

Common Name: OZARK BUNCHFLOWER

Scientific Name: Veratrum woodii J.W. Robbins ex Wood

Other Commonly Used Names: Wood's false hellebore

Previously Used Scientific Names: Melanthium woodii (J.W. Robbins ex Wood) Bodkin

**Family:** Liliaceae (lily) or Melanthiaceae (bunchflower)

Rarity Ranks: G5/S2

State Legal Status: Rare

Federal Legal Status: none

Federal Wetland Status: none

**Description:** Perennial **herb** from a deeply buried bulb. **Basal leaves** 8 - 24 inches (20 - 60 cm) long and 1 - 4 inches (3 - 10 cm) wide, oval, with raised parallel veins giving a slightly pleated look; **stem leaves** are few and smaller. **Flowering stem** up to 6½ feet (2 meters) tall, the middle and upper sections with many slender, flowering branches. **Flowers** about ¾ inch (2 cm) wide, with 6 tepals (3 petals + 3 sepals), maroon, turning dark green with age; each tepal with 2 shiny, dark glands at the base. **Fruit** an erect, 3-lobed capsule, ½ - 1 inch (1.5 - 2.5 cm) long.

**Similar Species:** Small-flowered false-hellebore (*Veratrum parviflorum*, synonym: *Melanthium parviflorum*) has similar leaves, 1¾ - 5½ inches (4.5 - 14 cm) wide; its flowers are greenishyellow and about ½ inch (1.4 cm) wide; it occurs in moist, hardwood forests in north Georgia. Broad-leaved bunchflower (*V. latifolium*), occurs in moist, hardwood forests in the mountains, Piedmont, and upper Coastal Plain; its leaves are strap-shaped, 10 - 21½ inches (25 - 55 cm) long and ¾ - 2¾ inches (1 - 7 cm) wide; its flowers are greenish-yellow, the tepals nearly as wide as long and abruptly narrowed at the base, with undulate margins and 2 conspicuous glands.

**Related Rare Species:** American false hellebore (V. viride, Special Concern) resembles Ozark bunchflower. It has similar leaves up to  $2\frac{3}{8}$  - 6 inches (6 - 15 cm) wide but the stem is leafier; its greenish-yellow flowers are hairy and  $\frac{3}{8}$  -  $\frac{1}{2}$  inch (0.8-1 3 cm) wide, with a conspicuous pair of glands near the base of the tepal; it occurs in seepy, hardwood forests in northeast Georgia.

Habitat: Lower slopes and stream terraces in moist, hardwood forests, usually over basic soils.

**Life History:** Ozark bunchflower is a perennial herb that reproduces sexually and possibly vegetatively. Sexual reproduction is limited as plants flower infrequently, with stands of apparently mature plants producing no flowers for several years or only one flowering stem in a given year. Drought seems to stimulate flowering in some populations. Inflorescences include both perfect and male flowers, with male flowers found mostly on branches at mid-inflorescence. Pollinators have not been studied but the colorful, nectar-producing flowers of Ozark bunchflower seem likely to attract bees, moths, flies, and butterflies. Seed set is low. Other species of *Veratrum* spread by rhizomes, and it seems possible that the bulbs produce offsets, but vegetative reproduction has not been reported for Ozark bunchflower. Populations are believed to be long-lived; one stand in Illinois was known to persist for 50 years. *Veratrum* species are known for their highly toxic steroidal alkaloids, concentrated in the roots, bulbs, and seeds, which can cause cardiac failure and death.

**Survey Recommendations:** Surveys are best conducted during flowering (July–September); however, plants may flower only every few years.

**Range:** Georgia, Florida, Alabama, North Carolina, Tennessee, Kentucky, Arkansas, Illinois, Indiana, Iowa, Missouri, Ohio, and Oklahoma.

**Threats:** Logging and clearing of hardwood forests, overbrowsing by deer, competition from exotic pest plants.

**Georgia Conservation Status:** Twenty populations are known, 4 on conservation lands.

**Conservation and Management Recommendations:** Avoid logging and mechanical clearing. Reduce the size of Georgia's deer population. Eradicate exotic pest plants such as Japanese honeysuckle.

## **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.

Ebinger, J. 1996. Flowering in false hellebore (*Veratrum woodii*, Liliaceae) populations in east-central Illinois. Castanea 61(1): 46-48.

FNA. 2003. Flora of North America, Vol. 26, Magnoliophyta: Liliidae: Liliales and Orchidales. Oxford University Press, New York.

Kral, R. 1983. A report on some rare, threatened, or endangered forest-related vascular plants of the South. Technical Publication R8-TP2. United States Forest Service, Atlanta.

NatureServe. 2008. NatureServe Explorer. Arlington, Virginia. <a href="http://www.natureserve.org/explorer">http://www.natureserve.org/explorer</a>

North American Pollinator Protection Campaign and the Pollinator Partnership. 2009. Selecting plants for pollinators: a regional guide for farmers, land managers, and gardeners in the ecological region of the Laurentian Mixed Forest Province (draft). <a href="http://www.pollinator.org/PDFs/Guides/Laurentianrx10FINAL.pdf">http://www.pollinator.org/PDFs/Guides/Laurentianrx10FINAL.pdf</a>

Patrick, T.S., J.R. Allison, and G.A. Krakow. 1995. Protected plants of Georgia. Georgia Department of Natural Resources, Natural Heritage Program, Social Circle.

Radford, A.E., H.E. Ahles, and C.R. Bell. 1968. Manual of the vascular flora of the Carolinas. University of North Carolina Press, Chapel Hill.

Tenaglia, D. 2006. Missouri plants: photographs and descriptions of flowering and non-flowering plants of Missouri. http://www.missouriplants.com

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

Zomlefer, W.B., W.M. Whitten, N.H. Williams, and W.S. Judd. 2003. Overview of *Veratrum s.l.* (Liliales: Melanthiaceae) and an infrageneric phylogeny based on ITS sequence data. Systematic Botany 28(2): 250-269.

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## **Date Compiled or Updated:**

L.Chafin, Jan. 2009: original account D.Weiler, Jan. 2010: added pictures Z. Abouhamdan, April 2016: updated link





