

Wood Lily



Parks & Open Space

5201 St. Vrain Rd., Longmont CO 80504 303-678-6200 BoulderCountyOpenSpace.org



Wood Lily Photo By BCPOS Staff

Species Description

Scientific Name: Lilium philadelphicum

Family: Liliaceae

CNHP & State Status: G5, S3S4

Description: Herbaceous plant up to 2.5 ft. tall and unbranched. Alternate whorled or scattered leaves 1.5 to 3 in. long with parallel venation. Each flower consists of six orange to reddish tepals/petals; yellowish with conspicuous purplish brown dots near base. Flowers with six orange to reddish stamens and an orange-reddish style with a swollen stigma.

Phenology: Flowers June – August.

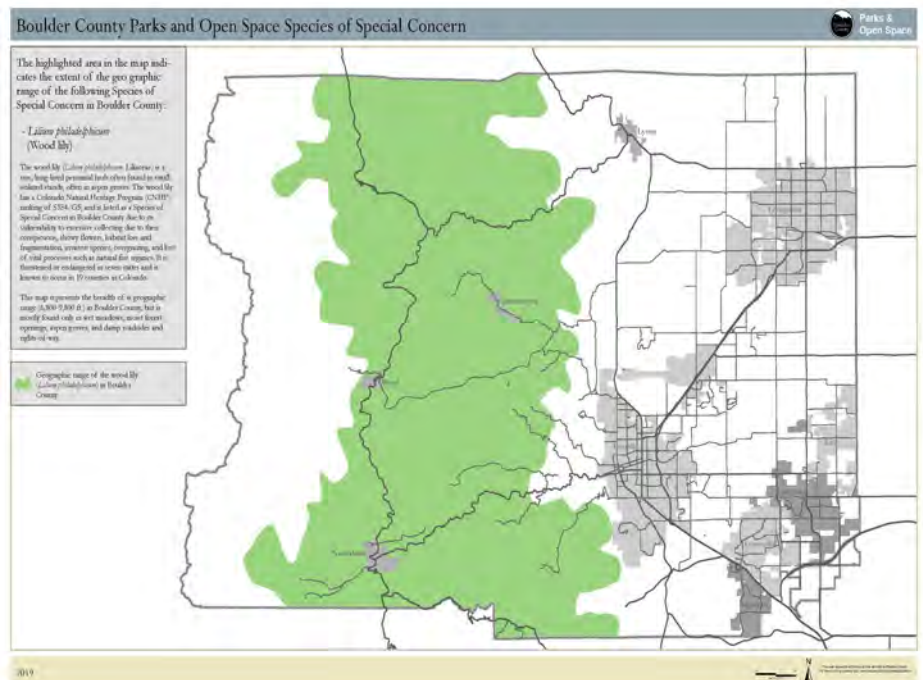
Look Alikes: None in Boulder County.

Habitat: Wet meadows, moist forest openings and aspen groves; damp roadsides and rights-of-way; elevations 6,800-9,800 ft.

Background

The wood lily is a rare, long-lived perennial herb often found in small isolated stands in aspen groves. It is known in 19 Colorado counties, and it is vulnerable to excessive collecting because of its conspicuous, showy flowers. Other threats include habitat loss and fragmentation, invasive species, overgrazing, and loss of vital processes, such as natural fire regimes. Wood lilies are primarily pollinated by large butterflies, like swallowtails and monarchs, and require cross-pollination to produce fruit, although the plants can also reproduce vegetatively.

Distribution & Range



Threats

Habitat Loss & Fragmentation: Given the limited distribution of wood lilies in Boulder County, development can have a disproportional effect on habitat loss.

Invasive Species: Non-native plants can outcompete wood lilies by using available water and nutrients, and they can crowd them out of their habitat. Even native species like cattails, under the right environmental conditions, can threaten populations of wood lilies.

Grazing: The loss of natural habitat and habitat fragmentation can cause ungulates like deer or elk to seek refuge in protected habitats, causing increased herbivore pressure on wood lilies. Grazing of livestock among populations of wood lilies can also create excessive herbivory pressures.

Poaching/Collection: Due to their showy red-orange flowers, wood lilies are particularly vulnerable to illegal collecting. This prevents seed production, which inhibits populations from recovering.

Alteration of Disturbance Regimes: The loss of natural or anthropogenic fires in wood lily habitat prevent the disturbance necessary to maintain suitable habitat. Overgrown canopies and loss in water availability because of increased vegetative cover degrades ideal wood lily habitat.



Wood Lily anthers close during rain and then re-open, a very rare occurrence among flowering plants.

Photo By BCPOS Staff



Wood Lily Habitat Photo By BCPOS Staff

Management Considerations

Coordinate management actions with

BCPOS: Potential locations can be reported to BCPOS to help with planning and conservation. BCPOS can help with:

- **Documentation:** If stands are identified, landowners should map or monitor these areas with BCPOS.
- **Agriculture/Grazing:** Grazing by livestock should be excluded from stands. Installing animal exclosures can help to prevent herbivory.
- **Restoration:** BCPOS can guide restoration efforts, which could entail the use of herbicide treatment and re-introducing native species that are known to occur in these communities.
- **Invasive Plant Management:** If possible, mechanical removal of invasive species is ideal (i.e., hand-pulling or using hand tools to remove invasive species).
- **Fire Management:** BCPOS can help determine if fire management would be an effective tool to fight invasive species.

2021

The areas displayed in this map indicate known and potential locations of the following species of special concern in Boulder County:

Lilium philadelphicum



Wood lily

The wood lily is a rare, long-lived perennial forb found in small isolated stands, often in aspen groves. It is vulnerable (S3) in Colorado due to several threats, including over-collecting due to its conspicuous, showy flowers. It is a Boulder County Species of Special Concern. Other threats include habitat loss and fragmentation, invasive species, overgrazing, and loss of vital processes such as natural fire regimes and changing hydrological processes.

This map shows only known locations from documented herbaria records in the county, and where there is a potential for the species to occur based on its known elevation range.

