

supplements (annually, 1979-1982 & 1986). Published by the author: Fayetteville, Arkansas.

WOODSON, R. E., Jr. 1954. The North American species of *Asclepias* L. Ann. Missouri Bot. Gard. 41:1-211.

CAREX MICRODONTA TORR. & HOOK. (CYPERACEAE) NEW TO FLORIDA—While visiting some chalky limestone glades in Gadsden County, Florida, the senior authors collected *Carex microdonta* Torr. & Hook., familiar to us from the prairies and glades of Arkansas, Oklahoma, and Texas, but apparently unreported for Florida (Ward 1968; Clewell 1985). Anderson independently found the species on these glades a year later. The full specimen citations are as follows:

FLORIDA: Gadsden Co.: common on exposed white chalk of the Chattahoochee Formation (Miocene) in chalky limestone glade (named "Chalk Glade" by local botanists) on lower northeast facing slope 0.8 mi N of Dolan Road at a point 2 mi W of FL 269, ca. 3 mi SW of Chattahoochee, SEQ, SWQ, Sec. 8, T3N, R6W, Chattahoochee 7.5' Quad., 30° 39'52" N, 84° 51'40" W, Elev. 120 ft, 10 May 1987, Orzell, Bridges, A. K. Gholson, & R. K. Godfrey 5213 (FLAS, FSU, TEX), 8 May 1988, A. K. Gholson 11968 (FSU), 13 May 1988, Anderson 11271 (FSU); open flat of slightly raised glade (named "E. B. Glade", ca. 0.2 mi ENE of "Chalk Glade"), SWQ, SEQ, Sec. 8, T3N, R6W, Chattahoochee 7.5' Quad., 30° 39'55" N, 84° 51'28" W, Elev. 130 ft, 29 Apr 1988, Anderson & J. B. Nelson 11194 (FSU).

The glades supporting *Carex microdonta* were dominated by *Schoenus nigricans* L. Other associated species at one or both sites included *Bumelia reclinata* (Michx.) Vent., *Carex granularis* Muhl., *Dichanthelium dichotomum* (L.) Gould, *Hedyotis nigricans* (Lam.) Fosb., *Juniperus silicicola* (Small) Bailey, *Polygala boykinii* Nutt., *Rhynchospora divergens* Chapm. ex M. A. Curtis, and *R. globularis* (Chapm.) Small. At Chalk Glade, *Carex microdonta* occurs in areas with generally low vegetative cover over hard chalky limestone rubble, whereas at E. B. Glade it occupies areas of shallow gravelly soil with no obvious limestone outcrops.

Carex microdonta is primarily a species of shallow-soil prairies in the south-central United States. Its range center is from southeastern Kansas southward through central Oklahoma to the calcareous formations of northeastern, central, and southeastern Texas. More isolated records are known from northeast Kansas (1 county), central (2) and southwestern (2) Missouri, southwestern Arkansas (4), central Louisiana (1-2), central Tennessee (1), northern Alabama (1), and the Blackbelt regions of Alabama (5) and Mississippi (3). It is perhaps most abundant in shallow soil blackland prairies on the chalky cuestas of north central and central Texas and

the calcareous coastal prairies of southeastern Texas. The nearest known station to Florida is apparently in Wilcox County, Alabama, about 250 km northwest of the Gadsden County site (Kral 1973, 1976).

The chalky limestone glade/outcrop complex community where *Carex microdonta* occurs in northwestern Gadsden County, Florida, is a very rare and phytogeographically significant natural community for the state. These areas occur where resistant beds of white, cream or gray colored, arenaceous or argillaceous, pasty, silty, or chalky impure limestone are exposed within the dissected west-facing escarpment of the Tifton Uplands just east of the Apalachicola River (Cooke 1945; Moore 1955; Puri & Vernon 1964; Brooks 1981; Schmidt et al. 1985). These glades apparently are unique to Florida, with the possible exception of one or two sites in adjacent Decatur County, Georgia (Ward & Gholson 1987). A partial floristic description of these habitats can be found in Ward & Gholson (1987). Their floristic distinctiveness is clearly indicated by the dominance over some of the less disturbed glades of *Schoenus nigricans*, a sedge known in the United States apparently only from Florida, Texas, Nevada, and California (Sparling 1968). Many species rare in Florida and disjunct primarily from areas farther north or west occur on these glades, including *Asclepias viridiflora* Raf. (Anderson 1984), *Aster pratensis* Raf. [= *Aster phyllolepis* T. & G. in Kral (1981), Cronquist (1980), and Clewell (1985)], *Callirhoe papaver* (Cav.) Gray, *Bouteloua curtipendula* (Michx.) Torr. (Nelson 1985), *Delphinium carolinianum* Walt., *Dodecatheon meadia* L. (Anderson 1988), *Echinacea purpurea* (L.) Moench, *Lepuropetalon spathulatum* (Muhl.) Ell. (Ward and Gholson 1987), *Sporobolus vaginiflorus* (Torr.) Wood (Anderson 1988), and *Stachys crenata* Raf. *Polygala boykinii* is a restricted southeastern calciphile (Bridges & Orzell 1986) that ranges down the west coast of Florida. It is characteristic of these glades and is generally absent from the more acidic coastal terraces to the west. The flora of these glades has much in common with that of shallow soil chalk outcrops in Alabama and Mississippi (Harper 1920; Kral 1973, 1976, 1981), and many of the same species occur on limestone glades in Tennessee (Bridges & Orzell 1986) and glauconitic outcrops, Catahoula Formation (Miocene) tuffaceous siltstone barrens, and hillside blackland prairies in southeastern Texas (Orzell & Bridges, unpublished data).

