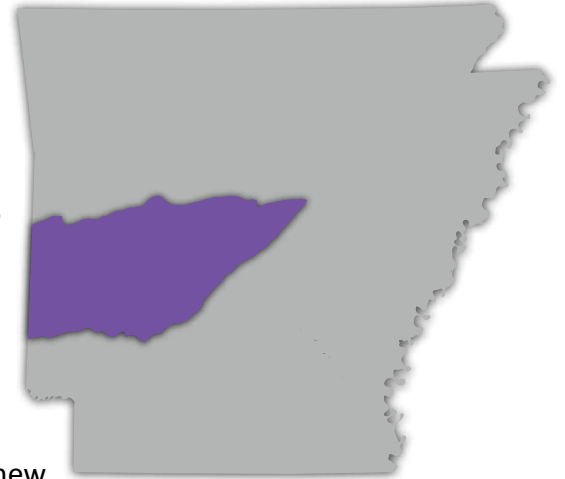


...in the Ouachita Mountains

Our enabling legislation empowers the commission to establish working relationships with outside agencies and organizations. We formalize our collaboration process within our rules and regulations to extend the impact of our staff and financial resources beyond what we can accomplish alone. Some of our best opportunities for effective partnerships exist in the Ouachita Mountains. The U.S. Forest Service is the largest public land holder in the Ouachitas, with approximately 1.4 million acres. The commission's staff worked with Ouachita National Forest personnel to explore, discover, and document some of the amazing ecological resources of this unusual mountain chain.



The commission's botanists discovered new locations of rare plants such as the Arkansas twistflower and Ouachita bluestar. They also kayaked a number of Ouachita streams and found new sites for the federally endangered plant harperella, including a total population of several thousand plants. Surveys also yielded new records for 12 other plant species of state and global conservation concern. These records are shared through the commission's biodiversity database and guide habitat management efforts in the region.

Above: A drawing of the endangered plant harperella by a Hot Springs elementary student that was submitted to the Arkansas Endangered Species Day Art Contest.



Cossatot leafcup grows in some of the most rugged terrain of the Ouachita Mountains. It prefers woodland openings on the south and east sides of steep,

rocky slopes. Since its discovery in 1988, this rare plant has only been known from four sites in Arkansas. On August 18, 2010, after coming up empty-handed in strenuous yet seemingly perfect habitat, and in extremely hot and humid weather conditions, ANHC and USFS researchers struck gold in the botanical sense. The eastern toe slope of a small, unnamed "knob" between Bald and Gap mountains in Montgomery County (above left) yielded over 400 plants and became the fifth known site in the world for the species!



The commission's staff takes audiences the message of what makes the Ouachita Mountains and Arkansas unique. This year we conducted family night campground programs at Hot Springs National Park, two programs for the Garland County Master Gardeners, four programs at Lakeside Middle School and judged the senior science symposium at Arkansas School for Mathematics, Sciences, and the Arts in Hot Springs. Other FY2011 programming also included: leading the Arkansas Outdoor Photographers Club on a botanical hike at Baker Prairie Natural Area, teaching natural divisions to the Arkansas Master Naturalists, and presenting endangered animal programs (above right) for K-12 students across the state.



Middle Fork Barrens Natural Area (above), located along the Middle Fork of the Saline River, is a high quality mosaic of glades, barrens, oak and oak-pine forests and woodlands. The glades support 11 species of rare plants, but over time, eastern red-cedar trees decreased glade size and plant diversity. Work at the natural area has focused on restoring habitat structure by removing the cedars and reintroducing fire to the landscape. Rare plant populations are flourishing, with a number of species not previously known from the site now showing up. Among the most exciting finds have been prairie parsley and ragged fringed orchid. This natural area is also known to host a population of the rare and endemic Pelton's rose-gentian.

The National Park Service invited the environmental community and local officials to participate in the development of strategies for the protection of the Hot Springs National Park water recharge zone. The commission's staff joined representatives of



the U.S. Geological Survey, City of Hot Springs, Garland County, Arkansas Natural Resources Commission, Arkansas Department of Environmental Quality, and the National Park Service, affirming that ANHC is valued as a respected source of scientific information in Arkansas. Through our environmental review program, the commission's research staff (above right) received 192 requests for high visibility projects in FY2011. Examples include the coal-fired facility in Hempstead County and the Draft Comprehensive Conservation Plan and Environmental Assessment for Felsenthal and Overflow National Wildlife Refuges.



Cossatot River State Park - Natural Area (left) is one of the largest components of the System of Natural Areas. The original purchase of just over 4,000 acres was the first project for the Natural and Cultural Resource Council and its funding from the Real Estate Transfer Tax.

Today, the natural area encompasses 5,484 acres and is an outstanding example of lands managed cooperatively to balance the protection of natural resources with public outreach and compatible outdoor recreation. The commission's education

staff often conducts teacher workshops and student programs in the information and education center's classroom and we set up booths for special events. This year, the commission's aquatic specialist led Eco Fun Day participants on a fish survey for the federally threatened leopard darter (left).