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Perspectives on the North Carolina Commercial Fishing Industry North Carolina Fishery Policy Series Part 2

BY **SARA MIRABILIO**, FISHERIES SPECIALIST, NORTH CAROLINA SEA GRANT; AND **RORY J. FLEMING** AND **KELLY ANDERSON**, RESEARCH LAW FELLOWS, NORTH CAROLINA COASTAL RESOURCES LAW, PLANNING AND POLICY CENTER

This is the second of a two-part series on North Carolina fishery policy and management issues. The first article provided a brief history of commercial fishing in North Carolina, significant federal and state laws and regulations governing fishing practices, and current factors hindering industry longevity. This installment will discuss the main challenges and key regulatory issues in greater depth, and provide insights on future avenues for maintaining North Carolina's commercial fishing opportunities and the way of life for the state's coastal communities.

Statewide commercial seafood landings have been on the decline since 1981. In addition, the dockside value of the catch before processing also has seen a downswing over the past decade. Current challenges for the state's commercial fishing industry include, but are not limited to, illegal, unreported and unregulated seafood imports driving down overall seafood prices; labor shortages; declines in seafood supply due to tighter fishing quotas and harvest restrictions; waterfrontdevelopment pressures; increased fuel prices; and increased regulatory compliance costs. Consumer education, direct-marketing arrangements and property tax breaks for waterfront fish houses are actions with the potential to benefit the North Carolina commercial fishing industry.

Competing with Imports

In Barbara Garrity-Blake and Barry Nash's An Inventory of North Carolina Fish Houses: Five-Year Update — a 2012 report on the state's fish houses published by North Carolina Sea Grant — their survey results revealed that the majority of North Carolina seafood wholesalers participate in interstate trade along the U.S. East Coast to markets in Virginia, Baltimore, Philadelphia and New York. However, some seafood wholesaler respondents indicated that they also sold seafood to markets and restaurants within North Carolina.

In sum, 39 percent of wholesalers stated that they sold the majority of their fish to in-state markets; 44 percent reported shipping the majority of their fish out of state; and 17 percent said that they had roughly a 50-50 split between in-state and out-of-state sales. The report also included the percentage of annual sales obtained from domestic and imported seafood. Sixty-three percent of participants claimed to deal solely in domestic product, with 57 percent of purchases exclusively from North Carolina fishermen. Thirty-five percent of respondents said that they sold a mixture of imported and domestic seafood, noting that between 1 and 50 percent of the seafood stocked was imported. However, most of the survey participants reported that between 20 and 40 percent of their product was imported. Major imported products included various species of catfish, crabmeat, crab legs, flounder, grouper, mahi mahi, salmon, sea trout, shrimp, snapper, swordfish, tilapia, tuna and wahoo.

North Carolina fishermen are feeling the effects of market oversupply of these species. The value of the state's most profitable seafood products — shrimp, blue crab and flounder — has dropped. Further, market volatility and decreased profit margins, not just for individual fishermen but also at the wholesale level, have resulted in loss of industry infrastructure. As an example, competition from imported crabmeat, in part, has brought about the closure of 34 of 45 crab-picking facilities in the state since 1982. In 2011, a Hyde County crab processor received \$18 per pound of picked crabmeat. However, imported crabmeat from Venezuela was selling for roughly \$13 per pound.

Supply and Demand

Fishery management involves regulating when, where, how and the quantity fishermen can catch using a variety of tools, such as limiting harvest amounts, fishing seasons and allowable gear by which certain fish may be caught. The North Carolina seafood industry operates on a high-volume, low-margin business model. As federal and state regulators began restricting harvests and establishing harvest seasons to rebuild fish stocks, this model began to fray as the amount of local seafood declined. Many fishermen were forced to practice "derby fishing," where they focus on catching as much of a specific species for as long as its season is open.

This practice contributes to a periodic oversupply of perishable product that must be moved quickly into distribution before it becomes unsellable. Consequently, North Carolina fishermen and packers receive very low revenues when supply exceeds demand. For example, black sea bass is a federally managed fishery with a



limited number of allowable fishing trips, short harvest season and highly specific size limits, making this once high-value species now often a low-revenue commodity. A Carteret County seafood dealer explained the situation, "The window for black sea bass became very small, and when it opened, all permit holders jumped in and the price crashed."

