TOPP for further analysis.

- **Coastal Tracking: POST.** As the POST project gears up for the 2004 field season, the Vancouver Aquarium, home to its steering committees, has been awarded grants from several sources totaling nearly \$4 million US. The latest addition to this support comes from the Gordon and Betty Moore Foundation. There is a sharp increase in the interest in the project for species other than the salmon that were the focus of its pilot studies. A dramatic record of a White Sturgeon in the Fraser River in BC, originally tagged over a thousand kilometers to the south in the Klamath River in California, contributed to this interest! This season should provide major extensions of listening curtains to the north and south, as well as tests of new technology: smaller tags (7×18 mm) and remotely pollable receivers to approach real time tracking. POST will participate in major Canadian initiatives in fiber-optic cable observatories and acoustic technology, as well as expanding its species coverage.

Carla Sbrocchi, POST's outreach coordinator, is leaving her position at the Vancouver Aquarium to move to Australia. We appreciate all of the work she has done for POST and for the CoML and wish her the best of luck in her endeavors "down under."

- **Latitudinal/Longitudinal Gradients in Near-Shore Biodiversity: NaGISA.** On April 1, Robin Rigby joined Tetsuya Kato as a NaGISA international post-doc. Based out of Seto Marine Biological Laboratory, Robin has been hired on a one-year contract to liaise between the ever-growing multitude of partners and interested parties. Robin has already been involved with NaGISA for 2 years and looks forward to this new assignment.

On April 2, Tetsuya Kato introduced NaGISA to the European communities at a workshop of the European Union funded project MARBENA. MARBENA, led by SSC member Carlo Heip, deals with large-scale European Coastal Marine Biodiversity and is complimentary to NaGISA. Dr. Jan Marcin Weslawski in Gdansk, Poland, hosted the workshop. There is hope that the presentation results in a European branch of NaGISA.

On April 6, the first ever NaGISA-style transects were run in the Atlantic. The high school students of Niceville, Florida were able to get in the water with the help of an amazing number of people. They are now in the process of sorting and identifying their findings. The entire NaGISA team is excited about this first remote (i.e., run by the students themselves rather than the NaGISA scientists) sampling and is looking forward to other schools joining. A student-run effort of this kind takes a tremendous teacher, and NaGISA sends special thanks to Richard Hernandez of Niceville High for organizing these transects. A full report with acknowledgements of all those involved will be available shortly at <http://www.comlnagisa.org/>.

On April 8th, Western Pacific NaGISA (formally known as the Japan Center) began its 2004 sampling. They have started with the Seto area and will move on to Okinawa next month.

Eastern Pacific NaGISA (formally known as the Alaska Center) is about to start its second year of sampling! NaGISA PIs Brenda Konar and Katrin Iken of the University of Alaska Fairbanks will be in Port Graham, Alaska sampling with the local community on 19-20 April. Matt Edwards (NaGISA's California and Baja investigator) hosted the first organizational meeting of Eastern Pacific NaGISA at the San Diego State University on 16-18 April.

NaGISA Thailand will be moving its Thai Sorting Center from the Phuket Marine Biological Station to Kasetsart University, Bangkok. The move does not come without its downsides (e.g., the loss of a number of good para-taxonomists), but NaGISA looks forward to the training challenge in the new academic setting. The new Sorting Center will be run by Dr. Chittima Aryuthaka under the auspices of the Dean of the Faculty of Fisheries Professor Yont Musig. The official date of the move will be announced at <http://www.comlnagisa.org/>.

The NaGISA Protocol Power Point presentation is now available. Please contact Robin Rigby (nagisaonline@yahoo.com) for a copy. The protocol will also be distributed on DVD in the near future.

- **Abysal Sediments: CeDAMar.** CeDAMar has won funding to strengthen its own secretariat to serve as CoML's umbrella program for biodiversity surveys of the abyssal plains. Pedro Martínez Arbizu (German Centre for Marine Biodiversity Research, Senckenberg Research Institute, Germany) and Craig Smith (University of Hawaii, USA) are PIs for this initiative. We welcome Dr. Brigitte Hilbig as the Scientific Project Manager. The goals of CeDAMar are to document actual species diversity of abyssal plains as a basis for global-change research and for a better understanding of historical causes and ecological factors regulating biodiversity. The global implementation will include: latitudinal gradients in the Atlantic Ocean; diversity and biogeography of Antarctic deep-sea fauna; diversity and gene flow in nodule regions of the central North Pacific; diversity patterns in a warm deep sea (the Mediterranean); and diversity versus food availability in the Indian Ocean.

Pedro Martinez will be giving a talk on CeDAMar at the Benguela Current Large Marine Ecosystem Programme (BCLME) BENEFIT Marine Biodiversity Assessment and Mapping Stakeholders Workshop in Swakopmund, Namibia on 26-27 April 2004. CeDAMar has done much work off the coast of Namibia through its component expedition DIVA-I.

