

NEW TO OKLAHOMA: *CAREX COMOSA* (CYPERACEAE)

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ABSTRACT

This paper documents the occurrence of a vascular plant species previously unknown to the flora of Oklahoma. *Carex comosa*, a perennial sedge, was discovered in a small emergent wetland known as Ferndale Bog in Atoka County of southeastern Oklahoma.

KEY WORDS: *Carex comosa*, Cyperaceae, Oklahoma, sedge

Carex comosa Boott (Cyperaceae, sect. Vesicariae; longhair sedge) is a perennial sedge. The species has been reported from much of the North American continent north of Mexico but is uncommon in the unglaciated South and in the West (Ball & Reznicek 2002). Populations have been found in neighboring states of Arkansas, Missouri, and Texas (BONAP 2012; USDA, NRCS 2012) but a collection reported here is the first for Oklahoma (Hoagland et al. 2012).

Oklahoma. Atoka Co.: McGee Creek Natural Scenic Recreation Area, “Ferndale” Bog, 15S 242185 3810626, T25S R14E Sec. 2, 6 May 2008, Buthod & Hoagland AB-7776 (OKL 239346a). Figs. 1, 2.

The Oklahoma collection was found at a site known as Ferndale Bog in Atoka County in southeastern Oklahoma. The habitat is considered unique in the state and was cored for palynological research in the 1970s. The substrate consists of generations of sphagnum growing near a spring on a Ouachita Mountain sandstone ridge (Albert 1981). The site is dominated by a 1.5+ meter tall growth of *Osmunda cinnamomea* (cinnamon fern) and *O. regalis* (royal fern) (Fig. 3). Other associated species included *Boehmeria cylindrica*, *Carex lupulina*, and *Carex stricta*.

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LITERATURE CITED

- Albert, L.E. 1981. Ferndale Bog and Natural Lake--Five Thousand Years of Environmental Change in Southeast Oklahoma. Oklahoma Archaeological Survey (1981), 7.
- Hoagland B.W., A.K. Buthod, I.H. Butler, P.H.C. Crawford, A.H. Udasi, W.J. Elisens, and R.J. Tyrl. 2012. Oklahoma Vascular Plants Database. Oklahoma Biological Survey, Univ. of Oklahoma, Norman. <<http://www.oklahomaplantdatabase.org/>> Accessed Jan 2012.
- BONAP. 2012. North American Plant Atlas (US county-level species maps). Biota of North America Program, Chapel Hill, NC. <<http://www.bonap.org/genera-list.html>>
- Ball, P.W. and A.A. Reznicek. 2002. *Carex* (Cyperaceae). Pp. 254–572, in *Flora of North America North of Mexico*. Vol. 23. Oxford Univ. Press, New York.

USDA, NRCS. 2012. The PLANTS Database. National Plant Data Team, Greensboro, North Carolina. <<http://plants.usda.gov>> Accessed Jan 2012.



Figure 1. *Carex comosa* from Ferndale Bog in Atoka Co., Oklahoma. Buthod & Hoagland AB-7776 (OKL).



Figure 2. Spikelet of *Carex comosa* (Hoagland & Buthod AB-7776).



Figure 3. Aspect of Ferndale Bog with *Osmunda cinnamomea* in foreground.