



Census of Marine Life Education and Outreach Network

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News from the Census

July/August 2009

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September Synthesis Calendar

Don't forget to check your September Synthesis Calendar.

Here are some important dates:

Sep 1-5 2nd European Congress of Conservation Biology, Prague.

Sep 16-18 SCOR Workshop on Ocean Biology Observatories, Mestre, Italy.

Sep 21-25 Ocean Obs '09, Venice, Italy.

SEPTEMBER 2009						
Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
		1 United States Day of the Environment	2 National Day (Ireland)	3	4	5
6 International Day of the Girl (U.N. Canada)	7	8 World Environment Day (U.N. Canada)	9 World Oceans Day (U.N. Canada)	10	11	12
13	14	15	16 SCOR Workshop on Ocean Biology Observatories, Mestre, Italy	17	18	19
20 Open the Sea	21	22 International Day of the Girl (U.N. Canada)	23	24	25	26
27 Queen's Birthday (Australia)	28	29	30 China's Mid-Autumn Festival			

18D in September
SCOR meeting on ecologically and biologically significant areas beyond national jurisdiction, Canada

To view the Synthesis Calendar click [here](#).

Galatee Film in UN Oceans Atlas Newsletter



The Galatee Film "Oceans" is scheduled for release on Earth Day 2010. A recent mention in the UN Atlas of the Oceans newsletter highlighted the release of a downloadable trailer for the

film that is compatible with iPods. The film's website now features trailers in four size formats to suit your internet connection speed, viewing platform, or viewing enjoyment. The HD version is something truly spectacular and a must see for those anticipating the final release of the film. You can visit the [Oceans film website](#) or [download the trailer](#).

Public Library of Science Progress Report

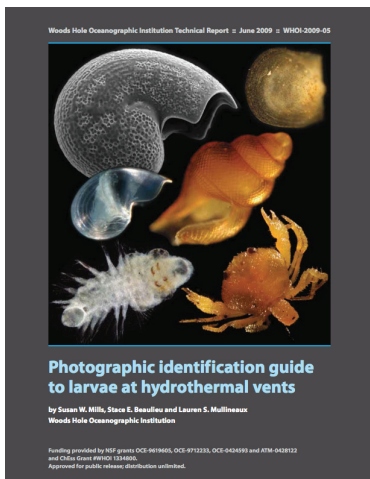
The Public Library of Science (PLOS) has recently issued a progress report discussing the organization's first decade of dedication



to open access science publication. The report addresses the open access publishing philosophy, the aims of the PLoS organization, its successes, and its ongoing expansion. Also provided are reports on the financial sustainability of the PLoS organization, its attempts to mainstream open access publishing, and goals for the future. Census researchers considering PLoS as an outlet for disseminating their work would be well served to read this report. It can be accessed online: [PLOS Progress Report](#).

Recent Census Publications

In her dissertation *Supersizing Science; on the building of large-scale research projects in biology*, Niki Vermeulen analyses the Census of Marine Life as an example of large-scale research in the life sciences. She investigates the growing collaboration in the life sciences, or the emergence of what is called 'big biology'. Her analysis suggests that scientific technological and social developments have transformed natural history research into what Vermeulen calls 'new natural history' collaboration. For further information on *Supersizing Science* or the CoML chapter, please contact the author: [Niki Vermeulen](#).



ChEss has contributed to the development of an identification guide for larvae associated with hydrothermal vents. The guide, which is available as a website, a PDF document, or a printed document has been produced by the Woods Hole Oceanographic Institution. The guide, entitled *Photographic identification guide to larvae at hydrothermal vents*, aims to provide guidance to researchers in collecting, preserving, identifying, and cataloging larval forms of hydrothermal vent benthic fauna. For more information visit: [Larval Identification Guide](#).

