

Saltwater News

A Monthly Newsletter for UNH Marine Program Faculty, Staff and Students
January 2005, Volume 4, Number 1

From the Director

The **Undergraduate Research Conference (URC)** is scheduled for the week of April 25 - 30, 2005. As has been the case for the last few years, there are several different events for our students to participate in. I particularly want to encourage participation in the **'Interdisciplinary Science and Engineering Symposium'** that will be hosted in Morse Hall on Wednesday, April 27th from 2-5PM. This event will be open to both undergraduate and graduate students and will provide an opportunity for students working in marine science and ocean engineering to present their research in a single forum. Additional opportunities for presentation include the Vice-President for Research & Public Service event on Friday and the COLSA Symposium on Saturday.

Faculty, we hope that you will strongly encourage your undergrads involved in projects and research to register to participate in this conference. Students must register by March 11th. Please direct your students to the URC website, <http://www.unh.edu/urc/>, for more information.

Faculty News

Dr. John G. W. Kelley, a research meteorologist at NOAA-UNH Joint Hydrographic Center, received a NOAA Bronze Medal in Washington, DC on Dec. 2, 2004.



Dr. Kelley was honored for providing the public with the ability to view, from one location, on-line oceanographic, meteorological, hydrologic, and water quality real-time data, and NOAA forecast information for all U.S. coastal regions. He conceived of and led the development of **'nowCOAST'**, a web

mapping portal using the latest in GIS internet technology. The portal serves as a "one-stop shopping" web site to real-time coastal meteorological, oceanographic, and hydrologic observations from a variety of internet sites within and outside of NOAA along with forecasts from NOAA's National Weather Service and National Ocean Service.

NowCOAST was designed to be a planning aid for recreational and commercial mariners, coastal managers,

HAZMAT responders, marine educators, and researchers to discover and display real-time information for their particular needs and geographic area of interest. Prior to his work, there was no consolidated access to, nor inventory of, real-time or predicted coastal and estuarine data.

The Bronze Medal is the highest honorary award given by NOAA, an agency of the U.S. Department of Commerce. The secretary of commerce presents it to commerce department offices and employees who have made outstanding or significant contributions in support of the overall departmental goals that serve the nation.

Well done John!

In Depth With CINEMar

(News Release by **Dolores Leonard**)

New Hampshire fishermen will bring home a new catch this year, thanks to the Open Ocean Aquaculture Project at the University of New Hampshire (UNH). Yankee and Portsmouth Fishermen's cooperatives have received permits from the N.H. Department of Fish and Game to farm blue mussels for the first time in state coastal waters. Long lines, which are used to culture the mussels, were deployed last November.

"We need alternatives in the face of changing fishing restrictions and the fact that our fisheries are not an infinite resource," says Andy Lang, an independent fisherman who will farm mussels under the permits. "This is a wide-open opportunity. The quality of the product is superior, and UNH has made it clear that it will support the tech transfer 100 percent."

"Open ocean mussel culture is an environmentally sustainable practice and an economically viable option for New Hampshire fishermen," says U.S. Senator Judd Gregg (R-N.H.). Gregg recently notified UNH that he has obtained \$2.4 million in additional federal funding for the Open Ocean Aquaculture Project, bringing total appropriations for the program to \$16.4 million since its inception in 1997. In addition to shellfish culture, project scientists are engaged in a major initiative to develop and refine the farming of finfish such as cod, halibut, and haddock in deep sea cages.

Senator Gregg adds, “Sustaining our commercial fishing industry requires innovative strategies, the kind that come from combining federal and state support with the research talent at University of New Hampshire and the entrepreneurial spirit of Northeast fishermen.”

Harvesting mussels is a new industry for the state, and fishermen like Lang will be the first to apply the techniques that have made UNH a world leader in offshore mussel culture research. Unlike inshore farms that use floating rafts or surface lines, these mussels will grow nearly three miles offshore from a submerged long line—out of sight and safely away from boat traffic. From the surface, passersby will only see two pairs of buoys, bobbing 600 feet apart.



“For a mussel industry to succeed off New Hampshire’s crowded coast, fishermen need a sustainable approach, one that doesn’t conflict with other uses, employs existing boats and equipment, and can result in a reasonable profit,” explains **Richard Langan**, project leader and



director of CINEMAR, the Cooperative Institute for New England Mariculture and Fisheries, which sponsors the project. “This technology transfer has been five years in the making, requiring a team of

marine biologists, oceanographers, engineers, educators, and fishermen.”

When farmed offshore, far from pollution sources, blue mussels (*Mytilus edulis*) are a healthy and nutritious source of protein. To elude the Gulf of Maine’s currents, waves, and weather—which can combine to create conditions such as those described in the book *The Perfect Storm*—mussel growing ropes are suspended from a long line submerged 40 feet below the surface. The long line is anchored to the bottom by granite blocks, 130 feet below. The site, determined by working with commercial and recreational fishermen, was chosen to avoid the “hard bottom”—those boulders and ledges that lobstermen and recreational fishermen depend on for their catch.

“Open ocean mussel culture has the potential to be a new industry for the entire Northeast,” says **Rollie Barnaby**, the UNH Cooperative Extension educator on the project. “It will complement, not replace, other fisheries.”

Marine Program Pot-Pourri

Linda Wade in the Marine Program Office received a very special Christmas gift this year. Her first grandchild, a boy, was born in the wee hours of Christmas morning. Angus John MacPherson-MacBeth entered this world at 9 lbs. 12 ozs. sporting a full head of black hair. Mom and Dad and baby Angus are all doing well and if you would like to see pictures, just ask (or just walk past her office) - she has a TON of them.

Congratulations to GEBCO Grad Student **Taisei Morishita** on the birth of his son Hiroki born January 10th in Japan. Taisei was able to return to Japan to be with his wife for the birth before returning to CCOM to complete his studies.

All EE, PAT and OS UNH employees (with some restrictions) are eligible for **Staff Professional Development Grants**. The deadline this year is March 1, 2005. For more information, go to: <http://www.unh.edu/hr/pod/pdfs/Staff-Prof-Dev-Grant.pdf>.

Comings and Goings

Welcome to **Kirsten Weir**. Kirsten is NH Sea Grant's new science writer. A former member of the editorial staff at both Natural History and Current Science, she has an MA in science journalism from New York University. She will be involved in Sea Grant's public information efforts and a range of special communications projects.

Deb Lamson, after 15 years at JEL, is planning on expanding her horizons. Here’s a note from Deb.

This note is to let my UNH friends know that I will be leaving Jackson Lab on February 4th. I've got lots of plans, in all kinds of directions, which I am looking forward to doing. I'll be starting with sculpture and blacksmithing courses, and then moving on to ventures with friends in Portsmouth.

The fact that I have stayed at JEL for 15 years is evidence that I liked the variety of projects, research, and have felt very lucky to be involved with so many great people.

I hope to keep connected to the Marine Program by occasionally working on an hourly basis with any boating, diving, or research projects that could use my help (as long as they don't interfere with all of my afternoon Soap Operas!).

It would be great to keep in touch with everyone. My new e-mail address is: deblamson@comcast.net

Cheers, Deb