

Input from Census of Marine Life (CoML)

To Projects:

Data Management Discussion

- 1. Please present the status of your project in terms of management of data and/or metadata. Three projects--GEOTRACES, IMBER, and SOLAS--have been asked to make oral presentations about the status of their data management activities, but it would also be helpful to have written statements from other projects.*
- 2. Has your project done anything to encourage visualization of project data?*
- 3. Is your project keeping track of project cruises and collecting any information about the cruises?*

COML is working closely with POGO to establish a global dynamic research cruise website to facilitate both pro- and retrospective cruise planning and analysis. OBIS have integrated the Challenger Cruise data with the biological data online. All of the CoML data goes into OBIS where mapping tools are available for display of the data. OBIS will soon have tools to integrate biological and physical data displays.

- 4. Has your project discussed data archiving with a World Data Center yet and/or involved WDC staff in your data management discussions?*

We have had some discussions with IOC.

Separate report from OBIS.

GOOS Discussion

- 1. Does your project have ongoing interactions with GOOS?*

Based on their successes to date, the POST and TOPP projects have been involved in a series of meetings to establish the Ocean Tracking Network (www.oceantrack.org), which would combine the strengths of both projects in a global network. The key initiatives for OTN are proposals to the Canada Foundation for Innovation and the Canada IPY Fund that together request \$43M with matching commitments from about 30 nations of \$120M. This would create curtains of acoustic receivers to monitor passage of animals with coded tags, make time series of physical measurements *in situ* and acoustically download archived data from migrating animals similar to the data TOPP now downloads to satellites. Australia has already made a \$2M commitment to OTN as part of NCRIS, CoastTrack is preparing a large proposal to the European 7th Framework and a similar proposal is under development in Mexico. GOMOOS, AOOS and SOOS are all committed to OTN. US and Canadian agencies are working to expand the POST system and extend it into the Arctic (in conjunction with the COML ARCOD project) and Atlantic (in conjunction with the COML GOMA project). John Field and Keith Alverson have both participated in OTN development and have agreed to serve on its management committees to ensure its smooth integration into GOOS in keeping with IOC Resolution XXIII-3 in July 2005.

In the U.S., fisheries surveys are considered part of the U.S. GOOS. OBIS has fisheries-related data from a few countries and hopes to have the U.S. fisheries data in the near future.

The GOMA project is COML test-bed for looking at the potential ways that GOOS (i.e. GOMOOS) and COML can synergistically contribute to ecosystem management.

The NaGISA project has completed its nearshore sampling protocol in 51 countries and is working toward a Barcode of Life (CBOL) approach to routine biodiversity monitoring that could become part of GOOS for seagrass and macro-algae habitats. The CREEFS project has similar potential for coral reef habitats.

2. Have you had any GOOS scientists or staff attend a project SSC meeting, or have any project SSC members or IPO staff participated in a GOOS meeting?

James Baker has joined the COML SSC, is liaison to POST and TOPP, and provides a strong link to GOOS, as well as working as a liaison to IOC and GEO. David Farmer is spending part of his Sabbatical liaising with GEO as well. Fred Grassle, Chair of the CoML SSC is a member of the U.S. GOOS Steering Committee.

3. Do you have a link to any element of GOOS on your project Web site?

There is a link on the COML site, but links should be improved.

4. Has your SSC discussed what is, or will be, available from GOOS and other observing systems?

Most of the discussion has been project by project. OBIS would like to have GOOS data freely available.

5. Has your SSC identified any specific GOOS observations to which your scientists would like access?

OBIS is very interested in further integration of physical data with individual species data.

6. What research observation systems would your project like to see become operational?

CoML would like to further develop operational observing systems in association with NaGISA and CREEFS. Physical as well as biological data from pelagic species should become operational. Species level data collection from the Bermuda and Hawaii time series and perhaps other time series stations should become operational.

Time-Series Stations

1. *Will implementation of your project require observations from time-series stations? If so, in what locations?*
2. *How will such stations be supported?*
3. *Has your project identified time-series sites (either existing or new) that are a priority for achieving project goals?*

COML has links to both BATS and HOTS, particularly in relation to OBIS, CMARZ and ICOMM projects. SAHFOS Continuous Plankton Recorder data is one of the largest components of OBIS. Many of the CoML projects mentioned hope to continue time series into the foreseeable future. In Japan there are commitments to repeat NaGISA protocol sampling for up to 50 years at some sites. Other countries have not yet made long-term commitments, but, statistically, the protocols are even better for times series than for spatial analysis.

Southern Ocean Research and Observations

1. *What activities has your project undertaken or planned for the Southern Ocean? Have you coordinated your Southern Ocean research with other projects? Do you have any special plans for the 3rd International Polar Year in 2007-2009 or later?*

CAML is the lead biodiversity project in the SO for IPY. It is managed through SCAR and has sampling components on a diverse set of international cruises, as well as plans to integrate discoveries for the 2010 Census report. The CEDAMAR abyssal plains project has well integrated and extensive SO operations.

2. *What is the status of planning and funding for your project's Southern Ocean cruises, observations, and experiments?*

Many commitments are in place and more are under development. OTN (above) anticipates links to SOOS, which is being coordinated through the CAML Secretariat.

Education and Capacity Building

1. *What activities, plans, and ideas does your project have in relation to education and capacity building?*
2. *How are you funding your education and capacity-building activities?*

The core Sloan Foundation funding for COML projects expects 10-20% to be committed to education and outreach. Many projects have moved far beyond this with specific independently funded projects. MAR-ECO, for example, won an EU prize for it Norwegian-funded TV documentary. NAGISA has a strong capacity building component to develop taxonomic capacity and national species indices as required by the UN CBD. The COML International Secretariat has recently hired Kirsten Martin from IUCN to help develop a COML GEF proposal for Biodiversity Centers of Excellence in the developing world, linking with OBIS and CBOL. Jacque Perrin is collaborating with COML to produce the movie "Oceans", the sequel to "Winged Migration"

Satellite Availability and Needs

1. Is your project using satellite data or does it plan to do so?

TOPP makes extensive use of satellite data to provide context for its animal tracks on a specially developed Live-Action Server. It also contributes huge amounts of CTD-type data from its "animal oceanographers" or "bioprobes" via the System Argo.

2. Which satellite observations are most crucial for your project to meet its goals?

Tough question. We use almost all of them at some time.