An article on a living fossil bivalve has been published in the *Nautilus* (Vol. 123 March 2009) by CoML Caribbean researchers. The paper discusses the rediscovery of the only extant species from the genus *Pholadomya*. This species, *P. candida* was thought to have gone extinct in the late 19th century but has been recently found living in the sandy bottoms of the Bahia Concha on the Caribbean coast of Columbia. The article, which is not yet available online, is entitled "Rediscovery of the "living fossil" *Pholadomya candida* Sowerby, 1823 (Bivalvia: Anomalodesmata:Pholadomyacea)."

Two recent papers on DNA barcoding of marine fishes have been published in *Molecular Ecology Resources* (Vol 9, Issue s1) and *PLoS ONE*. The first addresses the use of barcoding technology to reveal overlooked marine fish species. The results of this paper, entitled "DNA barcoding reveals overlooked marine fishes," suggest that much higher species diversity exists among marine fishes than previously thought.



Barcoding has made it possible to determine that populations once thought to belong to single species are actually genetically distinct groups. This paper is available online though [Wiley Interscience](#). The second paper on barcoding, titled "Barcoding Nemo: DNA-based identifications for the ornamental fish trade," has been published on *PLoS ONE* by Steinke, Zemplak, and Hebert. The article addresses the importation of exotic vertebrate species and DNA barcoding as a means of providing adequate identification tools in this economically important industry. The full article can be found online: [PLoS ONE](#).

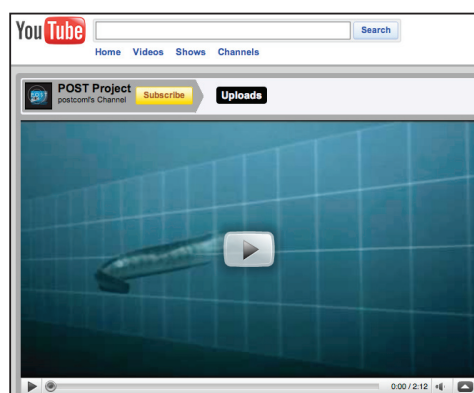
MAR-ECO Expeditions

From June 8 to 17 July, 2009, MAR-ECO researchers aboard the NOAA Fisheries vessel *Henry B. Bigelow* studied the Charlie Gibbs Fracture Zone along the Mid-Atlantic Ridge. The aim of the cruise was to further study the deep-water ecosystems associated with under-explored area. A cruise blog with some early findings can be viewed on the Virginia Institute of Marine Science website: [CoML Blog](#).



On August 1, 2009, the RRS *James Cook* set sail again, bound for the mid-Atlantic Ridge. The MAR-ECO expedition, made up of 30 scientists from 12 universities and research institutions in the UK, Portugal, and Russia, and 20 crewmembers, aims to collect data on all aspects of the mid-Atlantic Ridge and its overlying surface waters. The cruise, led by Professor Monty Priede Director of Oceanlab, University of Aberdeen, will be dispatching a [daily blog](#) about their adventures and discoveries, as well as sending out updates via [Twitter](#) through the conclusion of the expedition on September 9, 2009.

POST YouTube Channel



POST has created a channel on YouTube to showcase its technology and research. The new channel currently supports an animated overview of POST's technology. This video conveys the basics of POST research in a concise and attractive way. Please visit POST's channel to view the video and or subscribe: [POST](#).

Recent Census Project Newsletters

A number of Census projects have recently issued newsletters communicating recent activity or announcements to the CoML community. Below are some highlights and links to those communiqés.



POST E-Blast June

- > 2009 POST Science Forum
- > Out and About with POST
- > Steelhead, Sturgeon, and Humbolt Squid Tagging

POST E-Blast July

- > 2009 Science Forum Results
- > New Data Download Tool for Researchers
- > Record Year for POST Publications
- > POST Management Meeting

POST E-Blast August

- > Discover POST
- > Publishing Opportunity
- > Did You Know?