This fishery management paradigm limits the ability of fishermen to move among fisheries based on what is plentiful and seasonally available. Regulations result in heavy fishing pressure on more viable fisheries with less stringent management measures. Resultant overexploitation can make a once-stable fish stock become overfished and/or experience overfishing. A prime example of this phenomenon is the state's blue crab fishery.

The blue crab fishery is North Carolina's most valuable domestic seafood product. The N.C. Division of Marine Fisheries, or DMF, lists the stock status as that of "concern" because of continued decreases in landings. In 2013, landings were more than 5,000 pounds lower than the 10-year average of 22,000 pounds. Fishery managers attribute this decline predominantly to overfishing of the blue crab stock, although the assessment for 2012 suggests that the blue crab stock is not overfished. This assessment will be updated in 2014. The belief is that as state and regional fishing regulations and quotas increased, fishermen were forced out of options for fish species to harvest. However, the blue crab fishery, which was deemed viable, had lessstringent management measures and required less expensive gear. Thus, many fishermen refocused their fishing efforts on blue crabs.

Development vs. Access

Loss of boat-launch areas, disappearance of traditional working waterfronts and reduced availability of marine services are hurting North Carolina's commercial fishing industry. Because there is limited waterfront available for development, the North Carolina coast is under pressure from nonfishing industries. Traditional seafood businesses and associated marine industrial infrastructure are facing dwindling financial prospects and an uncertain economic future. A dock, pier or fish house is much less valuable than a waterfront condo or house. Coastal lands traditionally used for fishing purposes

have increased in market value in recent years, prompting the sale of these areas for other uses and to escape higher property taxes.

Fish house operators who lease their property, and thus could have the property sold out from under them, or fishermen who gain access to the water through property easements or "gentleman's agreements," which could be nullified upon the sale of the property, are most vulnerable to loss of waterfront access. In these situations, residential properties or retail establishments, such as restaurants or hotels, end up on these waterfront properties, typically excluding fishing uses and general public access.

Changing Regulations

Government, academia and nongovernmental organizations have worked with industry to find, develop, test and implement new fishing gear that reduces bycatch, which is the incidental capture of unwanted animals. For example, fishermen now must use circle hooks on longlines and turtle excluder devices and bycatch reduction devices in shrimp trawls to help reduce bycatch of sea turtles, marine mammals and incidentally caught finfish. Proven solutions exist to catch fewer nontarget species and to allow these species to escape and many more are in development. But in many cases, the gear modifications and related technical solutions are complicated to install or carry out, expensive to buy, and result in loss of target species, and thereby, profit.

Managing restricted fishing areas can be difficult with limited at-sea enforcement capacity. To address this problem, federal fishery managers are implementing "vessel monitoring systems," or VMS. These systems create additional costs and responsibilities for fishermen because vessel owners typically have to pay for everything equipment purchase, installation and maintenance; required position reports; and communication costs for normal hourly reporting. Many North Carolina fishermen must maintain VMS systems, including watermen who use shark gillnets, and pelagic and bottom longlines.

Regulations can sometimes change the way a fisherman fishes. Recently, the state implemented stricter gillnet regulations in the Albemarle and Currituck sound areas to avoid fishermen interacting with sea turtles. During most of the year, fishermen who set large-mesh gillnets in the Albemarle and Currituck sounds and their tributaries are limited to overnight soaks. In July 2014, DMF implemented a new rule that requires fishermen to remove anchored, large-mesh gillnets from these waters between one hour after sunrise and one hour before sunset each day. These actions already are required in many other water bodies in the state. With this rule change, fishermen have to make two trips to fishing grounds each day, as opposed to one trip to catch the same amount of fish, doubling the fuel costs they incur.

These investments have long-term benefits, such as increased catch efficiency and more protection for nontarget species. However, in the short term, complying with some regulations have resulted in revenue losses and debt increases for many independent fishermen.

