



ANHC acquires new tracts for System of Natural Areas

June
2009

As we close out the state fiscal year, the Arkansas Natural Heritage Commission (ANHC) announces the addition of several new acquisitions to the [System of Natural Areas](#). Funds secured from the 1/8th cent Conservation Tax and through grants from the Arkansas Natural and Cultural Resources Council and U.S. Fish and Wildlife Service were used to purchase the acquisitions described below.

One of the the ANHC's most recent acquisitions will become the agency's 66th natural area. That area, the 200-acre Kingsland Prairie Natural Area (image at right) in Cleveland County, is a mosaic of saline soil barrens, post oak savannas, and pine-oak woodlands. This natural area also hosts one of the few Arkansas populations of the federally threatened plant, [Geocarpon minimum](#).



The ANHC's other acquisitions comprise additions to existing natural areas. Just over 140 acres will be added to [Falcon Bottoms Natural Area](#). Falcon Bottoms, located in Columbia, Lafayette, and Nevada Counties, protects high-quality bottomlands along Bayou Dorcheat. An 80-acre tract will also be added to Falcon Bottoms Natural Area in June.

A total of 254 acres were added to [Devil's Knob-Devil's Backbone Natural Area](#) (image at right) in Izard County. Located in the Ozark Mountains, this rugged natural area contains high-quality glades and spectacular views of the White River and surrounding landscape.



A recently acquired 78-acre tract at [Terre Noire Natural Area](#) in Clark County provides much needed connectivity between once isolated portions of this natural area. Terre Noire protects blackland prairies and woodlands along with several rare animal and plant species.

[Pine City Natural Area](#), in Monroe County, also increased in size with the addition of 52 acres. The new tract, a former agricultural field, is targeted for re-planting with native loblolly pines (see [Arkansas's Lost Pines](#)). This new acquisition increases public access and, over time, will offer improved habitat to a nearby population of the federally endangered [Red-cockaded Woodpecker](#).

One hundred acres was added to [Benson Creek Natural Area](#), also in Monroe County. The new Benson Creek tract had been used for agriculture but has been re-planted with a mix of bottomland hardwood tree species. This acquisition will increase overall restoration and protection efforts at the natural area and nearby [Cache River National Wildlife Refuge](#).

The ANHC will acquire a 640-acre conservation easement that will be incorporated into [Poison Springs State Forest Sand Barren and Oak-Pine Forest Preserve](#) in Ouachita County. This easement protects high-quality sandhill communities and will be managed cooperatively with [The Nature Conservancy](#).

- [Michael D. Warriner](#)

Arkansas's largest state park opens visitor center

A grand opening ceremony was recently held for a new visitor center at Hobbs State Park Conservation Area in northwestern Arkansas. The 17,532 square foot facility officially opened its doors to the public on May 27th. Hobbs State Park Conservation Area is Arkansas's largest state park at 12,045 acres and is a cooperative project of [Arkansas State Parks](#), [Arkansas Game and Fish Commission](#), and ANHC. For its part, ANHC staff participated in the long-range planning process for the state park and conducted several plant inventories.



The visitor center at Hobbs will serve a key role in welcoming visitors and students to this state park conservation area, a diverse tract of Ozark landscape consisting of plateaus, ridges, valleys, and streams featuring an upland forest of oak-hickory/shortleaf pine. For more information, visit [Hobbs State Park Conservation Area](#).

Arkansas and the Nation celebrate National Pollinator Week

For the third consecutive year, the [Pollinator Partnership](#) (P2) is working to raise public awareness of the importance of protecting the numbers and health of all pollinating animals vital to our North American ecosystems and agriculture. Arkansas [Governor Mike Beebe](#) has also proclaimed June 22-28 as [Arkansas Pollinator Week](#).

Pollinators comprise a diversity of wild creatures, from birds and bats to butterflies, moths, beetles, flies and even the odd land mammal or reptile, but bees are one of the most important in most ecosystems. Unlike social honeybees, imported to North America in the 1600s, the majority of the continent's native bees are solitary, nesting in burrows on the ground or small holes in wood rather than building hives. Worldwide, there are some 20,000 bee species, 4,000 of them found in North America.



Bees and other pollinators are essential to human survival. To produce seeds and reproduce, three-quarters of the world's flowering plant species rely on animal pollinators. (The others use the less precise methods of wind or water to transfer pollen between male and female flower parts.) Animal-dependent plants include more than two-thirds of the world's crop species, whose fruits and seeds provide more than 30 percent of the foods and beverages we consume. Scientists estimate that in the United States alone, native bees perform up to \$3 billion worth of pollination services annually.