U.S. CoML Newsletter

- > National Ocean Competition
- > Destination: Panama
- > Opening a Window to Oceans Past
- > World Oceans Day
- > Seven Questions with Nancy Knowlton

Gulf of Mexico

- > HRI in Cuba for Sea Turtles
- > Sport-fish Tagging
- > US-Cuba-Mexico Workshop on Marine Sciences and Conservation of the Gulf of Mexico
- > Benthic Ecology Meeting
- > Staff News and Student News

GoMA

- > Gulf of Maine Symposium registration
- > Research Highlights
- > Recent Paper on Ecosystem Dynamics
- > Student Video Wins National Recognition

Russ Hopcroft Interviewed by Public Radio



Census researcher Russ Hopcroft has been interviewed by American University Radio (the Washington D.C. National Public Radio affiliate). His discussion highlights the weird and wonderful creatures of the polar ocean, doing research in both the Arctic and Antarctic, and the efforts of the Census. His interview addresses the Census as a whole as well as his own evolution as marine scientist, and the future of polar ecosystems. It can be heard online: [The Animal House](#).

Barcoding Articles of Interest to the Census



The CAML Barcoding initiative would like to share a list of barcoding papers with the Census community. These papers may be of some interest and value to research and synthesis efforts. Please find it here: [Barcoding Papers](#).

CenSeam Expedition

A research cruise departed Wellington, New Zealand on June 12, 2009 with the RV *Tangaroa* once again carrying CenSeam researchers to the Graveyard Seamounts on the Chatham Rise in the South Pacific. This cruise aims to study the biodiversity of the region and to continue research initiated on earlier cruises. Full details of the cruise and a ship-to-shore log can be found on the CenSeam website: [Return to the Graveyard](#).



Humpback Tagging Video Available Online

National Geographic's Wild Chronicles has released an episode highlighting humpback whale tagging efforts by Census researchers and NOAA on Stellwagen Bank in the Gulf of Maine. This 4-minute video piece shows how visualization techniques can be used to quickly and effectively tell a story and how the practical application (societal impacts) of the research findings concisely demonstrates and lends credence to the importance of the Census effort. The video can be viewed in the [Video Gallery](#) on the Census of Marine Life portal.



Synthesis Tools and Resources

A number of resources have come to our attention that may be of some help to Census Synthesis efforts:

ARKive:

ARKive is an online collection of wildlife images and species information that serves as a repository and reference. This site could help in species identification and would also be a great place to showcase Census imagery.



MarLIN:

The Marine Life Information Network (MarLIN) is an online clearinghouse for all types of information on marine life from species bibliographies, to habitat information, to biodiversity data. The MarLIN website also features an extremely complete [glossary](#) of marine science terms. This glossary has been indicated as the standardized glossary for Census Synthesis efforts.



NameLink:

EOL has developed an automated program (in beta version) called NameLink that filters a document or website for species names, and then embeds a link to the relevant EOL species page. NameLink should eventually prove to be a valuable tool for filtering large amounts of text (from papers to manuscripts to websites) and integrating it with EOL in just a couple of keystrokes.

Mendeley:

Mendeley is a free software program that allows the user to manage, annotate, and reference their personal library of electronic science papers. Using Mendeley, one can simply drop a PDF paper onto the Mendeley desktop and the program will automatically extract bibliographic data, database it, and make it available for referencing as endnotes in Word. The program also features a one click downloading interface with many popular online sources, and allows social file sharing integration with other users.



iBarcode:

iBarcode is a free online resource that provides access to a collection of visualization and analysis tools for DNA barcoding data. A paper on iBarcode was published in the June 2009 issue of [BMC Bioinformatics](#).



Fossilized Seahorses, Coral Reef Available for Study



A rancher in Texas, USA, has contacted the Census with reports of what appears to be a fossilized coral reef on their property. Over the past few years fossils of seahorses, amphibians, fish, turtles, and reptiles have been found associated with a spring-fed pond on the ranch. The rancher, Celinda Norvelle, has offered some of the fossils for study if there is interest. She claims to have a large number and variety of these fossils that can be made available. For more information, please contact the [Census E&O Team](#).

Boris Worm on NPR and in the NY Times



In 2006 Census researcher Boris Worm (FMAP) predicted that world fisheries may be heading for oblivion by 2048. This statement caused a stir in the international community. Now, a new paper on this subject has been published in *Science*, by Boris Worm, in collaboration with one of the most vehement critics of his initial work, Ray Hilborn (University of Washington). It states that certain fish stocks, with correct management, could be deterred from collapse. These new, more optimistic findings have received much attention, with write-ups in the *Economist*, the *NY Times*, and even an interview with Boris on *National Public Radio*.

