

Tidings

Gulf of Maine Research Institute Newsletter

FALL
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Are Bigger Fish Better?

“I'm really excited to begin our new project on the role of body size in fish communities. As a fish gets bigger, its metabolism becomes more efficient, meaning that it requires less food to support each gram of tissue in its body. This means that large individual fish may help buffer a population from fishing pressure or changes in the environment.”

Andrew Pershing, Associate Professor at the University of Maine and Ecosystem Modeler at the Gulf of Maine Research Institute, is keenly interested in the role of big fish in the marine ecosystem and what happens when total populations and size distribution change. Over the last century, the abundance of big fish has been greatly reduced. Pershing is leading a project to explore the relative impacts of removing different sizes of fish in populations such as Atlantic bluefin tuna and Atlantic cod. His team will build a series of computer models to look at how much food is required relative to the range of sizes in the population. Results will shine light on how changes in size influence the overall health of the population and its ability to resist external pressures such as fishing and climate change. The team will evaluate strategies to promote the resiliency of fish communities by altering how fishing effort is spread across different sizes.

Collaborators include GMRI Fishery Ecologist Graham Sherwood and UMaine/GMRI Postdoctoral Research Associate Walt Golet. The project is supported by a grant from the Lenfest Ocean Program.



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Conference Explores Fisheries Innovation



Walking into the “Innovative Strategies for Success Under Catch Shares” conference on the Portland waterfront last month, it was clear that this was a unique mix of people. Fishermen, seafood business professionals, regulators, and scientists from across the country were engaged in energetic discussions around fisheries innovation on the water, in communities, in the marketplace, and by management.

Under a catch share system, fishermen are given an allocation of fish stocks rather than being limited to a certain number of days at sea. New England's new sector system is a novel type of catch share, with groups of fishermen working in harvesting cooperatives. Facilitated by the Gulf of Maine Research Institute, the conference examined how innovation can increase profitability and sustainability for those fishing under the sector system. While the approach can present challenges in terms of financing, it also provides opportunities for achieving high catch levels, avoiding bycatch, and securing more market reward. Conference participants explored how a catch share-based fishery can both drive and necessitate innovation. One participant reflected:

“This was a truly inspiring conference. I was gratified to learn that so many people and organizations are making substantial progress in keeping community-centered fisheries viable in a catch share economy.”

GMRI Joins National 100Kin10 Movement to Meet STEM Challenge – 100Kin10 is a partnership of 80 national corporations and leading non-profits that have committed to addressing the growing need for science, technology, engineering, and math (STEM) teachers in U.S. public schools over the next 10 years. Alan Lishness, Chief Innovation Officer, described the Gulf of Maine Research Institute's role as a partner:

“This partnership puts Maine on the map as a statewide model for science literacy. This is an incredible moment for Maine schools. In the next decade, one in seven new Maine jobs will be in STEM-related areas. Eighty percent of jobs will require technology skills. We need to hire and retain exceptional science and math educators. GMRI is working to support teachers with the resources they need to ensure that all Maine students achieve science literacy. We are committed to a future where all students are skilled at critical thinking, collaboration, communication, and problem solving for the 21st century.”

www.gmri.org/100Kin10





Vessel Trip Reports – After working hard on the water all day, commercial fishermen have to fill out hand-written paperwork — whether they’ve landed a full catch or caught nothing. The time-consuming paper reports can be frustrating, and many are looking forward

to moving to an electronic reporting system. Gary Libby, a Port Clyde groundfish fisherman, has been working with the Gulf of Maine Research Institute and the Northeast Fisheries Science Center to begin submitting electronic vessel trip reports.

“Real-time reporting is going to be a big help to the fleet.”

Electronic reports have recently been approved by the National Oceanic and Atmospheric Administration as an optional replacement for paper. GMRI worked with 30 fishermen to pilot electronic software last year, and now several fishermen, including Libby, are actively using it. Our scientists help equip vessels, provide training, troubleshoot problems, and collaborate with developers and regulators. Although there is a learning curve, the overall response from fishermen has been positive. Electronic reporting expedites data entry, enables near real-time tracking, reduces the chance for error, and maintains a logbook of data for future reference. We expect to bring more fishermen online soon.

www.gmri.org/gear_technology

Watch for Gulf of Maine Seafood – Gulf of Maine

Responsibly Harvested seafood products can now be found in hundreds of stores throughout the Northeast as well as outside the region. In the last six months, Shaw’s, Giant Eagle, and Big Y have



joined Hannaford in carrying these branded seafood products. Several partners have signed on as licensed dealers, including Bristol Seafood, North Atlantic Seafood, North Coast Seafoods, Sanders Lobster Company, Slade Gorton, and Sousa Seafood. The program supports the long-term health of the Gulf of Maine’s fisheries and fishing communities. Verified products currently include Atlantic pollock, sea scallops, northern shrimp, cod, haddock, whiting, and lobster — with more soon to come. We’ve heard great reviews from seafood shoppers:

“We were in New Bedford last week, and I saw some Gulf of Maine Responsibly Harvested scallops at Shaw’s. I spoke to the seafood manager saying how much I appreciated it.”

“It makes great sense for all of us that live here — both economically and environmentally. Personally it’s a huge incentive for me.”

“I’ll check it out next time I’m in a grocery store!”

www.gmri.org/seafood

“I love that my job is focused on working to assist fishermen and fishing communities within the Gulf of Maine bioregion remain viable — and thrive — under changing fisheries management measures in New England.”

- Jonathon Peros, Project Manager,
Fisheries Technical Assistance Program,
Gulf of Maine Research Institute

Hear more about what excites our staff and watch videos featuring GMRI’s work in our Annual Report at www.gmri.org/AR2010

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