

Thursday, December 4, 2008 ■ Section II, Page EIGHT

Franklin Aquaculture Center Receives Grants Of Nearly \$3 Million

BY STEPHEN RAPPAPORT
ELLSWORTH — The University of Maine's Center for Cooperative Aquaculture Research (CCAR) and Maine's nascent offshore aquaculture industry got a huge boost last month with a pair of grants totaling just under \$3 million from the Maine Technology Asset Fund (MTAF).

The funds come from a \$50 million research and development bond approved by Maine voters in November 2007 and are administered by the Maine Technology Institute.

By far the largest grant, \$2.6 million, will go directly to CCAR to erect a new building that will be used for holding marine fish, such as cod, testing offshore aquaculture equipment and holding broodstock for large marine fish such as tuna. The smaller grant, just \$360,000, will go to the Maine Aquaculture Innovation Center (MAIC) to improve and upgrade aquaculture business incubator facilities at CCAR.

According to Nicholas Brown, CCAR's director, the \$2.6 million will be used to build a new 168-by-128-foot temperature-controlled building that will enclose a pair of existing 300,000-gallon outdoor tanks. Each 62-foot diameter tank will have its own separate water recirculation system.

The newly enclosed tanks will be used for a number of functions aimed at bolstering Maine's offshore aquaculture industry. One use will be the testing of new designs for offshore net pens.

Ocean Farm Technologies, based in Searsport, has already developed an offshore net pen system that it is marketing. As a partner with CCAR in the grant, the company plans to use the new facility to help it test feed-

ing, fish handling, grading and harvesting systems for fish such as Atlantic cod.

According to Brown, the tanks may also be used for holding broodstock for large pelagic fish such as tuna. A heavily overfished resource in the Gulf of Maine, tuna are successfully farmed in offshore pens in Australia and the Mediterranean Sea. According to the CCAR grant proposal, tuna have "an enormous potential for U.S. aquaculture."

The new building will also allow CCAR to establish a dedicated broodstock facility for cod. Operating in collaboration with commercial cod farmers, such as Great Bay Aquaculture and the Department of Agriculture's National Cold Water Marine Aquaculture Center, the facility will enable the CCAR and its partners to begin work on a national cod breeding program that "will be essential to ensure that long term egg supplies for hatcheries and help Maine's cod industry remain competitive in the long term."

The USDA operates a similar program for catfish at the Thad Cochran National Warmwater Aquaculture Center in Stoneville, Miss. That research and breeding program provides essential support to the nation's roughly \$600 million catfish farming industry.

Maine's \$2 million seaweed industry will also benefit from the new facility. Plans call for construction of a seaweed seeding facility that will allow the biosecure culture of algae such as nori, dulse and kelp using advanced techniques.

CCAR has two commercial partners that will work with it to develop the seaweed facilities. Maine Coast Sea Vegetables, like

CCAR based in Franklin, supplies wild-harvested nori and dulse to customers such as Whole Foods. Ocean Approved, LLC, of Portland, markets a number of kelp-based products.

In addition to building new facilities with the \$2.6 million, CCAR will benefit from the \$360,000 grant received by the Maine Aquaculture Innovation Center. Founded in 2002, MAIC has served as an important business incubator for the Maine aquaculture industry.

CCAR will use the \$360,000 to upgrade and renovate existing MAIC facilities that have already been used by companies such as Seabait Maine LLC to construct the world's first indoor recirculating marine worm farm.

Once the existing 160-by-72-foot building has been upgraded, it will be used for a number of projects already in the works.

Sea and Reef Aquaculture LLC, founded in 2003, is already raising 10 different species of marine ornamental fish for sale to hobbyists throughout the United States. Friendship International is in a completely different business.

Already a major exporter of green sea urchins that are harvested from Maine waters, Friendship has worked with MAIC and CCAR to develop a land-based urchin hatchery and broodstock operation and has tested the land-based growout of green urchins. The company has plans to expand its operations to grown enough urchins to for large-scale tests of methods for planting urchins on leased sea bottom plots, and to determine whether it is economically feasible to raise urchins entirely in a land-based recirculating system.