The senior authors wish to acknowledge Angus Gholson of Chattahoochee, Florida, for showing us these sites. He and Robert Godfrey provided a full and memorable day of botanizing these unique habitats.—*Edwin L. Bridges and Steve L. Orzell, The University of Texas Herbarium, Austin,*

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REFERENCES

- ANDERSON, L. C. 1984. Noteworthy plants from North Florida. *Sida* 10:295 – 297.
 ————. 1988. Noteworthy plants from North Florida. III. *Sida* 13:93 – 100.
- BRIDGES, E. L. and S. L. ORZELL. 1986. Distribution patterns of the non-endemic flora of Middle Tennessee limestone glades. *ASB Bull.* 33:155 – 166.
- BROOKS, H. K. 1981. Geologic map of Florida. Center for Environmental and Natural Resources, Tallahassee.
- CLEWELL, A. F. 1985. Guide to the vascular plants of the Florida Panhandle. University Presses of Florida, Tallahassee. 605 pp.
- COOKE, C. W. 1945. Geology of Florida. Florida Geological Survey, Geological Bulletin No. 29. 339 pp.
- CRONQUIST, A. 1980. Vascular Flora of the southeastern United States. Vol. 1. Asteraceae. Univ. North Carolina Press, Chapel Hill. 261 pp.
- HARPER, R. M. 1920. The limestone prairies of Wilcox County, Alabama. *Ecology* 1:198 – 203.
- KRAL, R. 1973. Some notes on the flora of the southern states, particularly Alabama and middle Tennessee. *Rhodora* 75:366 – 410.
 ————. 1976. Additions to some notes on the flora of the southern states, particularly Alabama and middle Tennessee. *Rhodora* 78:438 – 456.
 ————. 1981. Further additions to some notes on the flora of the southern states, particularly Alabama and middle Tennessee. *Rhodora* 83:301 – 315.
- MOORE, W. E. 1955. Geology of Jackson County, Florida. Florida Geological Survey, Geological Bulletin No. 37. 101 pp.
- NELSON, J. B. 1985. *Bouteloua curtipendula* in Florida. *Castanea* 50:58.
- PURI, H. S. and R. O. VERNON. 1964. Summary of the geology of Florida and a guidebook to the classic exposures. Florida Geological Survey, Special Publication No. 5. 312 pp.
- SCHMIDT, W., H. KIRK, and J. WAGNER. 1985. Cenozoic geology of the Apalachicola River area, northwest Florida. Southeastern Geological Society, Tallahassee. 95 pp.
- SPARLING, J. H. 1968. Biological flora of the British Isles No. 115. *Schoenus nigricans*. *J. Ecol.* 56:883 – 899.
- WARD, D. B. 1968. Checklist of the vascular flora of Florida. Part I. *Fla. Agr. Exp. Stat. Inst. Food Agr. Sci. Bull.* 726:1 – 72.
 ———— and A. K. GHOLSON. 1987. The hidden abundance of *Lepuropetalon spathulatum* (Saxifragaceae) and its first reported occurrence in Florida. *Castanea* 52:59 – 67.

NOTEWORTHY *CAREX* L. (CYPERACEAE: SECTION *STELLULATAE*) COLLECTIONS FROM MISSOURI—*Carex atlantica* L. H. Bailey subsp. *atlantica*. Shannon Co.: NW 1/4, SW 1/4 of section 5, T31N, R2W, Bunker 7.5' Quad, sedge-shrub fen in valley of Big Creek,



Bridges, Edwin L., Orzell, Steve L , and Anderson, Loran C. 1989. "CAREX MICRODONTA TORR. & HOOK. (CYPERACEAE) NEW TO FLORIDA." *SIDA, contributions to botany* 13, 378–380.

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