



New plant species from Interior Highlands of Arkansas and Oklahoma

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2009

A new species of hedge-nettle, endemic to the Interior Highlands of Arkansas and Oklahoma, was recently described by Dr. John B. Nelson of the [A.C. Moore Herbarium](#) at the University of South Carolina. The species description appears in the most recent issue of the Journal of the Botanical Research Institute of Texas.

While not technically "new" in the usual sense of the word, specimens of Ozark hedge-nettle have been around since the 1920s and botanists have argued for decades over their proper identity. For many years, specimens of this plant were lumped in with other established hedge-nettle species, most recently Epling's hedge-nettle (*Stachys eplingii*). However, recent field and herbarium work by Dr. Nelson has revealed that plants from the Interior Highlands differ so substantially from other hedge-nettles that they constitute a new species.

Dr. Nelson gave this new species the formal scientific name of *Stachys iltisii*, in honor of the botanist Hugh Iltis, who taught briefly at the University of Arkansas in the 1950s and advocated for the recognition of the Interior Highlands plants as something distinct from others in the genus. Dr. Nelson has suggested the common name of "Ozark hedge-nettle" for this new species, in recognition of its limited range in the Interior Highlands.

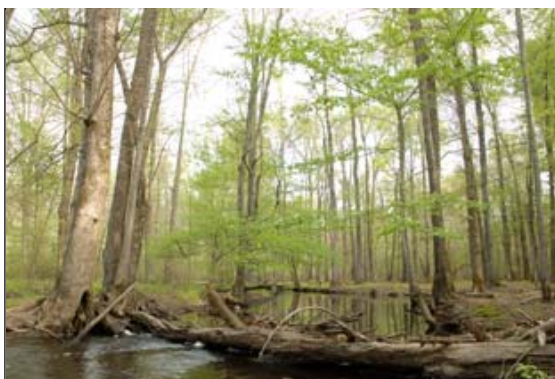


Ozark hedge-nettle is a robust perennial plant, growing over three feet in height, with showy clusters of small pink and white flowers. In Arkansas, Ozark hedge-nettle is typically found in rich upland forests, commonly on thin soil of rocky places, in both the Ozark Plateau and the Ouachita Mountains. In light of Dr. Nelson's work, all Arkansas reports of *Stachys eplingii* should now be considered *Stachys iltisii*. *Stachys eplingii* is found only in the Appalachian Mountains. To download a copy (PDF) of the species description, click the link below. Image courtesy of Dr. John B. Nelson.

Nelson, J.B. 2008. [A new hedge-nettle \(Stachys: Lamiaceae\) from the Interior Highlands of the United States and keys to the southeastern species](#). Journal of the Botanical Research Institute of Texas 2(2): 761-769.
- [Theo Witsell](#) and [Michael D. Warriner](#)

New tract acquired at Falcon Bottoms

Earlier this month, the Arkansas Natural Heritage Commission (ANHC) completed the purchase of a 40-acre tract at [Falcon Bottoms Natural Area](#). Falcon Bottoms has long been an acquisition priority for the ANHC. Since 1991, acquisitions there have focused on protecting bottomlands, and other natural communities, along Bayou Dorcheat. Located in Columbia, Lafayette, and Nevada Counties, the now 2,827-acre natural area is a long-term effort to provide



protection to a unique southwestern Arkansas ecosystem at the landscape level. Along with its ecological value, Falcon Bottoms Natural Area is also the only public hunting grounds in Columbia County. This new tract was purchased from Anthony Timberlands using funds from a grant the ANHC received from the Arkansas Natural and Cultural Resources Council.
- [Michael D. Warriner](#)

Year of Science 2009

The Coalition on the Public Understanding of Science (COPUS) kicked off Year of Science 2009 (YoS2009) - a national, yearlong, grassroots celebration-earlier this month at the annual meeting of the Society for Integrative and Comparative Biology. COPUS, which represents more than 500 organizations, is celebrating how science works, who scientists are, and why science matters.



A special Web site (<http://www.yearofscience2009.org/>) will help the general public learn more about this yearlong, national event. The site will feature a different scientific theme each month, complemented by blogs from scientists and science communicators about those topics and their fields of expertise. Highlights from the dynamic YoS2009 Web site include the integration of components from the newly launched Understanding Science Web site (<http://www.understandingscience.org/>), Flat Stanley explorations of science, the opportunity to name a new species of jellyfish or adopt a species for the Encyclopedia of Life, and a contest to build the most scientific pizza.

