

November 27, 2012

Contact: Laura Cotterman, 919.962.9457, [lmcotter@unc.edu](mailto:lmcotter@unc.edu)

**NEWS** — *for immediate use*

## New Plant Species Named by UNC Botanical Researchers

Chapel Hill: Scientists working at the UNC Herbarium of the North Carolina Botanical Garden have named a new species of wildflower based on the study of specimens from known populations of the very rare plant. Dr. Alan S. Weakley, Herbarium director and faculty member in the University of North Carolina at Chapel Hill's Biology Department, and biology graduate student Derick B. Poindexter, published their taxonomic treatment in the journal *Phytoneuron* on November 26, 2012.

The newly named *Marshallia legrandii* is an herbaceous perennial plant in the composite family. Associated with a rare fire-dependent habitat that is found today in a limited area of the Piedmont of north-central North Carolina and south-central Virginia, it is believed to be imperiled and thus warranting conservation protection. Botanists have located only four known populations of the "Tall Marshallia," two of which appear to be extirpated.



Photo by Misty Franklin

*Marshallia legrandii* occurs in remnants of oak savannas and barrens or "glades" that develop over cation-rich, clay soils derived from the mafic rocks diabase and greenstone. The plant had been noted and collected by others in the 1960s, 70s, and early 80s, but was usually assigned the name *Marshallia obovata*, a species with which it shares some similarity. It wasn't until North Carolina Natural Heritage Program biologist Dr. Harry E. LeGrand Jr. found what he considered to be unusual looking *Marshallia* plants on a site near Butner, NC, that the possibility of a new species was considered. *Marshallia legrandii* differs from other "Barbara's Buttons" by its taller stature, larger flower head with deeper pink color, and later flowering time, among other characteristics.

Dr. Weakley named the plant after Dr. LeGrand, who he says "first found and recognized the unusual morphology and importance of the population [in Granville County], leading ultimately to this re-evaluation. Although the species had been collected before, it is quite likely that its distinctive features would have gone unnoticed without LeGrand's careful observations from the fourth and by far the largest population known to date."

Over the course of his 28-year career with the North Carolina Natural Heritage, LeGrand, an alumnus of North Carolina State University (Bachelor's and Master's Degrees) and Clemson University (PhD), has had an instrumental role in the discovery and protection of numerous natural areas in North Carolina, especially in the Piedmont.

"This globally rare species has long been recognized by the North Carolina Natural Heritage Program as 'Significantly Rare,'" said Misty Buchanan, Natural Areas Inventory Manager for the Natural Heritage Program in the N.C. Department of Environment and Natural Resources. "Having the species formally described by [Weakley and Poindexter] may pave the way for the NC Plant Conservation Program to review its state protection status as well."

North Carolina Botanical Garden staff propagated *Marshallia legrandii* plants from seed collected from the wild population. These new plants, originally labeled "*Marshallia* species 1," are installed in the Piedmont Habitat Garden on the Botanical Garden's grounds in Chapel Hill. Part of the Piedmont Habitat Garden was designed to represent the barren/glade plant community to which *M. legrandii* is endemic. "We created this space to encourage people to learn about diabase glades and the rare plants that can be found there," said Habitat Gardens Curator Chris Lilioia.

The scientific recognition and naming of new species requires considerable study and review. The UNC Herbarium provides resources for this process through its massive collection of more than 800,000 museum specimens of plants, especially of the southeastern U.S. Over the last 10 years, researchers at UNC have named 11 new plant species. An additional 10 new species are in the process of being described.

###

For more information about *Marshallia legrandii* and research at the UNC Herbarium, please contact Dr. Alan Weakley: [weakley@bio.unc.edu](mailto:weakley@bio.unc.edu) or 919-619-1101.

For more photos or information on the NC Botanical Garden: Laura Cotterman, [lmcotter@unc.edu](mailto:lmcotter@unc.edu), 919-962-9457