

## **SUBMERGED AQUATIC MACROPHYTE RE-VEGETATION EFFORTS FOR FISH HABITAT IN LITTLE BEAR CREEK RESERVOIR, ALABAMA**

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Reestablishment of native aquatic plant communities is a technique that can be used to restore vegetated habitat important to fish with positive effects on water quality and other aquatic fauna. During 2007 we planted a variety of aquatic plant species in Little Bear Creek Reservoir in Northwest Alabama. Of the five species planted, American pondweed *Potamogeton nodosus* was the only species to show significant survival rates ( $p < 0.05$ ). Several factors may have led to low survival of species other than American pondweed, chiefly low water levels in 2007. In 2008, we planted three species along a depth gradient. The depth of species planted had no effect on pooled species survival ( $p < 0.05$ ) but species did have an effect, with American pondweed emerging as the most successful. As our work continues in this restoration effort, the results and methods of these trials will provide us with information that will aid in future native aquatic plant reestablishment in Little Bear Creek Reservoir. Additionally, we plan to incorporate our data into spatial models in a GIS and fish bioenergetics models to assess the potential effect that restoration has on bluegill *Lepomis macrochirus*.