Natural ecosystems and their inhabitants also rely on pollinators. Many North American songbirds, for instance, feed on the fruits, seeds and berries of plants pollinated by animals. Pollinating insects themselves, especially their plump larvae, provide protein for adult songbirds and their fast-growing fledglings. Even the notoriously carnivorous grizzly bear depends more directly on pollinators than one might expect. According to wildlife ecologist Kimberly Winter, habitat programs manager for the National Wildlife Federation, in some places between 80 and 90 percent of the bear's diet is made up of fruits, nuts, bulbs and roots of animal-pollinated plants. On an ecosystem level, "losing a pollinator can have a domino effect on countless other species," she



says.

In a 2006 National Academy of Sciences (NAS) report, a scientific committee chaired by May Berenbaum, chairman of the Department of Entomology at the University of Illinois at Urbana-Champaign, found that "...there has been too little effort to document the long-term status of pollinator populations in the United States and to detect trends, long-term surveys are essential." Here in Arkansas, "bumble-watchers" across the state participated in the ANHC's 2005-2006 native bumblebee survey as one of our citizen science survey projects. For the results of the survey and more information on Arkansas bumblebees, visit ANHC's [Citizen Science](#) page.

For more information on the Pollinator Partnership, including a variety of downloadable resources and information on how you can "plant for pollinators", visit [Pollinator Week 2009](#).
- [Jane Jones-Schulz](#)

Woodpecker population at Pine City grows

The ANHC manages a large number of ecologically significant sites across the state. In eastern Arkansas, one such area is [Pine City Natural Area](#). This natural area supports the last population of [Red-cockaded Woodpeckers](#) in the Mississippi Delta.

Each spring, I monitor the breeding activities of RCWs at Pine City. This year, two groups of birds produced nestlings and successfully fledged (rear until ready for flight) young. The term "group" is used instead of "pair" because RCWs often have helpers at their nest site. Helpers are usually male offspring from a prior year that are awaiting a vacant territory.

Prior to the birds fledging from the nest, I banded the chicks (image at right) when they were about seven days old. Banding the birds facilitates annual monitoring efforts to track population trends and determine group size and the age, sex, and relatedness of each individual in each group. This provides important and timely information for reciprocal translocation efforts with other populations; for example swapping an individual from Pine City for one from another population to promote growth in the number of breeding groups at both locations. This information also provides useful feedback related to habitat management.



The following week I used a treetop peeper (image below) to peek into the nest to determine the sex of each nestling. The peeper has a probe with a camera and light that goes into the nest cavity and sends a signal to a small video monitor. Male nestlings have a small "red cap" of feathers and females lack the cap. Based on that trait, I determined that one group had two male and one female nestlings and the other group had two female nestlings.

The RCW is one of North America's most endangered birds and received federal protection under the Endangered Species Act in 1970. About the size of a cardinal, these woodpeckers require open, park-like landscapes of mature southern pine that thrive in fire-maintained ecosystems. This habitat is extremely rare now due to a variety of factors that eliminated and/or fragmented large blocks of contiguous habitat.

Fire suppression has also eliminated habitat by allowing understory and midstory hardwoods to reduce the amount of open pine habitat. It is estimated that fire-maintained pine ecosystems of the southeastern United States once supported over 1,600,000 RCW breeding groups. Approximately 16,000 breeding groups remain today. The good news is that, with areas like Pine City Natural Area, population numbers are now increasing.

- [Bill Holimon](#)



Natural News connects ANHC staff to discoverer of Means' giant earthworm.

As part of our celebration of the 2009 Heritage Month theme "[Only in Arkansas: Exploring our](#)



"Natural Heritage," we have been including an "endemic of the month" in each edition of our e-newsletter, *Natural News*. In February, we featured Means' giant earthworm (*Diplocardia meansi*) (image at right) which is also one of the species featured on this year's Heritage Month poster. Later that same month, I had the happy surprise of receiving an e-mail from the discoverer of the earthworm, [Dr. Bruce Means](#), who had been a forwarded copy of *Natural News*.