Higher Fuel Prices

Rising fuel prices also are taking their toll on the industry. The U.S. Energy Information Administration, or EIA, reported that on Nov. 3, 2014, diesel fuel cost an average of \$3.62 per gallon nationally, down 23 cents from a year ago. However, diesel prices still remain near all-time highs. The EIA notes that average diesel fuel prices across the country remained below \$1.30 per gallon in the 1990s, were approximately \$2.71 in 2006, and rose to \$4.13 in March 2012. Low market prices have coincided with soaring fuel and regulatory compliance costs, further eroding profit margins for North Carolina commercial fishermen. For example, because of low shrimp prices and high fuel costs, large trawlers can be found dockside and stripped of gear in traditional shrimping communities, including Sneads Ferry, Varnamtown and Shallotte. Additionally, seafood transportation companies are less likely to send trucks to seafood packing warehouses if they are not guaranteed a full truckload of product.

Labor Crisis

While the state of North Carolina has seen an increase in the general workforce in recent years, the commercial fishing industry has witnessed a decline in active labor force.

According to Garrity-Blake and Nash's 2012 fish house inventory, seafood dealers cited a lack of harvesters landing seafood and a decrease in young fishermen as reasons for this decline. There are fewer incentives for new people to harvest seafood for a living. Reasons for not entering the fishing industry include increased operating costs — such as equipment, bait, fuel and permits as well as a higher cost of living in general. The report quotes a dealer saying, "They can't bear the risk. How can they invest in permits when they don't know what the government will shut down next?"

In addition, many coastal fishing communities are located in rural areas where access to domestic labor is extremely limited, so the industry is highly dependent on migrant labor. As explained by the N.C. Rural Economic Development Center's briefing paper, A Supply Chain Analysis of North Carolina, the H-2B nonimmigrant visa program "has long permitted small, domestic employers, including seafood businesses, to secure temporary visas for foreign, unskilled labor to do seasonal, non-agricultural work." The crabmeat industry is illustrative of this. Since the 1990s, processors have hired primarily Latino migrants for this labor-intensive work. Recently, the U.S. Department of Labor (DOL) changed the process. Previously, employers could get work visas for Latino migrants after simply claiming a failure to find willing and able American laborers. Crab processors now are mandated to "formally consult with state workforce agencies to show they cannot find Americans before DOL will issue H-2B visas," which will significantly increase the cost and time required for the labor search.

Help from "Locavores"

The National Restaurant Association's annual *What's Hot* culinary forecast predicts menu trends for the coming year. Locally sourced meats and seafood topped the 2014 forecast. The local foods movement, with its consumer-driven emphasis on community-based food systems and local food production, is an encouraging development for the North Carolina seafood industry. Consumers are choosing to purchase local seafood for a variety of reasons, including freshness, quality and taste. However, many also make conscious decisions to support local fishermen.

A 2008 survey conducted by the University of North Carolina at Chapel Hill showed that 94 percent of respondents factored seafood origin into their purchasing decision, preferring to support local fishing communities, if possible. Additionally, a survey conducted by the University of North Carolina at Greensboro at the 2010 North Carolina Seafood Festival in Morehead City found that 84 percent of respondents preferred local seafood to imported seafood. Increased consumer awareness of the potential health risks and environmental harms associated with farm-raised, imported seafood also has led to more consumers inquiring about the origin of their seafood and requesting local. The 2012 fish house inventory respondents substantiated the data showing an increased demand for local seafood — 67 percent of fish house owners observed that demand for locally caught seafood has increased in recent years.

Based on the community supported agriculture model, a community supported fishery, or CSF, is a program that links fishermen to a local market. In a CSF, customers pre-pay for periodic delivery of fresh, seasonal and local seafood. CSFs — whether in Down East, Maine, or Down East, North Carolina — seek to reconnect coastal communities to their food system, encourage sustainable fishing practices, and strengthen relationships between fishermen and communities. By creating a local market for seafood that bypasses the traditionally lengthy seafood supply chain, fishermen are able to obtain a small price premium for their catch. Further, by paying in advance, consumers are participating in a form of risk-sharing with fishermen, who are assured of a buyer for their catch before they leave the docks.

Tax Breaks

The state has stepped in to prevent the conversion of working waterfronts to other uses as the result of economic pressures caused by the increased assessment of land value for property taxation. N.C.G.S. § 105-277.14 requires the assessor to evaluate a property based on its worth as working-waterfront land and not what its market value would be should the property be converted to other uses. The landowner may elect to apply for taxation under this law by filing an application with the local assessor. The difference in tax is deferred annually unless, or until, the property changes use. The 2012 fish house inventory surveyed 45 respondents with waterfront fish houses, 24 of whom were aware of the Present Use Value, or PUV, legislation. However, only eight took advantage of the tax break. Those who took advantage of PUV taxation reported saving between \$3,000 and \$5,000 in property taxes per year, and were satisfied with the program.

