**Partnerships Begin to Untangle Aquatic Vegetation Problems at Ouachita**

The Lake Ouachita Corps of Engineers in partnership with Lake Ouachita's Citizens Focus Committee (LOCFC) has worked hard to fight the ever-increasing problem of exotic aquatic vegetation growth in Lake Ouachita. Recently the efforts put forth by the LOCFC were rewarded with a congressionally authorized funded item of $140,000.00, thanks to the Congressional leadership of Senator Blanche Lincoln and Representative Mike Ross.

The 15 Member Lake Ouachita Citizen Focus Committee engaged its first effort to address the Lake Ouachita aquatic weed situation in early November 2001, when it conducted a workshop to discuss the perceived problems and potential solutions available. Between November 2001 and February 2002, the LOCFC discussed the matter with representatives from the Ouachita National Forest, Arkansas Game and Fish Commission, Department of Environmental Quality, Department of Health, the University of Arkansas at Pine Bluff, the University of Arkansas Extension Division and various local sources. Based on this investigation, the LOCFC concluded that major damages were being inflicted on the Lake's esthetics and recreational use.

Brazilian Elodea, Eurasian Water milfoil, and Hydrilla have invaded the waters of Lake Ouachita. This invasion of exotic species is creating significant problems around 8 swimming areas, 21 boat ramps, six marine pump out stations, and 10 marinas, which adversely impact tourism and create potential safety concern for water enthusiast. A survey indicated Hydrilla and Water Milfoil; both exotic aquatic invaders were the most dominant species.

Hydrilla, a highly invasive exotic weed, is present at water deeps of 5 to 30 feet is a succulent rhizome type weed that cannot be controlled by lowering the lake. The explosive growth of this weed overpowers other aquatic vegetation. Essentially, density of its growth creates an environment that harbors smaller forage fish but precludes larger game fish from feeding. This creates a non-supportive environment causing the size and numbers of popular game fish to decline.

Not only does Lake Ouachita's hydrilla infestation affect fisheries it also has been detrimental to popular wilderness areas, particularly islands, that are frequented by water enthusiasts and campers. The visiting public should be aware that hydrilla can be spread by boating traffic which chops the weed allowing it to quickly spread and root in unaffected areas. Furthermore, boaters have experienced damage to their vessels by entangling lower units and causing overheating of the drive system.

Lake Ouachita Field Office staff has been working tirelessly to tackle an aquatic vegetation challenge that impacts the lake and its recreation opportunities. The staff devised and implemented a plan to control the aquatic weeds by several different means. Biological controls have been initiated for the use of exotic species fish and insects to control weed growth with the possible of introduction of triploid grass carp and to initiate the controlled introduction of hydrellia pakistanae (Leaf-Mining Fly). In conjunction with biological controls the Corps continues herbicide applications of environmentally safe herbicides directly onto the vegetation, primarily around swimming areas, boat ramps and boat docks.

The first step in initiation of management controls of the exotic pest was to get satellite 3D hypo spectral imagery by the Corps Topographic Lab in Washington D.C. One major point was the Corps needed to set base line growth coverage during the 2003 growing season. Hypo spectral color satellite imagery provided the best overall coverage of Lake Ouachita so as to determine the required information on: Area of vegetation coverage, locations of specific species, density of the vegetation known as Bio-mass, and distribution of species. Once the satellite imagery was obtained Corps staff, LOCFC members, and other volunteers performed on-site surveys at 160 locations on Lake Ouachita. Additionally, the LOCFC followed through on this project by preparing a fact sheet identifying the critical impact the spreading aquatic weed would have on Lake Ouachita and sent it to the Arkansas Congressional leaders requesting there support in obtain funds to combat this problem.

The partnership established between Lake Ouachita Field Office and the Lake Ouachita Citizen Focus Committee has proven that public/private partnerships serve to enhance overall project operations. Through their combined efforts, Lake Ouachita is in a position to begin an earnest attack on the aquatic vegetation in Lake Ouachita.