That simple connection through our e-newsletter has turned into a continuing correspondence in which Dr. Means has generously provided us with additional images of "his" earthworm as well as the fascinating story of its discovery, which is also a chapter in his new book, [Stalking the Plumed Serpent and Other Adventures in Herpetology](#). While Dr. Means first identified the new species in 1973, it was on another trip to western Arkansas with his two young sons in 1981 that he made the additional, astonishing discovery:

*"While road-cruising the Talimena Scenic Highway, I pull the vehicle over and dispatch the boys to fetch some *D. meansi* in the auto headlights. They pick up a few and then I douse the headlights just for a prank. The joke is on me. The boys' hands are glowing with a lime green light! We promptly discover that the coelomic fluid, which the worms invariably secrete when picked up, is bioluminescent."*

Dr. Means is President and Executive Director of the [Coastal Plains Institute and Land Conservancy](#), a nonprofit organization he and others founded in 1984 that is dedicated to conserving the rich biodiversity--and elevating public awareness and appreciation--of the vast Coastal Plain of the southeastern United States. We were happy to send him posters with his wonderful worm and he continues to share information with us – most recently helping to answer a question that I have been asked repeatedly while doing education programs about Arkansas endemics: What is the largest earthworm in the world? Dr. Means reports that:



*"The jury is still out on that. There are giant earthworms all over the place. The largest one in the United States probably is the one in Oregon, but it has not been seen in decades. Alas, the largest one in the same genus as the Means's Giant Earthworm is in Texas named *Diplocardia fuscus*. I have dug up a few in the Big Thicket, but this one is getting rare, too. One of the largest, if not THE largest in the world, is one in SE Australia. However, South America keeps turning up giant earthworms, lots of them. We need more students with interests in natural history to dig them up."*

If you or someone you know has a connection to articles in *Natural News*, we would like to hear from you too.

- [Jane Jones-Schulz](#)

ANHC/Audubon Arkansas volunteer partnership

Earlier this spring, the ANHC entered into a partnership with [Audubon Arkansas](#) to develop a natural area volunteer program. Audubon Arkansas administers the program that involves volunteers in on-the-ground management of ANHC natural areas. So far, volunteers have adopted several natural areas and, with guidance from Audubon Arkansas staff, accomplished a great deal in a short amount of time. Students from Lonoke High School have been working at [Railroad Prairie Natural Area](#) cutting and clearing invasive plants (image at right). In Pine Bluff, Watson Chapel High School is being sponsored by Wal-Mart to



round routine trash removal at [Byrd Lake Natural Area](#). Similar work is also being carried out by volunteers at [Mills Park Natural Area](#). For more information about this program, contact Audubon Arkansas at 501.244.2229.
- [Michael D. Warriner](#)

New rare plant found in Arkansas

ANHC botanist [Theo Witsell](#) and Bergman High School teacher Keith Moon recently documented the first site in Arkansas for the plant, [bashful bulrush](#) (*Trichophorum planifolium*) (image at right). Moon is an amateur botanist and photographer who has been sending Witsell plant images for years. Witsell identified the plant from one of Moon's photos. Bashful bulrush is a rare sedge long known from dry, acidic woods in the Missouri Ozarks but previously unknown from Arkansas. The newly discovered Arkansas site for this plant is located in Boone County. This represents the first site in the state, not only for the species, but for the genus as well. The ANHC will track this species as an element of special concern. Bashful bulrush ranges from Massachusetts west to Ontario and south to Virginia and Kentucky, with disjunct occurrences in Missouri, southern Illinois, and now northern Arkansas.
- [Michael D. Warriner](#)

Endemic species of the month: June 2009 Stern's medlar (*Crataegus x canescens*)

Stern's medlar (*Crataegus x canescens*, formerly *Mespilus canescens*) is a large flowering shrub that produces clusters of attractive white flowers. First described as a species in 1990, the only known locality for this plant is [Konecny Grove Natural Area](#) in Prairie County. Just over twenty individuals of this plant occur naturally at Konecny Grove and nowhere else in the world. The status of Stern's medlar as a valid species has been debated for some time. Recent molecular studies, suggest that Stern's medlar is a hybrid – the result of a cross between the native blueberry hawthorn (*Crataegus brachyacantha*) and a Eurasian medlar, *Mespilus germanica*.



Upcoming Events

June 26-July 1, 2009. [2009 Meeting of the American Arachnology Society:](#)
Arkansas Tech University, Russellville.

June 30, 2009. Department of Arkansas Heritage (DAH) Summer Workshop Series: "Exploring our Natural Wonders – Crowley's Ridge" at Lake Frierson State Park in Jonesboro. For more information, visit the [DAH website](#) or contact [Tammie Dillon](#) at 501.324.9150.

July 21, 2009. Department of Arkansas Heritage (DAH) Summer Workshop Series: "Exploring our Natural Wonders – Ouachita Mountains" at Camp Ouachita near Perryville. For more information, visit the [DAH website](#) or contact [Tammie Dillon](#) at 501.324.9150.

August 26, 2009. Arkansas Natural Heritage Commission Meeting: The ANHC will meet at 4:00 p.m. on Wednesday, August 26, 2009 at the Winthrop Rockefeller Institute on Petit Jean Mountain.

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