

Grass Carp Herbivory at Guntersville Reservoir and Its Impact on Waterfowl—Preliminary Results

by

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Grass carp herbivory of Eurasian water-milfoil and native aquatic macrophytes was examined at North Sauty Creek, Guntersville Reservoir, Alabama, in the summers of 1992 and 1993, by comparing biomass of exclosed and grazed samples. In both years, grass carp herbivory had no significant impact on milfoil biomass ($P < 0.05$), but had a significant negative impact on native plant biomass ($P < 0.05$). We compared waterfowl use of milfoil and native plant (i.e., *Chara* spp. and *Najas* spp.) areas during October 1993-February 1994 to determine the impact of grass carp herbivory on migrating and wintering waterfowl. We examined natural senescence of milfoil and

native plants using 1-m² exclosures to track availability of the two vegetation types. We also quantified waterfowl herbivory and use of milfoil and native plant areas. Preliminary results show that while milfoil persisted into February, native plants senesced much earlier, in December. Waterfowl herbivory was significant ($P < 0.05$) in both milfoil and native plant areas in all months except October, where only herbivory of natives was significant. Waterfowl use of milfoil remained constant throughout the fall and winter. However, native plants attracted a greater number and diversity of ducks than milfoil in October and November.

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