

**RARGOM Board Meeting
Gulf of Maine Research Institute**

7 October, 2005

In attendance: John Annala, Kevin Friedland, Steven Hale, Lew Incze, Gordon Wallace, Jeffrey Runge, Lynn Rutter

The meeting commenced shortly after 10:00 with news of activities from representatives in attendance.

John Annala provided an overview of the new Gulf of Maine Research Institute. GMRI is guided by a three-part mission: collaborative fisheries ecosystem research in the Gulf of Maine, serve as a neutral convener to discuss and resolve aquatic resource conflicts, and educate Maine residents and visitors about the Gulf of Maine and its watershed. The new 44,000 square foot building on the Portland waterfront was completed in December, 2004. A planned phase II expansion would add 25,000 sq. feet on the site for research in marine biotechnology. GoMOOS and the University of Southern Maine (L. Incze) have offices in the building, and John Annala, the Chief Scientific Officer, is leading a recruitment effort to build an interdisciplinary research team with expertise in eight core areas of marine fisheries science (biological oceanography, benthic ecology, demersal ecology, small pelagics ecology, apex predator ecology, ecosystem dynamics modeling, fish behavior and gear design and resource economics). Three of these positions have been filled and two more are actively being recruited as joint appointments with the University of Maine School of Marine Sciences. Lew Incze gave a tour of the facility later in the day, which included the high-tech, interactive education room. It receives students especially at the 5th and 6th grade level, with the goal of reaching every fifth and sixth grader in the state.

Finances

J. Runge with the assistance of L. Rutter presented an updated summary of the RARGOM finances (annex I) for year 2005 to date. Most institutions have paid or are in the process of paying the annual dues. The projected bottom line is a positive balance of \$13,450, somewhat lower than originally forecast. However, this includes as yet unencumbered funds for website development and the carryover to 2006 may be adjusted upward if they are not fully utilized in 2005.

July theme workshop

J. Runge reported on the RARGOM Theme Session, entitled "Modeling Needs Related to the Regional Observing System in the Gulf of Maine", that was held at the Cliff House in Ogunquit on 6-7 July. There were 51 participants with strong representation from the modeling research community but also including representation of the management community, coastal ocean scientists and guest speakers from Norway, Scotland and Quebec. A draft outline of the workshop report was circulated at the meeting. The plan is for the report to be completed and distributed to the Gulf of Maine community via the

RARGOM website and a limited number of printed copies by the end of the year. The community will have the opportunity to read the report and then offer comments in a one-day follow-up session to be held in February-March at a central location, probably UNH.

The workshop discussions identified four types of interdisciplinary modeling applications that would address management user needs, critical issues for model development and data needs for the new generations of integrated, physical-biological models that will be employed to analyze, interpret and present observing system data. The three top critical issues were: funding regional infrastructure that will allow regional coordination, advancement of models that have experimental forecasts as products and regional coordination of model assessment (e.g. model skill assessment, evaluation of uncertainties, model ensemble approach to predictions).

Perhaps the most far-reaching discussion concerned how to build a regional infrastructure that would advance analysis, modeling and prediction of observing data in relation to user needs. Two separate, but not necessarily exclusive organizational structures emerged during the meeting. One is a **Regional Modeling Center** within the Regional Association for the Gulf of Maine Observing System (part of the Integrated Ocean Observing System or IOOS) that would have a role in exchange/transitioning activities to facilitate and provide support for modeling applications to specific management needs. The other would be the establishment of a **Gulf of Maine Experimental Environmental Forecast Center**, which would foster collaboration among NOAA operational and research centers, the Gulf of Maine Observing System, universities, state agencies and the private sector. Its primary objective would be to develop and test forecast models for the Gulf of Maine that could be adapted by NOAA or other government agencies for implementation in operational mode. The facility would have multiple components, including interfacing with the Gulf of Maine Data Partnership, a test bed computer facility for development of forecast models at various scales (river, estuarine, coastal and regional), outreach and products for users.

The meeting participants conveyed a feeling that the timing is right for establishing a regional modeling center that would provide experimental forecasts and transition research modeling to user applications. Forecasting and predictions, as well as hindcasting for understanding what has been happening in the Gulf of Maine, were seen as possible. Failures, while expected, will get smaller in frequency and magnitude with future refinements in the modeling and data evaluation process. The feeling at the meeting was that now is the time to "just do it".

