



# Rare Plants of New Hampshire

## Large Yellow Lady's Slipper

*Cypripedium pubescens* Willd.

(synonym- *Cypripedium calceolus* L. var. *pubescens* (Willd.) Correll)

Orchid family (Orchidaceae)

### What Does It Look Like?

This woodland plant is a robust perennial herb, 10-70 cm (4-28 inches) tall, with musky-smelling roots and densely covered with fine hairs.

**Leaves:** The 3-5 bright green leaves are strongly ribbed, oval shaped, and sheath the stem.

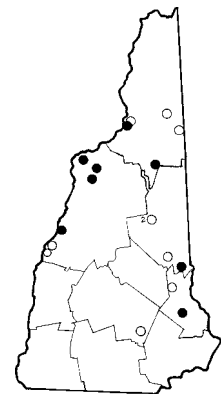
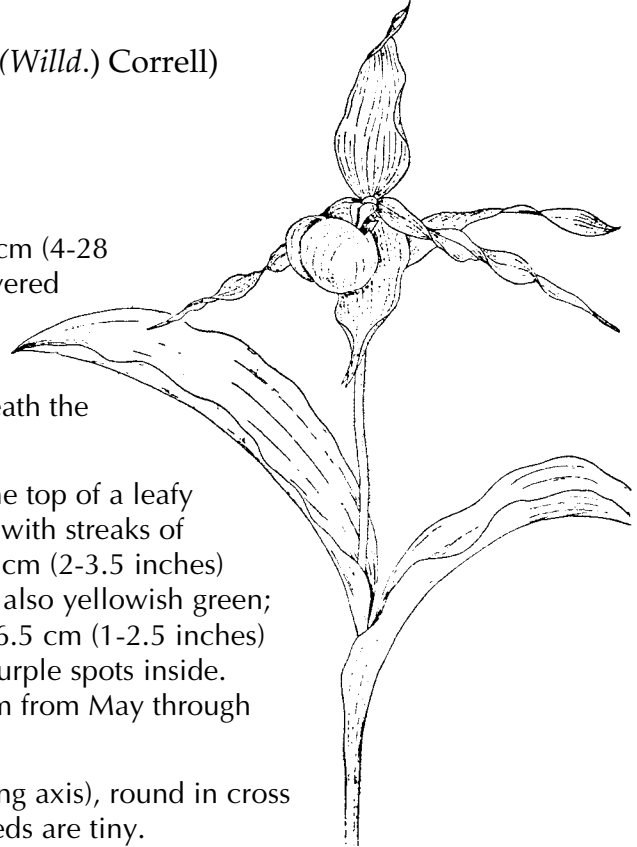
**Flower:** One or two large yellow flowers at the top of a leafy stem. The sepals are yellowish green with streaks of brown; lateral petals are narrow, 5-9 cm (2-3.5 inches) long, loosely twisted to spiraled, and also yellowish green; the lip is inflated (slipper-shaped), 3-6.5 cm (1-2.5 inches) long, and pale yellow with reddish-purple spots inside. Flowers are faintly scented and bloom from May through mid to June.

**Fruit:** The capsule is elliptical (along the long axis), round in cross section, ribbed, and almost erect. Seeds are tiny.

**Similar species:** The only other yellow lady's slipper is *Cypripedium parviflorum*, which is slightly smaller and very fragrant. It differs from large lady's slipper in flower size (its lip is only 2-3 cm (0.8-1 inch) long) and its strongly twisted lateral petals, 3-5 cm (1-2 inches) long. Pink lady's slipper (*Cypripedium acaule*) sometimes have white flowers, only have basal leaves (none on stem) and grow in drier, more acidic woodlands.

### Where Is It Found?

**Habitat:** Across its range, large yellow lady's slipper is a very slow growing plant of rich, usually swampy or seasonally wet, limy deciduous woods. In New Hampshire, it is most likely to occur in dry to moist (usually rich) forests or woodlands, along the edges of spring run-off streams, or in circumneutral/calcareous (enriched) forests and woodlands, including rich mesic forests, seepage forests and seepage swamps. Seed set is small and reproduction is largely vegetative. The roots form an association with soil fungi to enhance mineral absorption and because of this the plants do not transplant well.



**Large Yellow Lady Slipper in New Hampshire**

○ Historic Locations  
● Verified since 1980



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### Associated species:

Sugar maple (*Acer saccharum*), white ash (*Fraxinus americana*), yellow birch (*Betula alleghaniensis*), lake sedge (*Carex lacustris*), bog goldenrod (*Solidago uliginosa*), water avens (*Geum rivale*), maidenhair fern (*Adiantum pedatum*), cinnamon fern (*Osmunda cinnamomea*), rattlesnake fern (*Botrychium virginianum*).

**Distribution:** Nova Scotia to Minnesota and south to New England, along the mountains to Georgia, Alabama, Tennessee, and Missouri.

## What Is Its Status?

### Conservation

**status:** Populations elsewhere are stable, but imperiled in New Hampshire because of its rarity. It is state listed as threatened due to its rarity (only 8 of 18 known occurrences for the state have been confirmed since 1980).

**Management:** Decline of this wildflower is due in part to collectors who dig the plants for gardens and for sale. Large yellow lady's slipper is a plant adapted to forest ecosystems. Its response to canopy removals is uncertain, but it is likely that it would not tolerate significant overstory removals or soil and hydrological changes.

## What Should You Do If You Find This Plant?

Please report sightings of this or other rare species to the New Hampshire Natural Heritage Inventory. Documentation should include: (1) location of the sighting on USGS topographic map or road map, with written directions for relocating the plant; (2) a photo of the plant; and (3) descriptive information including how many plants there are, whether any plants are flowering or fruiting, and comments about the surrounding vegetation. Information may be sent to NHHI/DRED, PO Box 1856, Concord, NH 03302-1856. If you have any questions, please call the New Hampshire Natural Heritage Inventory Program at (603) 271-3623.

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