Related Links

Cooperative Institute for Coastal and Estuarine Environmental Technology

Cooperative Institute for New England Mariculture and Fisheries

New Hampshire Fishermen Are Mussel Bound

Contact: Dolores Leonard
(603) 862-3685
CICEET and CINEMAR

Jan. 19, 2005

DURHAM, N.H. — 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. Sen. 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.

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 see only 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."

CINEMAR is a joint institute between UNH and the National Oceanic and Atmospheric Administration (NOAA). As part of its mission to further ecosystem–based management of marine environments, NOAA supports the development of a competitive, environmentally-friendly aquaculture industry in the United States, one that will meet growing demand for seafood and provide for sustainable fisheries.

When farmed offshore, far from pollution sources, blue mussels (Mytilis 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."