

Common Name: BARBED RATTLESNAKE ROOT

Scientific Name: Prenanthes barbata (Torrey & Gray) Milstead

Other Commonly Used Names: Coosa flatwoods rattlesnake root

Previously Used Scientific Names: Prenanthes serpentaria Pursh var. barbata Torrey & Gray,

Nabulus integrifolia Cassini (in part)

Family: Asteraceae/Compositae (aster)

Rarity Ranks: G3/S2

State Legal Status: Threatened

Federal Legal Status: none

Federal Wetland Status: FAC

Description: Perennial **herb** with milky sap. **Stems** 1½ - 5 feet (50 - 150 cm) tall, repeatedly branched above the middle, smooth or hairy, reddish-purple. **Leaves** 1½ - 4 inches (4 - 10 cm) long and 3% - 1½ inches (1 - 4 cm) wide, reduced in size upward, alternate, usually hairless; midstem leaves sometimes shallowly lobed or toothed, tapering to a winged leaf stalk; upper leaves toothed and clasping the stem. **Flower heads** held at the tips of drooping branchlets, the base of each head surrounded by a cup (**involucre**) ½ - 5% inch (1.2 - 1.7 cm) long consisting of 6 - 10 narrow, reddish-purple **bracts** covered with stiff, white, spreading hairs. **Ray flowers** 10 - 15 in number, white or cream-colored, with finely toothed tips and showy, curling stigmas; there are no disk flowers. **Fruits** about 3% inch long, dry, seedlike, with barbed bristles at the base.

Similar Species: Tall rattlesnake-root (*Prenanthes altissima*) leaves are usually deeply lobed; flower heads have 4 - 7 ray flowers and 6 or fewer bracts. Lion's foot (*P. serpentaria*) and gall-of-the-earth (*P. trifoliata*) leaves are deeply and irregularly lobed; the bracts are greenish-purple and only slightly hairy. None of these species has white ray flowers.

Related Rare Species: None in Georgia.

Habitat: Coosa Valley prairies, calcareous flatwoods and bottomlands, edges of limestone glades, and roadsides and rights-of-way through these habitats.

Life History: Barbed rattlesnakeroot is a perennial herb that reproduces sexually, although unfortunately, plants seldom flower. Its flowers are probably pollinated by bees, although no studies have been conducted to confirm this. The barbed bristles that surround the base of each fruit stick to the fur of animals and promote seed dispersal. The milky sap in leaves and stems is bitter which discourages insect predation.

Survey Recommendations: Surveys are best conducted during flowering (early September–late October). Flowers are required for positive identification; unfortunately, plants seldom flower.

Range: Georgia, Alabama, Mississippi, Louisiana, Texas, Arkansas, and Kentucky.

Threats: Conversion of habitat to pine plantations, agriculture, and development; canopy closure; off-road vehicle use; invasion by exotic pest plants.

Georgia Conservation Status: Fourteen small populations are known, about half on conservation land.

Conservation and Management Recommendations: Use prescribed fire or hand-clearing to create sunny openings. Avoid clearing, bedding, and other mechanical disturbances. Exclude vehicles from prairies and glades. Eradicate exotic pest plants.

Selected References:

Chafin, L.G. 2007. Field guide to the rare plants of Georgia. State Botanical Garden of Georgia and University of Georgia Press, Athens.

Cronquist, A. 1980. Vascular flora of the southeastern United States, Vol. 1, Asteraceae. University of North Carolina Press, Chapel Hill.

FNA. 2006a. Flora of North America. Vol. 19, Magnoliophyta: Asteridae, Part 6: Asteraceae, Part 1. Oxford University Press, New York.

Horn, D., T. Cathcart, T.E. Hemmerly, and D. Duhl. 2005. Wildflowers of Tennessee, the Ohio Valley, and the southern Appalachians. Lone Pine Publishing, Auburn, Washington.

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia. http://www.natureserve.org/explorer

Singhurst, J.R., R.J. O•Kennon, and W.C. Holmes. 2004. The genus *Prenanthes* (Asteraceae: Lactuceae) in Texas. Sida 21(1): 181-191.

Weakley, A.S. 2008. Flora of the Carolinas, Virginia, Georgia, northern Florida, and surrounding areas. University of North Carolina Herbarium, Chapel Hill. http://www.herbarium.unc.edu/flora.htm

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