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Astral Summer Institute in Chile



The Department of Oceanography and the Center for Oceanographic Research in the eastern South Pacific (FONDAP COPAS) of the University of Concepcion, are pleased to announce the Astral Summer Institute X (ASI X). ASI X will be devoted to topics on Multi-Scale Observations in Coastal Oceanography (such as fjord ecosystem biodiversity, global biogeochemistry, and marine microorganism biodiversity) and will be held at the Main Campus of the University of Concepcion and at the Marine Biological Station in Dichato, Chile, in December 2009 and January 2010. Detailed information on the program, lecturers, and an application form are available at [ASI X](#).

Nereus Dives to Challenger Deep



The deep-sea robotic vehicle *Nereus* has successfully dived the Challenger Deep in the Mariana Trench, making it the deepest diving vehicle in the world and the first to explore the Mariana Trench since 1998. *Nereus* was designed

and built by the Woods Hole Oceanographic Institution to provide research support and exploration of the world's deepest oceanic environments. Launched from the RV *Kilo Moana* on May 31, 2009, under the watchful eye of a team of engineers and scientists (including ChEss and CenSeam Steering Groups member Tim Shank), *Nereus* dove to a depth of 10,902m tethered by only a thin fiber optic cable. Spending over ten hours on the bottom, *Nereus* collected a host of samples and data, setting the stage for many future deep-sea discoveries. For more info visit [Nereus](#).

James Cook Rescues Rower on the High Seas



The RV *James Cook* rescued a British rower attempting a world record crossing of the Atlantic from dangerous sea conditions associated with Hurricane Bill. On August 19, Peter Bray, a British record-breaking rower

attempting to set a new record for crossing the Atlantic, called out a mayday and was picked up safely by the *James Cook*. Bray was more than a month into his journey and 1500 km from land when the 200+ km per hour winds of Hurricane Bill forced him to cut short his attempt at breaking the record for the fastest solo rowing crossing from St. John's, Newfoundland to Bishop's Rock Lighthouse in Sicily. More information on Bray and his ordeal are available online: [Telegraph](#). An account of Bray's rescue can be found on the [James Cook cruise blog](#).

EOL Position Announcement

The marine evolution, ecology, and biogeography team at the British Antarctic Survey (BAS) was awarded a grant from CAML to host a bipolar species science coordinator (part time, 2 days a week) for 5 months. The selected candidate will organize and assist the international effort to ascertain how many of the [recently publicized list](#) of species suspected by Census of Antarctic Marine Life (CAML) and Arctic Ocean Diversity (ArcOD) to be present in both polar areas have valid testable specimens in museums, universities or institutes. The list includes species from all realms including benthic, pelagic and planktonic across a wide range of taxa. The chosen applicant will be based at BAS, Cambridge, and will work with Bruno Danis (SCAR-MarBIN) and other marine biologists across the international community. Please contact [Huv Griffiths](#) at the BAS.

EOL Invites Applications for the Rubenstein Fellows Program

The Encyclopedia of Life has announced that it is now accepting applications for the Rubenstein Fellowship Program administered by the Smithsonian National Museum of Natural History and the Species Pages Group of EOL. A generous gift by David M. Rubenstein will provide up to 50% funding or salary stipend for 60 early career scientists over the next four years. The fellowship is intended to provide support in reviewing, summarizing, and disseminating the scientists' taxonomic, regional, or thematic research through the EOL platform. Applications for this year's round of this international competition are being accepted through September 30, 2009. For more information and application materials visit: [Rubenstein Fellowship](#).

The Census of Marine Life is a global network of researchers in more than eighty nations engaged in a ten-year scientific initiative to assess and explain the diversity, distribution, and abundance of life in the oceans. The world's first comprehensive Census of Marine Life — past, present, and future — will be released in 2010.