Looking Ahead

North Carolina fisheries are declining, but there are some steps that can be taken by regulatory agencies, industry groups and interest groups to improve the prospect of the long-term continuance of the state's commercial fishing industry. First, data show that additional members



of the fishing industry could benefit from availing themselves of the PUV tax break. Next, people in the seafood industry should be offered avenues to continue to learn about direct-marketing methods and identify approaches that might be the most appropriate for their situations. In addition, increasing state and federal funding for marketing local products and expanding customer education on the importance of supporting local businesses would likely help address the problem of consumers choosing cheaper imports over higher-quality, local seafood. Further, showing fishermen how to reduce their operating costs and providing them with grants and low-interest loans also can help those who are struggling to stay in the industry. Finally, engaging the younger population of local fishing communities with the industry through school programs or apprentice opportunities may alleviate some of the pressures facing the aging commercial fishing workforce by encouraging new members to join their ranks.

References

N.C. GEN. STAT. § 105-277.14.

Garrity-Blake, Barbara, and Barry Nash, 2012. An Inventory of North Carolina Fish Houses: Five-Year Update. North Carolina Sea Grant. Published July 12, 2012. Available at http://ncseagrant.ncsu. edu/ncseagrant_docs/products/2010s/fishhouse_ inventory_2012.pdf.

McInerny, Stephanie, and John Hadley, 2014. An Economic Profile Analysis of Coastal Commercial Fishing Counties in North Carolina. N.C. Department of Environmental and Natural Resources. Published March 2014. Available at http://portal.ncdenr.org/c/document_library/ get_file?uuid=b13dbf57-2c73-44df-882ad64984853208&groupId=38337.

National Oceanic and Atmospheric Administration. *Farmed Seafood: Outside the U.S.* Available at http://www.fishwatch.gov/farmed_ seafood/outside_the_us.htm.

National Restaurant Association, 2014. *What's Hot Culinary Forecast*. Available at http://www. restaurant.org/Restaurant/media/Restaurant/ SiteImages/News%20and%20Research/ Whats%20Hot/What-s-Hot-Top-Five.jpg.

N.C. Division of Marine Fisheries, 2014. *Stock Status Report 2014*. Published July 2014. Available at http://portal.ncdenr.org/web/mf/2014-stock-status-report.

N.C. Division of Marine Fisheries, 2014. *State Implements Stricter Gill Net Regulations in Albemarle and Currituck Sound Areas to Avoid* *Closure*. Published July 23, 2014. Available at http://portal.ncdenr.org/web/mf/nr-35-2014-gill-nets.

North Carolina Rural Economic Development Center, 2013. A Supply Chain Analysis of North Carolina's Commercial Fishing Industry. Published September 2013. Available at http://ncseagrant. ncsu.edu/ncseagrant_docs/products/2010s/supply_ chain_analysis_nc_commercial_fishing.pdf.

North Carolina Sea Grant, 2007. *Waterfront Access Study Committee Final Report*. Published April 13, 2007. Available at http://ncseagrant.ncsu.edu/ ncseagrant_docs/products/2000s/wasc_final_report. pdf.

Preston, Julia, 2012. "Labor Dept. Issues New Rules for Guest Workers." *New York Times*. Published Feb. 10, 2012. Available at http://www. nytimes.com/2012/02/11/us/rules-revised-for-h-2bguest-worker-program.html?_r=0.

Sartwell, Tim, 2009. What Can Be Done To Save The East Coast Blue Crab Fishery? Duke

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University. Published May 15, 2009. Available at http://dukespace.lib.duke.edu/dspace/ bitstream/handle/10161/1014/tws2_mp_final. pdf?sequence=1.

U.S. Energy Information Administration, 2014. *Monthly Energy Review*, pg. 122. Published September 2014. Available at http://www.eia.gov/totalenergy/data/monthly/pdf/sec9_6.pdf.

U.S. Energy Information Administration, 2014. Short-Term Energy and Winter Fuels Outlook. Published Oct. 7, 2014. Available at http://www. eia.gov/forecasts/steo/index.cfm.

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