Theme session planning for 2006

Ecosystem metrics and indicators

K. Friedland has expressed interest in following up on this idea. He will confer with M. ten Brink this fall and line up speakers. A prospectus is also needed. L. Rutter can assist with logistics. The time frame for holding this session is spring to early summer.

"Linkage between estuaries, nearshore and coastal ocean ecosystems in the Gulf of Maine: does coastal human activity have a significant impact on the greater Gulf?"

J. Runge and L. Incze have expressed interest in organizing this session for fall of 2006. It could be linked with a workshop on a similar theme under consideration by the Census of Marine Life.

Impacts of climate change in the Gulf of Maine

J. Runge will approach A. Pershing for his interest in leading this session for 2007-2008.

Invasive species in marine ecosystems of the Gulf of Maine

L. Incze will approach L. Harris as a possible leader of this session for 2007-2008.

The Gulf of Maine: decadal synthesis of research knowledge

The board discussed the possibility of holding a longer meeting that would provide a synthesis of recent knowledge about the Gulf of Maine, similar to meetings held in 1985 and again in 1996. The 1996 meeting in St. Andrews produced a volume that served as a useful summary and perspectives of current knowledge of the physical and ecological processes in the Gulf of Maine. The concept is that this should be updated every decade.

The subject of the synthesis could be "Climate variability, biodiversity and ecosystem function in the Gulf of Maine". Perhaps it could be combined with the theme session planned on climate change.

Funding sources discussed included those mentioned in the acknowledgements of the 1996 workshop report, including the Gulf of Maine Council on the Marine Environment, the Davis Family Foundation, the Henry P. Kendall Foundation and various federal agencies (e.g. EPA and NOAA). Other potential sources are foundations associated with the oil industry (e.g. Mobil Corp. and Irving).

Planning for this will be brought up again at the next meeting.

Nomination of representatives for an advisory committee to the Northeastern Regional Association of Coastal Ocean Observing Systems

The Regional Association, based at the University of Southern Maine and coordinated by Evan Richert and Josie Quintrell, has received funding from IOOS (Integrated Ocean Observing System) to establish infrastructure for the Coastal Ocean Observing System in the Gulf of Maine region. As part of this structure, an advisory panel will be creating, involving representation of a number of regional management, research and industry interests. The Regional Association has asked RARGOM to nominate 4-6 members who would report back to the RARGOM board and therefore represent Gulf of Maine research interests and perspectives. The board nominated the following members: R. Beardsley (WHOI), L. Incze (USM), J. Runge (UNH), G. Wallace (UMASS Boston) and a representative from Canada Fisheries and Oceans.

The board held a discussion about the Regional Association and its role in the region. The role of the Regional Association in coordinating integrative, multidisciplinary modeling

of the observing data was a topic addressed in the RARGOM theme session in Ogunquit. There was a question about interaction between EPA, which is concerned about monitoring water quality and habitat in the nearshore, and the new RA. This would help provide more of a connection between the watershed monitoring and the marine environment as well. There appears to be a need for more cross talk between the two organizations, in which RARGOM may play a role as facilitator.

Website update

J. Runge and L. Rutter provided an overview on the status of the website. Plans for changes to the design of the site were put on hold during organization of the July theme session and writing of the workshop report. Focus on the website will return during the fall. B. Tripp continues to work on bringing new content to the website, including a database of Gulf of Maine research developed with the Sea Grant support and a partnership with USGS.

There was concern expressed by board members that the website content is thin and some material is outdated. It is not a good advertisement for RARGOM. Suggestions were to keep the content simple and especially up to date, to get local (UNH) access and control of the website in order to facilitate this and to engage the services of local website medias experts. J. Runge and L. Rutter will work on this and report back at the next meeting.

Search committee for a new chair

J. Runge will have served two consecutive two-year terms by the end of 2006. He opened up the need to find a new chair for RARGOM, commencing in 2007. He would be willing to work closely with the new chair to ensure a smooth transition. A search committee consisting of K. Friedland and J. Runge and a third member to be named was started. This will be taken up at the next board meeting in January.

Next meeting date

The next meeting date was set for January 6 with a backup of January 13 in case of snow. The meeting will be held at the University of New Hampshire.