COPUS, which began with support from the National Science Foundation, has grown to be an inclusive grassroots endeavor spurring communication and collaboration in the scientific community while shining the spotlight on science in 2009. Still growing, the COPUS network of more than 500 organizations includes a broad range of participants from large federal agencies such as the National Oceanic and Atmospheric Administration and the Environmental Protection Agency to local groups such as the Banana Slug String Band from Santa Cruz, California, and TalkingScience, a New York City nonprofit that is organizing a "Rock-it Science" concert in 2009. Major sponsors of the Year of Science 2009 include the American Institute of Biological Sciences, the University of California Museum of Paleontology, the Geological Society of America, and the National Science Teachers Association. To register as a participant or to learn more, visit <http://www.copusproject.org/>.

New Henslow's Sparrow publication

ANHC Chief of Research [Bill Holimon](#), in collaboration with Theo Witsell (ANHC), Dr. Bill Baltosser (University of Arkansas at Little Rock), and Catherine Rideout (Arkansas Game and Fish Commission), had the results of their work with Henslow's Sparrows (*Ammodramus henslowii*) published in the recent issue of the [Journal of Field Ornithology](#). Henslow's Sparrow is a rare grassland bird that is thought to be experiencing population declines. The abstract of that paper follows:

Holimon, W.C., C.T. Witsell, W.B. Baltosser, and C.W. Rideout. 2008. Density and habitat associations of Henslow's Sparrows wintering in saline soil barrens in southern Arkansas. *Journal of field Ornithology* 79(4):364-370.



Although the habitat requirements of breeding populations of Henslow's Sparrow (*Ammodramus henslowii*) have been examined, less is known about their habitat requirements and ecology during the nonbreeding season. We estimated population densities and quantified habitat associations of Henslow's Sparrows wintering in saline soil barrens in southern Arkansas. Densities of Henslow's Sparrows in the saline soil barrens were similar to those in the Longleaf Pine (*Pinus palustris*) Ecosystem of the southeastern United States, considered by many to be their primary wintering habitat. Henslow's Sparrows were closely associated with open areas with greater cover of *Aristida* spp. and globe beaksedge (*Rhynchospora globularis*), greater stem density at 11-20 cm above ground, more lichens, more herbaceous cover, more bare ground, greater occurrence of little bluestem

(*Schizocyrium scoparium*) as the tallest vegetation, less moss, and less shrub cover than randomly selected sites. In contrast to the results of studies conducted in the Longleaf Pine Ecosystem, the presence of Henslow's Sparrows in our study was not correlated with the height of the tallest vegetation. Our results indicate that saline soil barrens of southern Arkansas support a high density of wintering Henslow's Sparrows and do so for longer post-disturbance periods than longleaf pine savanna. We also found that stem density near the ground was similar to that reported from longleaf pine savanna, but only about half that observed on their breeding grounds. Areas used by Henslow's Sparrows had more lichen and less moss cover, suggesting that those areas were drier than random sites within the barrens. Further research is needed to determine if large populations of Henslow's Sparrows winter in other saline soil barrens and if fire influences habitat associations and densities in the barrens.

Endemic species of the month: January 2009
Cossatot leafcup (*Polymnia cossatotensis*)

Cossatot leafcup was first discovered in October 1988 by Bert Pittman, then ANHC botanist, and Vernon Bates, a freelance botanist. The pair were conducting inventory work in the Ouachita Mountains and found this plant growing abundantly in an open area of novaculite talus along the Little Missouri River. An annual plant in the composite family (Asteraceae), Cossatot leafcup grows up to five feet in height and produces dense sprays of yellow and white flower heads. Each of these heads, which might appear at first glance to be an individual flower, is actually a "composite" of small yellow disc flowers in the center of each head, and a few white ray flowers arranged around the outside of this central disc. With help from Dr. Robert Kral of Vanderbilt University, Pittman and Bates described their find as a new species in 1989 - *Polymnia cossatotensis* - after the Cossatot Mountains where the plant was first discovered. Despite exhaustive field work since, Cossatot leafcup is known only from four sites in Montgomery and Polk Counties, making it one of Arkansas's rarest endemic plants. Image courtesy of Vernon Bates (Bert Pittman with Cossatot leafcup).



- [Michael D. Warriner](#) and [Theo Witsell](#)

Upcoming Events

January 28, 2009. Arkansas Natural Heritage Commission meeting: ANHC commissioners and staff will meet Wednesday, January 28, at 11:00 a.m. in the lobby conference room (Rm 170) of the Tower Building, 323 Center Street, Little Rock, Arkansas.

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