Alive at Five Concert Series

The Alive at Five concert series, sponsored by Downtown Morehead City, Inc., is in full swing. Free concerts are held at Jaycee Park at 807 Shephard Street from 5 to 8 p.m. on the first and third Friday of the month and feature a variety of regional bands showcasing an assortment of music genres. The remaining 2017 Alive at Five concerts will feature:

August 4: The Mikele Buck Band, which is an Eastern North Carolina-based group that has shared the stage with such nationally known acts as Aaron Tippin, Joe Nichols, Jeff Bates, Trent Tomlinson, Bucky Covington and, most recently, Jason Aldean. Visit themikelebuckband.com for more information.

August 18: The Jan Michael Fields Band features the stellar voice of Jan Fields, a charismatic performer who appeals to audiences of all ages. Jan received a Lifetime Achievement Award in 2016 for his dedication to his craft and support of the North Carolina music industry. He has shared the stage with top acts, including .38 Special, Cheap Trick, Firehouse, Kansas, The Romantics, Billy Squire, Klymaxx, Greg Kin Band, and Taylor Dayne. More information is available at janmichaelfields.com.

September 1: The North Tower Band, one of the South's great party bands for over 35 years, provides the best in oldies, beach, top 40 and funk. Sizzling brass, super vocals, and a wide ranging repertoire will all make this concert one to remember. Go to northtowerband.com for more information.

Alive at Five concert-goers are encouraged to bring blankets and lawn chairs for seating. Attendees arriving by boat should dock at the Jaycee Park docks, complimentary during concert hours. Beer, wine, water and soda will be for sale during the concerts along with light refreshments. While outside food is permitted, no outside beverages or coolers are allowed and concert attendees are encouraged to visit the many downtown Morehead City bars and restaurants following the concerts.

August Sudoku Puzzle

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See solution on page 11.

CMAST Study Targets Dolphinfish

By Chloe Mikles

Dolphinfish, mahi-mahi, dorado, *Coryphaena hippurus*—no matter the name, this fish has great importance for our ecosystem and industries. Popular among seafood eaters and recreational and commercial fishermen alike, the dolphinfish fishery is a valuable one to research. The fisheries lab at NC State's Center for Marine Science and Technology (CMAST) currently has a project underway to learn more about the dolphinfish that end up on our plates, and what happens to those that are released.

In South Carolina, Georgia and Florida, there is a minimum size to keep dolphinfish—a fork length of 20 inches. North Carolina has no minimum size requirement, but does have a daily catch limit of 10 per person, and no more than 60 per vessel. Dolphinfish grow extremely fast, reaching maturity at around four months, and can live to about four or five years (but rarely do). They are also highly migratory, inhabiting the Bahamas, moving north along the US east coast, and rounding off toward Africa into the western Atlantic. As pelagic fish, they inhabit a wide range of the water column, but frequently swim near sargassum grass lines or any structure floating on the surface. Off the coast of North Carolina, dolphinfish can frequently be found in the Gulf Stream, where the water is blue and floating objects are abundant. Dolphinfish are fun to catch as they frequently swim in schools, and can be seen breaching the surface and changing colors as they are reeled in.

The ongoing study at CMAST has several components. One of the overall goals of the project is to define a discard mortality rate for dolphinfish in the recreational troll fishery. Discard mortality is represented as a percent, so through years of data and statistical modeling, researchers will be able to predict what chances a dolphinfish has of surviving if it is angled and released. Changes in legislation could potentially occur, depending on the findings. If the discard mortality rate is found to be very high for this species, the population may be in trouble.

In order to come up with a discard mortality rate and other publishable results on the species, data must be collected. Dolphinfish that are brought in by recreational charter boats in Morehead City are frequently sampled. The information that can be found from the fileted carcasses includes fork length, sex and the hooking location. By examining the fish, it is possible to determine where it has been hooked. If the hook has been left in the fish (usually in the gut or the gills), it is retrieved. The importance of determining the hooking location is derived from previous research studies, which generally conclude that certain locations of being hooked can be more lethal than others. So far, over 2,000 fish carcasses have been sampled.

Another aspect of the study is one that the public and anglers in North Carolina can help out with. Dolphinfish are tagged by researchers, and if recaptured, the data on the fish is extremely valuable. Once caught by the research team, the fish is examined for trauma, and all information to be taken from the individual fish is recorded. A small incision is made in the fish's abdomen, and an internal-anchor wire-core tag is inserted. The tag is small, and does not impair movement. It has all of the information necessary for a recapture to be reported, and anyone who catches a tagged fish can get a reward.

There is a lot of work left to be done, and there are more upcoming components of the study. Collecting data is a process that takes a lot of time and the combined efforts of many, but this project will expand our understanding of the dolphinfish population, arguably one of the most popular fisheries of eastern North Carolina.

Chloe Mikles is a rising sophomore at Cornell University's Ithaca, NY, campus, where she is an animal science major. She is a staff writer for the university's newspaper, The Cornell Daily Sun, and a member of the varsity swim team. Chloe is spending the summer as a researcher at NC State's Center for Marine Sciences and Technology (CMAST) in Morehead City, and we are pleased to have her as a guest contributor to The Shoreline.—The Editors