Ocean fish, fresh from the farm

Aquaculture of sea creatures has commercial promise in North Carolina

By WADE RAWLINS
Staff Writer

WRIGHTSVILLE BEACH - Chef John Howell recently listed fresh black sea bass as one of the specials at the Bridge Tender restaurant in Wrightsville Beach. He stuffed it with crab, topped it with salsa.

“We sold out of them in two nights,” Howell said. “It was sweet.”

But what made the dish really special was that the fish didn’t come from the ocean -- it came from a university fish farm.

Someday all the pan-seared black sea bass that chef Howell serves will launch a new marine incubator that helped fund the research.

Researchers hope their work and that of colleagues at other universities answers a lot of research questions, said Daniel Baden, director of the Center for Marine Science at UNCW and the coordinator at the Center for Marine Resources.

“We’re at a stage where we’ve answered a lot of research questions,” Baden said.

The research in Wilmington indicates the black sea bass are a good candidate for commercial production using sustainable feeds in tank farms. In feeding trials, researchers have successfully replaced up to 70 percent of their diet with soy meal -- which could help reduce pressure on harvesting small feeder fish to grind up into meal.

“We are developing an industry in an era where there is more concern for protecting the environment,” said Wade Watanabe, a research professor at UNC-W and the coordinator of the aquaculture center.

Watanabe said researchers needed to demonstrate that the fish can be raised in sufficient numbers in confined spaces and grow quickly enough to be sold to health-conscious consumers.

“I think there is a lot of work to be done in the area of learning how to develop technology for raising these fish in inland systems that don’t have access to seawater,” Watanabe said.

Ted Davis, a principal in Aquaplantations, a Wilmington company formed to develop farms, wants to transfer the university research into a commercial fish operation. He said right now the capital costs for launching the farm remain steep -- $700,000 for a fish farm with a recirculating water system that would produce 100,000 pounds of fish.

In a collaboration with university researchers, Davis has provided some tanks and equipment at the aquaculture center to raise sea bass. He has also acquired an eight-acre site near the airport to eventually locate a farm. He has sold some fish to restaurants and expects to have more marketable fish in about 18 months.

“The fish is grown in the Wilmington area, which could help reduce pressure on the United States,” Watanabe said.

Aquaculture is the fastest-growing source of food production. The U.S. imports about 70 percent of its fish.

Raising ocean fish from eggs is more complicated than farming freshwater fish, scientists say, just as keeping a salt water aquarium involves more work than a freshwater aquarium. Ocean fish eggs are smaller and more fragile and difficult to cultivate.

“I would like to be a part of launching an industry for the state,” Davis said. “I see marine aquaculture developing much like the swine or poultry industry. Seafood is the last wild product left. You don’t go out and kill a turkey or pig. It’s grown.”

In order for us to have seafood, there is going to have to be an agricultural system.”