National and Regional Activities

- **Canada.** The Centre for Marine Biodiversity (CMB), the headquarters of CoML efforts in Canada, has added two new databases to its marine biodiversity portal

website (<http://www.marinebiodiversity.ca/en/databases.html>). The first is a database of benthic macrofauna collections from 1954-2000. The second is on ichthyoplankton surveys (EAISSNA) on the Scotian Shelf of North America. For more information, contact Ellen Kenchington at KenchingtonE@mar.dfo-mpo.gc.ca.

CMB has also helped sponsor a number of posters to date and copies of the completed posters are available for download at <http://www.marinebiodiversity.ca/en/posters.html>. Informational posters cover topics such as amphipods, hydroid diversity, seaweeds and corals in Canadian waters. Other posters are for more aesthetic purposes and depict an array of photos from the Bay of Fundy.

Mike Sinclair, Scott McKinley, Paul Hebert, and other Canadian CoML leaders, together with Jesse Ausubel, held meetings in Ottawa about CoML with high-level government leaders 7-8 April. Among those visited were Howard Powles (head of biodiversity, Dept. of Fisheries and Oceans), Wendy Watson-Wright (deputy minister of DFO), Tom Brzustowski (head of the National Science and Engineering Research Council), Alex MacKenzie (VP of Genome Canada), Peter Harrison (responsible for Oceans in NRC Canada), John ApSimon (senior advisor in Environment Canada), and Mark Graham (research director of the Canadian Museum of Nature). One outcome is likely to be an all-Canada CoML meeting in September or October 2004 to further strengthen Canadian participation.

- **Caribbean.** A regional workshop on Caribbean marine biodiversity, sponsored by CoML, is scheduled for 15-17 June 2004 in Isla de Margarita, Venezuela. Patricia Miloslavich and Eduardo Klein of Universidad Simón Bolívar are the lead organizers. The workshop will include approximately 20-25 participants from around the Caribbean including Belize, Bermuda, Columbia, Costa Rica, Cuba, Dominican Republic, Grand Cayman, Jamaica, Guatemala, Mexico, Panama, Puerto Rico, Tobago, and Venezuela. For more information, contact Patricia at pmilos@usb.ve.
- **China.** Researchers from Chinese ocean research institutions together with Yunqing Phoebe Zhang (OBIS, Rutgers Univ., USA) won support from Chinese and US sources for a KUU Workshop on Marine Biodiversity in China. This workshop will likely take place in conjunction with the 19th International Congress of Zoology on 23-27 August in Beijing. Zhang, Fred Grassle, and Ron O'Dor are traveling to Qingdao, China in late April 2004 for preliminary meetings in conjunction with the national working conference "The strategic development of Marine Biology in China".
- **Europe.** The EuroCoML Executive Committee met in Amsterdam on 19 February. The Committee discussed expanding its membership to provide better representation from the Mediterranean and Black Sea regions. It also plans to establish a EuroCoML website. The next meeting of the full EuroCoML Committee will be held 4-5 October 2004 (location TBD).

EuroCoML will be participating in the EurOcean Conference in Galway, Ireland on 10-13 May 2004. They will have a booth and posters highlighting the European led CoML projects.

A workshop, funded under EuroCoML, to develop an HMAP case study in the Mediterranean Sea will be held 20-23 September 2004 in Barcelona, Spain. Dr. Isabel Palomera of the Institut de Ciències del Mar is hosting.

- **Indian Ocean.** India has recently established a secretariat for the Indian Ocean Regional Committee at the National Institute of Oceanography in Goa. NIO Deputy Director Dr. P.A. Lokabharathi will head the secretariat. We welcome her to the CoML community and look forward to working with her.

The report of the Indian Ocean biodiversity workshop held December 2003 will be published as a special issue of the Indian Journal of Marine Sciences. Mohideen Wafar and Shubha Sathyendranath are hard at work editing the volume.

- **South America.** The report of the November 2002 South American biodiversity workshop will soon be available as a special issue of Revista Gayana 67(2):2003. For copies contact issue editor Victor Gallardo, yagallar@udec.cl.
- **Sub-Saharan Africa.** The report of the September 2003 workshop on Marine Biodiversity in Sub-Saharan Africa is now available, and can be downloaded at <http://www.comlsecretariat.org/> under Reports and Other Documents. Members of the newly formed southern African Committee include: Charles Griffiths (Chair – University of Cape Town, South Africa), Jude Bijoux (Seychelles Centre for Marine Research and Technology Marine Parks Authority), Yunus Mgaya (University of Dar-Es-Salaam, Tanzania), AK Armah (University of Ghana), Maria Sardinha (To be confirmed – Benguela Current Large Marine Ecosystem Programme, Angola), and Edward Vanden Berghe (Liaison to OBIS – Flanders Marine Institute, Belgium)
- **USA.** The next meeting of the U.S. National Committee is scheduled for 3-4 June 2004 in Long Beach, CA.

