

Celebrating Partnerships

A Collaborative Effort Brings an Ancient Species Back from Extinction

The Fish is Not Extinct

The robust redhorse, a large, long-lived member of the sucker family, was believed to be extinct until 1991. It was described in 1870 by Edward Drinker Cope but lost to science for 121 years. In 1991, the fish was rediscovered below Georgia Power's Sinclair Hydroelectric Project by Georgia Department of Natural Resources (DNR) biologists.

Robust Redhorse Conservation Committee (RRCC)

In 1995, a cooperative effort was initiated to restore the robust redhorse to its historic range of Georgia (GA), South Carolina (SC), and North Carolina (NC). The participants banded together under a Memorandum of Understanding (MOU) as the RRCC. Members include State (GA, SC, and NC) agencies, Federal agencies, industry, universities, and environmental organizations. In 2003, the RRCC completed a Conservation Strategy that documents the goals of the group. The ultimate long-term goal is to establish or maintain at least six self-sustaining populations distributed throughout the species' historic range.

Conservation Accomplishments

Present Wild Distribution

- In addition to the original population that was discovered in the Oconee River, other wild populations have been located in the Savannah River, GA/SC, the Pee Dee River, NC/SC; and Ocmulgee River, GA.

Refugial Populations

- Fingerlings have been stocked into ponds to develop refugial populations as insurance should a catastrophic event destroy a natural riverine population, and to allow the fish to grow to larger sizes for later stocking;
- Two ponds are located at Piedmont NWR, and one at Walton Fish Hatchery.



Releasing wild fish after collecting eggs and sperm

Spawning and Stocking Program

- Over 135,000 robust redhorse have been stocked into six river systems: Oconee, Ocmulgee, Ogeechee, and Broad Rivers in GA, and the Broad and Wateree Rivers, SC; spawning activity has recently been documented in the Ocmulgee River population.
- These stockings produced genetically-diverse fish that are exhibiting excellent growth and survival.

Research Topics

- Basic biological research on general life history;
- Effects of fine sediment, metal toxicity, and pulsed, high-velocity flow on eggs and larvae;
- Larval swimming performance;
- Physiochemical responses, habitat use, and movement of juveniles;
- Habitat use, movement, and spawning habitat characterization of adults;
- Taxonomic key;
- Genetics research indicating individuals from the Altamaha, Savannah and Pee Dee Rivers represent distinctly different Evolutionary Significant Units (ESUs)

Public Information Resources

- Development of a website, video, and informative displays;
- Live display at the SC Aquarium and the GA Aquarium.

Candidate Conservation Agreement with Assurances

- Georgia Power and GDNR developed a Candidate Conservation Agreement with Assurances with the Service.
- This partnership established the Ocmulgee River population and provides monies for research and monitoring.

Habitat Restoration

- Georgia Power adjusts flows during March-April below its Sinclair Project to simulate more natural flows and strive to improve both spawning success and survival of robust redhorse eggs and larvae.



Robust redhorse

- GDNR, with funding from the Service, is conducting an experimental gravel augmentation project to increase the amount of spawning habitat for robust redhorse.

Contact Information

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