

REPORT ON A COLLECTION OF FISHES FROM FRANKLIN CO., N.C.

by Bob Goldstein, Raleigh, NC

On January 21, 1984, a group of Raleigh Aquarium Society members conducted a collecting trip in Franklin County, N.C. for the purpose of stocking a display aquarium at the State Museum of Natural History with a coastal-plain swamp habitat assemblage of species. The participants on the outing were Todd Wenzel, Outing Leader, Alan Pitegoff, and Bob Goldstein. Wenzel had reported earlier collecting of appropriate species at the site with NCSU personnel, and that seemed a very close locale to Raleigh from which we might pick up Bluespotted Sunfish (Enneacanthus gloriosus). We set out at 1300 hours while the temperature was still below freezing.

Our route took us north on US 401 past Rolesville and well into Franklin County, just south of Louisburg. The collecting locality was a portion of Cedar Creek, a tributary of the Tar River. Our position was reached by taking US 401 nine miles north of US 96 over a portion of Cedar Creek, then a further 0.7 miles on US 401, then 0.3 miles east (right) on SR 110, 1.4 miles SE (right) on SR 1701, and then 1.8 miles S (right) on NC 39, which was identified at the time only as RR5 from mail-boxes, and subsequently from a county map. This took us back to another overpass bridge on the same creek, but one with easier access and a place to pull over.

Todd and Alan proceeded to pull on the new hip waders purchased as part of our Streamwatch Program activity, and plunge into the water on both sides of the road, and then on both sides of the bridge, covering all four available shoreline habitats. All collecting was done with long-handled quarter-inch-mesh nylon dip net.

The water was muddy, except for the very edges, where ice had formed to a thickness of 1/3 inch. I took photographs, and assisted with the bucket carrying fish and plants.

Because the air temperature was below freezing, the collecting nets would freeze quickly and remain solidly open, even while upside down, in the open air. It became imperative to get the fish from the nets quickly to prevent their freezing to the mesh.

The collection flora and fauna were typical of a swampy coastal plain, with elongate Sagittaria-like grasses, Ludwigia, and other swamp vegetation occurring in the margins and along the channel of the muddy, moving water. Fishes collected included a few Gambusia affinis (Mosquitofish), many Enneacanthus obesus (Banded Sunfish), one Lepomis gulosus (Warmouth), a large number of Aphredoderus sayanus (Pirate Perch), and two Notemigonus crysoleucas (Golden Shiner).

The fish were taken back to Raleigh for close-up photography and stored in flat 40-gal. tanks with aeration, and fed live tubificid-type worms. There were no problems in handling and no losses incurred.

The locality is a 40-minute drive from Raleigh and offers promise as a good site for swamp fishes when the weather warms later in the year. We did not collect Swamp Darters or other fishes that Todd had collected here previously, due to high water and the cold which prevented the use of seines. The fish will be displayed at the state museum in a swamp habitat tank, and then offered to anyone interested in keeping them.

Notes on Species:

Our Lepomis gulosus (Warmouth) individual was a juvenile in very good condition.

We might have caught some Enneacanthus gloriosus (Bluespotted Sunfish), but many of our Enneacanthus were too small for positive identification.

Our Gambusia affinis (Mosquitofish) were not worth saving, as we already have a stock of melanistic male Mosquitofish.

The Notemigonus crysoleucas were not identified under the microscope, but are very distinctive fish. There is little chance of an error here.

The abundant Aphredoderus sayanus (Pirate Perch) were in excellent condition, with one running ripe male in the group. We got a photo of it "running" by squeezing it against the photo glass, in order to demonstrate the position of the genital pore in this fish.

("Running ripe" is standard field ichthyologist terminology for fish in active breeding condition rather than approaching it, indicating that spawning is occurring at about this time. It is determined by gently pressing the sides of the fish. If sperm and eggs ooze out, the fish is said to be "running ripe." Running ripe is a condition that is determined only on living fish. It is important, since fish that are running ripe are selected for stripping. The fertility rate on such fish will be much higher than on fish which are not running ripe, and from which gonadal material has been taken by rough handling or autopsy.)