Cross-cutting and Other Related Activities

- **SCOR Panel on New Technologies.** The Scientific Committee on Oceanic Research (SCOR) Panel for Observing Marine Life (formerly SCOR Working Group 118) has received funding for 3 more years. The Chair of this panel is Elgar Desa of the National Institute of Oceanography (India), succeeding David Farmer and Van Holliday, whom we thank for their excellent leadership. The major products of the Panel will include regular advice to the CoML field projects and overall program and a website that will provide a resource for CoML project scientists and others in regard to new technologies for observing marine life. Do not be shy about seeking feedback from the SCOR Panel!

There is currently a call for nominations for members of this SCOR Panel. Nominations are due by April 30, 2004. Please contact Elgar Desa (elgar@darya.nio.org) and Ed Urban (Ed.Urban@jhu.edu) with nominations or for more information.

- **Arctic.** The full proceedings of the Arctic biodiversity workshop held in April 2003 are available for purchase through the Alaska Sea Grant bookstore (http://www.uaf.edu/seagrant/Pubs_Videos/pubs/M-26.html). Brenda Konar, Katrin Iken and Russ Hopcroft of the University of Alaska, Fairbanks organized the workshop to expand the geographic coverage of NaGISA into the Arctic and to begin to develop a CoML field project in the Arctic. Hopcroft, Rolf Gradinger, and Bodil Bluhm have drafted a plan for Arctic CoML, which is just entering review.
- **Microbes.** Craig Venter's Institute for Biological Energy Alternatives (IBEA) embarked on a five-week microbial sampling program in the Galapagos aboard the Sorcerer II in February. Victor Ariel Gallardo of the CoML international Scientific Steering Committee joined this leg of the cruise. Mitch Sogin (Marine Biological Laboratory, Woods Hole) together with Dutch and other colleagues are developing the plan for the Census of Marine Microbes, which should enter into review around 1 July.
- **Plankton.** The Census of Marine Life sponsored a planning workshop for a Census of Marine Zooplankton project 17-22 March 2004, hosted by Ann Bucklin at the University of New Hampshire. Twenty scientists from around the world developed a science plan to integrate existing collections and datasets. This helped to identify crucial new sampling needed to standardize traditional taxonomy across oceans and to reanalyze it from a genetic perspective. Ocean currents and global warming have their greatest impact this component of ocean life, so establishing global patterns will provide an essential baseline. For additional information, see <http://plankton.unh.edu/> and <http://www.iobis.org/Zoogene.shtml> or contact Ann Bucklin at ann.bucklin@unh.edu. Ann and colleagues are developing the plan for the Census of Marine Zooplankton, which should enter review around 1 July.
- **Coral Reefs.** The CoML U.S. National Committee is sponsoring a workshop to identify the appropriate goals and scope of a census of marine life of coral reefs, which would be the U.S. component to a global coral reef initiative under the CoML umbrella. This workshop is scheduled for 15-18 August 2004 in Oahu, Hawaii. Terry Hughes (James Cook University, Australia) and the NaGISA project are also participating in the development of the international CoML coral initiative and will join a planning meeting in Okinawa, Japan during the International Coral Reef Symposium in June.
- **Archiving.** In September 2003, the Academy of Natural Sciences in Philadelphia hosted a workshop on standards for archiving samples collected through the Census of Marine Life. A draft website (<http://clade.acnatsci.org/rosenberg/archiving/>) is now available that summarizes the consensus recommendations from that workshop. Please contact Gary

Rosenberg (rosenberg@acnatsci.org) with any comments or contributions to this website.

- **DNA Barcoding.** The Consortium for the “Barcode of Life Initiative”, which stems from a Canadian CoML workshop, is scheduled to come into formal existence 24-25 May at a meeting of the Smithsonian Institution, Washington DC. <http://barcoding.si.edu/> Several CoML scientists will attend.
- **Meeting of International Marine Programs.** In September 2004 the Scientific Committee on Oceanic Research (SCOR) will convene a meeting of representatives of the major international ocean research and observation projects and programs, including the Census of Marine Life, to discuss common opportunities, issues, and problems. More information will be available soon.

General News

- **New Challenger Expedition.** Check out the New Challenger Expedition website at <http://www.challengerexpedition.com/>. This global expedition of the deep oceans may present opportunities for CoML deep-sea projects.
- **Announcement of Capacity Building Programme.** The Partnership for Observation of the Global Oceans (POGO) is pleased to announce the Nippon Foundation-POGO Visiting Professorship Programme with the overall theme “Towards Operational Oceanography”. The programme provides for an experienced oceanographer to visit a developing country to provide training and mentoring to scientists from a host institute for a period of between three and six months. POGO is currently accepting proposals from institutions interested in taking up this opportunity. Further details are available on the POGO web site, at http://ocean-partners.org/Nippon-POGO_details.htm
- **Announcement of Post-doctoral fellowship.** The Marine Conservation Biology Institute headquarters in Redmond, Washington has recently announced a Post-doctoral Fellowship in Ecology and Conservation of Deep-Sea Corals and Seamounts. For more information, go to: <http://www.mcbi.org/MCBI%20postdoc%20annoucement.pdf>.