

Common Name: SOUTHERN LADY'S-SLIPPER

Scientific Name: Cypripedium kentuckiense C.F. Reed

Other Commonly Used Names: Kentucky lady's-slipper, ivory-lipped lady's-slipper

 $\label{eq:continuous} \textbf{Previously Used Scientific Names:} \ \textit{Cypripedium daultonii} \ \textbf{Soukop (nomen nudum)}, \ \textit{C}.$

furcatum Rafinesque.

Family: Orchidaceae (orchid)

Rarity Ranks: G3/S1

State Legal Status: Endangered

Federal Legal Status: none

Federal Wetland Status: none

Description: Perennial **herb**, 13½ - 39 inches (35 - 97 cm) tall, with 3 - 6 **leaves** evenly distributed along the stem. **Leaves** 5 - 9½ inches (13 - 24 cm) long and 1¾ - 6 inches (4.3 - 15 cm) wide, broadly oval with pointed tips and clasping leaf bases, alternate. **Flowers** 1 - 2 per plant, at the top of the stem, with an erect, green **bract** behind each flower; a white or pale yellow, pouch-like **lip petal** ("slipper") up to 2 inches (5 cm) wide and 2½ inches (6.5 cm) long with a large opening on the upper surface; 2 spirally twisted, drooping **petals**, up to 6 inches (15.6 cm) long; and 2 **sepals**, one curved over the top of the flower and another curved behind the slipper; sepals and petals are maroon or greenish-yellow marked with purple spots. **Fruit** a capsule about 2½ inches (6 cm) long.

Similar and Related Rare Species: Southern lady's-slipper differs from other lady's-slippers by the large opening on the upper surface of the lip, and by the pale yellow or ivory color of the lip. Yellow lady's-slipper (*Cypripedium parviflorum*) is state-listed as Rare; pink lady's-slipper (*C. acaule*) is state-listed as Unusual. Both are included on this website.

Habitat: Forested springhead seeps and wet, sandy stream banks; beech - red maple - oak forests adjacent to springheads.

Life History: Southern lady's-slipper is a perennial herb that reproduces by seed. Little is known about the life history of this species, but generally, lady's-slipper orchid flowers are pollinated by bees. Fruit production is usually low but each fruit contains thousands of seeds. The seeds are tiny and dust-like, containing no stored food reserves, and are wind-dispersed. They must land on a patch of soil containing a specific fungus that provides nutrients for germination and subsequent plant growth. Lady's-slipper plants dug from the wild and transplanted into gardens rarely survive for very long due to the lack of this fungus.

Survey Recommendations: Surveys are best conducted during flowering (mid-April–early May) and fruiting (July–August).

Range: Georgia, and about 180 small, widely scattered populations in Alabama, Arkansas, Kentucky, Louisiana, Mississippi, Oklahoma, Tennessee, Texas, Virginia.

Threats: Logging, draining, and filling wetlands. Conversion of habitat to pine plantations. Clearcutting. Poaching. Invasion by exotic pest plants. Digging by feral hogs. Overbrowsing by deer.

Georgia Conservation Status: Only one small population is known, 220 miles from the nearest population in Alabama. Although on private land, this site is the focus of conservation and monitoring activities.

Conservation and Management Recommendations: Avoid logging, draining, or filling wetlands. Avoid clearcutting on slopes. Eradicate exotic pest plants and feral hogs. Prosecute

plant poachers. All lady's-slippers are rare or unusual and should never be dug from the woods. They depend on a local soil fungus for nutrients and rarely survive transplanting. Most lady's-slipper species are now available from nurseries.

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Date Compiled or Updated:

L. Chafin, March 2007: original account

K. Owers, Jan. 2010: updated status and ranks, added pictures

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