

# Clustered Bluets



Oldenlandia close-up



Photo credits: Kimberly J. Smith

**Scientific Name** *Oldenlandia uniflora*  
L.

**Family Name** Rubiaceae  
Madder Family

## Did you know?

The genus was named by Linnaeus in honor of Heinrich Bernhard Oldenland, a Dutch botanist from the late 1600s. He helped establish the oldest public garden in South Africa, the Company's Garden in Cape Town (Wikipedia contributors).

## Summary

**Protection** Endangered in New York State, not listed federally.

This level of state protection means: listed species are those with: 1) 5 or fewer extant sites, or 2) fewer than 1,000 individuals, or 3) restricted to fewer than 4 U.S.G.S. 7 ½ minute topographical maps, or 4) species listed as endangered by U.S. Department of Interior.

**Rarity** G5, S1

A global rarity rank of G5 means: This species is demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.

A state rarity rank of S1 means: This plant is endangered/critically imperiled in New York because of extreme rarity (typically 5 or fewer populations or very few remaining individuals) or is extremely vulnerable to extirpation from New York due to biological factors.

## Conservation Status in New York

There are nine existing populations but only three of them have over 200 plants. There are three historical populations from the early 1900s that have not been resurveyed.

## Short-term Trends

The short-term trend appears to be stable to someone increasing. Most of the populations were resurveyed in the mid-2000s. All of them were doing about the same or had increased in number. Exact trends cannot be understood unless surveys are done every year because of the fluctuating nature of this pondshore species.

## Long-term Trends

This plant has always been rare in New York. However, its long-term trend appears stable with about the same number of populations for the last 100 years.

# Conservation and Management

## Threats

Some ponds have seen too much development along the shoreline which threaten populations with direct disturbance by trampling and ATV use. The invasion of Phragmites is also a threat to a few populations.

## Conservation Strategies and Management Practices

The pondshores need to be protected from direct disturbance by ATVs and excessive trampling. Exotic invasive species must be prevented from colonizing the shores and present populations must be eliminated. A natural buffer of at least 200 feet should be established around the ponds to prevent excessive runoff and pollution events.

## Research Needs

Research into the fluctuating water levels and habitat requirements of this plant is needed to better understand the optimum conditions for its growth.

# Habitat

In New York almost all of the plants grow on coastal plain pondshores among other species of wildflowers. The ponds can be surrounded by pitch pine forest or oak woods. One population was found in wet spots of oak woods along a sandy road down that leads down to a saltmarsh (New York Natural Heritage Program 2012).

## Associated Ecological Communities

### Coastal Plain Pond Shore

The gently sloping shore of a coastal plain pond with seasonally and annually fluctuating water levels. Plants growing on the pond shore vary with water levels. In dry years when water levels are low there is often a dense growth of annual sedges, grasses, and herbs. Submerged and floating-leaved aquatic plants, such as fragrant waterlily and pondweeds, may become "stranded" on the exposed shore. In wet years when the water level is high only a few emergents and floating-leaved aquatics may be noticeable. The vegetation of this pond shore community can change dramatically from one year to the next depending on fluctuations in groundwater levels.

## Associated Species

Nodding Beggar-ticks (*Bidens cernua*)  
Toothed Sedge (*Cyperus dentatus*)  
Spoon-leaved Sundew (*Drosera intermedia*)  
*Eleocharis flavescens* var. *olivacea*

Slender Flattop Goldenrod (*Euthamia caroliniana*)  
 Slender Fimbry (*Fimbristylis autumnalis*)  
 Golden Hedge-hyssop (*Gratiola aurea*)  
 Canadian St. John's-wort (*Hypericum canadense*)  
 Canada Rush (*Juncus canadensis*)  
 Dwarf Bulrush (*Lipocarpa micrantha*)  
 Bushy Seedbox (*Ludwigia alternifolia*)  
 Switchgrass (*Panicum virgatum*)  
 Brownish Beakrush (*Rhynchospora capitellata*)  
 Bald-rush (*Rhynchospora nitens*)  
 Long-beaked Baldrush (*Rhynchospora scirpoides*)  
 Eastern Poison Ivy (*Toxicodendron radicans*)  
 Bog White Violet (*Viola lanceolata*)

## Identification Comments

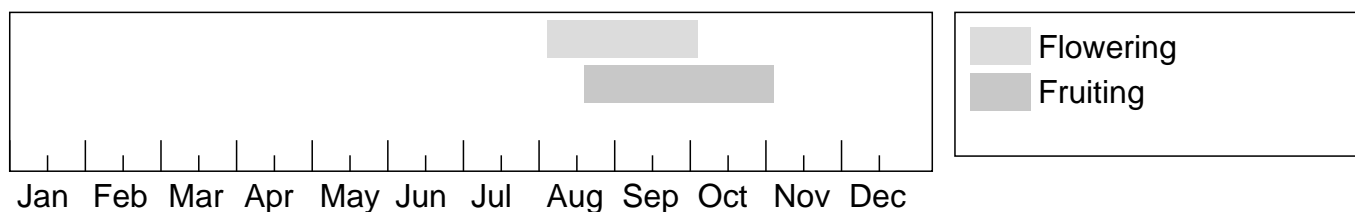
Clustered bluets is a small, erect or spreading annual 1-5 dm tall. The hairy stem can be simple or sometimes many-branched. The opposite, lanceolate to oval leaves are sessile on the stem and 1-2.5 cm long. They have an obvious midvein and are white-hairy on the margins and the midvein. The flowers are in clusters along the stem or at the top and have four small white petals that are shorter than the sepals and lack a funnel-shaped base. The fruit is a rounded, white-hairy capsule that is also shorter than the sepals (Gleason and Cronquist 1991).

### Best Life Stage for Identifying This Species

This species is best identified with the leafy plant in flower or fruit.

### The Best Time to See

Flowers August through September with fruits persisting through October.



**The time of year you would expect to find Clustered Bluets in New York.**

### Similar Species

Other bluet species have flowers that are more funnel-shaped below and are more bluish or purple. They also occur in drier soils (Gleason and Cronquist 1991).

## Taxonomy

**Kingdom** Plantae  
└─ **Phylum** Anthophyta  
    └─ **Class** Dicots (Dicotyledoneae)  
        └─ **Order** Rubiales  
            └─ **Family** Rubiaceae (Madder Family)

## Synonyms

*Hedyotis uniflora* ((L.) Lam.)

# Additional Resources

## Links

### Louisiana State University

[http://www.herbarium.lsu.edu/factsheets/Oldenlandia\\_uniflora.htm](http://www.herbarium.lsu.edu/factsheets/Oldenlandia_uniflora.htm)

### USDA Plants Database

<http://plants.usda.gov/java/nameSearch?mode=sciname&keywordquery=OLDENLANDIA+UNIFLORA>

### NatureServe Explorer

<http://natureserve.org/explorer/servlet/NatureServe?searchName=OLDENLANDIA+UNIFLORA>

### Google Images

<http://images.google.com/images?q=OLDENLANDIA+UNIFLORA>

## Best Identification Reference

Gleason, Henry A. and A. Cronquist. 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. The New York Botanical Garden, Bronx, New York. 910 pp.

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