FRESHWATER MUSSEL PROPATATION AND REINTRODUCTION EFFORTS IN ALABAMA.

Paul D. Johnson, Alabama Department of Conservation and Natural Resources, Alabama Aquatic Biodiversity Center, 2200 Highway 175, Marion, Alabama. paul.johnson@dcnr.alabama.gov

In 2005 the Alabama Department of Conservation and Natural Resources (ADCNR) created the Alabama Aquatic Biodiversity Center (AABC) to address conservation needs of Alabama's rarest riverine species. Alabama rivers host some 97 federally listed or candidate species, including the richest mollusk and crayfish species assemblages in the world. However, many once wide-ranging species are now restricted to single or few isolated occurrences. The primary goal of the AABC is to establish new populations of critically rare species. This is achieved through captive propagation and reintroduction/repatriation of conservation targets into unoccupied watersheds within their historical ranges. Additionally, because basic biological requirements of these species are unknown, the AABC supports primary research efforts (e.g., systematics, environmental physiology, life history, toxicology) through research partnerships with universities and other government laboratories. Comprehensive planning and monitoring efforts also accompany recovery efforts; emphasizing rivers already defined Critical Habitat for listed species. Cooperative efforts also extend towards habitat recovery in selected Alabama watersheds. Specifically the Geological Survey of Alabama (GSA) and the US Fish and Wildlife Service (USFWS) work cooperatively with the ADCNR to provide habitat and water quality data (GSA) and administrative support (USFWS) for critical habitats supporting these species. Current AABC reintroduction efforts have been completed for 51,524 individuals of 13 mussel species, since 2010. All initial reintroductions except 2 are persisting, and gravid females have been located in several reintroduction localities. However, additional stockings over a decade are anticipated to successfully establish numerous self-reproducing populations.