

CYPRIPEDIUM CANDIDUM Muhl. ex Willd.
White Lady's-slipper

FAMILY: Orchidaceae

HABIT: Herbaceous perennial, 1.5-4 dm.; flowering May, June.

SIMILAR SPECIES: This species is similar to *Cypripedium calceolus* var. *parviflorum* and may occur in similar habitats. The former has a white lip and the latter has a yellow lip. These colors can fade on herbarium specimens and determinations are sometimes difficult. In addition, these two sometimes hybridize, producing a plant with the white lip of *C. candidum* and the darker sepals and other two petals of *C. calceolus* var. *parviflorum*. In addition, hybrids are known with the larger *C. calceolus* var. *pubescens*. Other than these species and hybrids, however, this plant is unlikely to be confused with any other orchid in Ohio.

TOTAL RANGE: NY and NJ to OH, ND, NE, and MO.

STATE RANGE (as of 2008): Post-1980 records are from Adams, Erie, Sandusky, and Seneca counties. Pre-1980 records are from Champaign, Henry, Lucas, Montgomery, Portage, and Trumbull counties.

HABITAT: This species requires a basic substrate and full sun, and grows in wet prairies, calcareous fens, open tamarack bogs, and sometimes limestone barrens.

HAZARDS: Drainage of the site and utilization for cropland; succession of the habitat from an open to a shaded community; over-collecting.

RECOVERY POTENTIAL: There is very little calcareous wet prairie habitat left in Ohio. In addition, new populations may be difficult to establish. Many orchids do not survive transplanting well due to a requirement of soil fungi to form mycorrhizal associations with the roots. Seedlings have never been successfully established in the laboratory, and naturally germinated seeds may require more than ten years to develop into flowering plants.

INVENTORY GUIDELINES: Mature flowering material is needed for identification. Note the flower color on collected specimens. This small plant often times occurs among dense vegetation and can be difficult to spot.

COMMENTS: *Cypripedium candidum* was at one time known from sixteen states and three Canadian provinces. It is now apparently restricted to thirteen states and two provinces and is greatly reduced in many of these (Bowles, 1983). Habitat destruction both by farming and urban sprawl has caused this reduction. This species is pollinated by various small bees (Catling and Knerer, 1980). The best stand of this species known in Ohio occurs on an area that was mined for marl. A marly substrate remains periodically burned to maintain openings for wildlife. Fires, either in spring or autumn, are also reported to help this species, by controlling competing and shading vegetation. The species reproduces by adventitious buds from old roots, and can remain dormant underground during unfavorable periods.

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