

Robust Redhorse

NORTH CAROLINA WILDLIFE RESOURCES COMMISSION

fact sheet, 2007



The robust redhorse is a long-lived member of the redhorse sucker family and is found in only three Atlantic slope drainages in the southeastern United States.

The fish has a large, thick body, rose-colored fins and a fleshy lower lip. Adults can exceed 30 inches in length and weigh nearly 20 pounds.

HISTORY AND STATUS

The robust redhorse is often referred to as the mystery fish because after its original description from the Yadkin River in 1870, it was lost to science for more than a century (Bryant et al., 1996).

Its rediscovery in the 1980s prompted conservation efforts to prevent further population declines. Populations have been located in the lower piedmont and upper coastal plain regions of the Oconee and Ocmulgee rivers in the Altamaha River system (Georgia); the Savannah River (Georgia and South Carolina); and the Pee Dee River (North Carolina and South Carolina).

In North Carolina, robust redhorse are found in the Pee Dee River downstream of Blewett Falls Dam.

SURVEYS AND MONITORING

Over the last seven years, biologists with the N.C. Wildlife Resources Commission, Progress Energy, the N.C. Museum of Natural Sciences, the South Carolina Aquarium, the S.C. Department of Natural Resources and Duke Energy have sampled the Pee Dee River each spring looking for the elusive fish.



Ryan Heise, N.C. Wildlife Resources Commission biologist, searches for the elusive robust redhorse.

So far, they've captured 38 individuals and radio-tagged 24 to monitor the fishes' movements and learn about these fish and their preferred habitats.

Ryan Heise, a Wildlife Resources Commission biologist and robust redhorse project leader, and other biologists have been sampling the Pee Dee River to assess the status of the population there.

"By tracking the radio-tagging fish, we found other individuals," Heise said. "We have really learned a lot about where robust redhorse spawn and their migratory patterns."



A fleshy lower lip identifies the robust redhorse as a member of the sucker family.

Photos: Todd Pusser



Juvenile robust redhorse



POPULATION DECLINE

The robust redhorse's decline in range and numbers is due to many potential factors, including habitat loss and disruption of spawning migrations resulting from dams and impoundments.

In the Pee Dee River, spawning takes place in large, rocky shoals. Spawning individuals have been located in swift water over clean, silt-free gravel. After spawning, some individuals swim downstream more than 60 miles into South Carolina, where they remain until the next spring.

Once blocked from historical spawning grounds, robust redhorse may not have the specific habitat (clean gravel substrate and swift current) available for successful spawning. Another reason for their decline is significant deterioration of water quality due to sedimentation and pollution. Other reasons include predation and competition by introduced nonnative species, such as flathead catfish, blue catfish and smallmouth buffalo.

ROAD TO RECOVERY

It's not all doom and gloom for this fish. Leading an effort to help the fish's recovery is the Robust Redhorse Conservation Committee (RRCC). The RRCC is a consortium of state and federal agencies, environmental organizations and power utility companies that are working to conserve the robust redhorse. The committee hopes to locate new populations of robust redhorse, pinpoint and address reasons for the fish's decline and restore populations to healthy levels.



Heise and fellow biologist Rob Nichols tag a robust redhorse.



Robust redhorse habitat on the Pee Dee River

Photo: Vann Stancil

While the fish isn't found often, the capture of 38 individuals firmly establishes the fish's continued presence in the Pee Dee and helps biologists begin to piece together its life history. That means new hope for an old fish once lost to science.



Photo: Todd Pusser

If you capture a tagged redhorse on the Pee Dee River downstream of Blewett Falls Dam, or if you would like additional information, contact:

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