Satellite Tagging and Real-time Tracking of Tripletail

Eric Gigli
Fisheries Biologist
Mississippi Department of Marine Resources – Finfish Bureau

Abstract
To better manage and understand the migratory patterns of the species, the Mississippi Department of Marine Resources attached pop-up satellite tags to Tripletail captured in the Mississippi Sound. Tagging of wild-caught individuals occurred immediately prior to the expected migration of the fish during cooler months. In Fall 2019, Wildlife Computers miniPAT tags were deployed on ten fish. These tags record data throughout the deployment and upload data through the satellite network at the end of the deployment. Six of the ten tags provided data covering the Fall of 2019. In Fall 2021, Desert Star SeaTag-GEO tags were deployed on 10 fish as well as a single Wildlife Computers miniPAT tag deployment. Any time a SeaTag-GEO’s antenna breaches the surface of the water, the tag is capable of satellite communications. This may occur many times throughout the deployment and provides real-time GPS location. Six of the ten SeaTag-GEOs provided real-time tracking data throughout the Fall of 2021. The complete data transmissions for these eleven tags are still pending.

Bio
Eric first became interested in marine fish during visits to his grandparents in Cape Coral, Florida where they fished inshore in the mangroves of the Caloosahatchee. He graduated high school in Houston, Texas and then attended Armstrong State University in Savannah, Georgia (presently the Armstrong Campus of Georgia Southern University). At Armstrong he designed and completed a research project on population genetics of local Red Drum and graduated with a B.S. in Biology. He then moved to Ocean Springs, Mississippi for graduate school at The University of Southern Mississippi’s Gulf Coast Research Laboratory. His graduate assistantship focused on aquaculture of many key marine species including his master’s thesis, which focused on the performance of Spotted Seatrout in recirculating aquaculture systems. He then began working for the Mississippi Department of Marine Resources’ Finfish Bureau. Primary focuses during his time at MDMR have been administrating the Tails n’ Scales program, various supplemental data collection surveys, working to meet data development and analysis needs of state and federal programs, and the Tripletail satellite tagging project. He and his wife, Sarah, still live in Ocean Springs with their four-year-old daughter Harper and two-year-old son Fischer. They spend spare time fishing and cruising on their 18ft Kenner.