Georgia Report
Gulf and South Atlantic Regional Panel Update
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Gulfport, MS

Satilla River Flathead Removal Project

Current Results:

- For the 2009 sampling season, the crew removed 5,788 flathead catfish totaling 7,815 pounds. Since the implementation of the full time flathead management program in 2007, more than 42,570 pounds of flathead catfish (13,472 fish) have been removed from the river in 3 years. The size structure of the flathead population has been significantly affected with the average size fish removed dropping from 5.8 pounds in 2007, to 2.9 pounds in 2008, to 1.4 pounds in 2009. In addition, the average length removed has declined from 512 mm TL in 2007, to 352 mm TL in 2008, to 281 mm TL in (2009). Biomass per effort has also declined from 57.1 kg/hr in 2007, to 23.6 kg/hr in 2008, to 19.9 kg/hr in 2009.

- In addition, to changes in the size structure, the age structure was also truncated by removal efforts. In 2007, 15% of population was made up of age-1 & age-2 fish, and it was dominated by a strong 2003 year-class of age-4 fish (50%), and 5% of the population consisted of fish Age-6 or older. In 2008, the strong 2003 year-class of now Age-5 fish was still present and made up 13% of the population and the same amount of older fish (>age-6) still comprised 5% of the population, but the population began to show signs of being heavily exploited, because 50% of the catch was now age-1 or age-2 fish. In 2009, the age-structure data revealed a typical population that has received high exploitation, characterized by large numbers of small fish (<356mm TL), with over 80% of the fish being age-1 or age-2 and only 3% of the population was age-6 or older, including that once strong 2003 year class.

- There was evidence for higher recruitment and earlier maturation. The electrofishing catch rate increased dramatically in 2009 to 32.5 fish per hour in comparison to 22 fish per hour in 2007 and 18 fish per hour in 2008. Gravid, turning Age-2 females were found in ranging in size from 200 to 251 mm TL. There appears to be a shift in sexual maturity due to over a decade of increased exploitation.

- Maintenance control of flathead catfish in the Satilla River is possible given our reported changes in biomass, size and age-structure but higher recruitment and earlier maturation was demonstrated, as a result this will require intensive harvest to be maintained to prevent the flathead population from rebuilding within 2 to 5 years.

Apple Snail Projects

- Reviewing a proposal from UGA to evaluate factors controlling the spread and distribution of apple snails as well as quantifying the ecological impacts that result from their invasion. The channeled apple snail is currently classified as a Priority 1(a) species in the 2009 Georgia Aquatic Nuisance Species Management Plan (GANSMP). The proposed studies would assist agencies in Georgia with Objective 5 Action 3. Data concerning potential habitats would inform managers when planning surveys to investigate the occurrence of the species in Georgia. In addition, will synthesize information on existing locations, abiotic factors effecting growth, reproduction, survival and invasiveness, and ultimately use all this vital information to build a predictive model of the spread of the invasive apple snail within Georgia. The study will also initiate baseline monitoring in existing invasive snail locations and adjacent control sites to begin investigating impacts of the snail on aquatic ecosystems.

- GADNR will be assisting Dr. Teem at the Aquatic Center Pond located in St. Mary's, GA. The pond is located near the St. Mary's River. The site was chosen due to the close proximity to the Okefenokee refuge (~ 50 miles upstream). Smaller in size and more easily managed were other factors used to select this pond. The Aquatic Center Pond is largely isolated from other drainage ditches in the area and is connected only during times of high water. In year 1, bi-weekly photographic records of the survey sites at the Aquatic Center Pond and nearby control sites will be made to provide a baseline assessment of the fertile egg masses being produced. Snail density will also be measured using baited traps. At this time, there will be no sterile snails released into the Aquatic Center Pond. Georgia will first require an evaluation of the efficacy of the sterile-release pilot study at the Orange Ave pond in FL before releasing sterile snails. Eggs will also collected at the Aquatic Center pond and transported to the USDA facility in Tifton for irradiation.

Asian Swamp Eel

- A possible new population of eels has been discovered in Georgia. The Wildlife Resources Division, Fisheries section is working with the University of Georgia to determine the status of the population.