



Gulf & South Atlantic Regional Panel on Aquatic Invasive Species (GSARP).

Alabama Division of Wildlife and Freshwater Fisheries (ADWFF), 2023 Report, October 20.

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Highlights 2023:

- 2022-2023, our first post-approval year of the Alabama statewide Aquatic Nuisance Species (ANS) Plan, we hired a Fisheries Biologist, Adrian Stanfill. Adrian comes to the ADWFF with several years of fisheries and aquatic ecology experience (Auburn Univ, Florida Fish & Wildlife Conservation Comm.). Adrian will assist field sampling and educational activities regarding invasive carp and other aquatic species.
- During 2023, ADWFF sampled during spring and fall (278 electrofishing transects; 132 gillnet sets) targeting invasive carps across 35 GPS-fixed sites in Pickwick, Wilson and Wheeler Lakes using an occupancy strategy. Though we targeted all species of invasive carp, we captured only one each of Silver Carp *Hypophthalmichthys molitrix* and Grass Carp *Ctenopharyngodon idella* in Pickwick and Wheeler Reservoirs, respectively. Pickwick Reservoir is the leading edge of the invasion front for Silver Carp in Alabama waters of the Tennessee River system and an alarming number (approx 18K lbs) were captured by commercial fishers during February. Additional samples (n=8) were performed to investigate potential for juvenile carp recruits in Elk River, a system with high potential (Flu-egg model, TVA) for spawning suitability. Telemetry passage data was downloaded routinely at Guntersville and Wheeler Dams.
- Invasive carp BOL signage was placed at boat access areas in Alabama portions of the Tennessee River (n=51) and middle Tenn-Tom Waterway (n=9).
- ADWFF staff assisted multiple universities (South Dakota State, Sanford) or state (MS, KY, TN) and federal (USFWS, USGS, TVA, etc.) agencies with discussions on invasive carp distribution, abundance, control methods, and modelling of deterrence barriers, baitfish regulations and collection methods. ADWFF staff assisted USGS with sonic tagging of > 120 Silver Carp in Pickwick Lake for passage studies. Assisted Mississippi Wildlife & Parks and USFSW staff with a multi-boat electrofish sample effort for carp in five upper Tenn-Tom reservoirs. A meeting was

held with U.S. Army Corps Engineers (Holt Office) to discuss Zebra Mussel *Dreissena polymorpha* infestation extent and survey methods in the Black Warrior River system.

- More than a dozen invasive species reports were fielded from anglers, general public and biologists. These and all prior reports (n=47) since 2021 were compiled and reported to the USGS NAS Office in Gainesville. Species included: Zebra Mussels *Dreissena polymorpha*, Crested Floating Heart *Nymphoides cristata*, Water Lettuce *Pistia stratiotes*, Red-rim melania (Malaysian Trumpet Snail) *Melanoides tuberculata*, Oriental Weatherfish (Asiatic pond Loach) *Misgurnus anguillicaudatus*, Chinese Mystery Snails *Cipangopaludina sp.*, Giant Salvinia *Salvinia molesta*, Eurasian watermilfoil *Myriophyllum spicatum*, Island Apple snails *Pomacea maculata*, Southern Stargazer *Astroscopus y-graecum*, Blue Tilapia *Oreochromis aureus*, Nile Tilapia *Oreochromis niloticus*, Grass Carp, Bighead Carp *Hypophthalmichthys nobilis*, and Silver Carp *Hypophthalmichthys molitrix*. Species were scattered throughout public waterways of Alabama.
- Additionally, we compiled all ADWFF field samples of Silver Carp (n=116, 35 capture events) and Grass Carp (n=31, 21 capture events) since summer 2020 and forwarded to USGS NAS.
- ANS presentations were made to the north Alabama Cooperative Natural Resources Extension Team and Alabama Rivers and Streams Network.
- Planning is underway for multi-boat electrofishing efforts in creek coves at Wilson and Wheeler Reservoirs during November 2023. This is planned as an additional method to assess feasibility in collecting carp occupancy data.

Respectfully,

Dave Armstrong