

# Ute Ladies'-Tresses Orchid



Parks & Open Space

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Ute Ladies'-Tresses Orchid (*Spiranthes diluvialis*) is a rare orchid found throughout the interior west in riparian and wetland habitats.

Photo by USFWS, Endangered Species on flickr, credit Bekee Hotze/USFWS.

## Species Description

**Description:** Ute Ladies'-Tresses Orchid is a long-lived, perennial forb that is 20-50 cm tall, with narrow leaves up to 28 cm long and one cm wide. Its flowers grow in a loose, spiraling spike. They are white in color and stout in appearance, separating from the stem at a 90-degree angle.

**Phenology:** This plant flowers from late July to August.

**Look Alikes:** Hooded Lady's Tresses (*Spiranthes romanzoffiana*) are more common with some of the same distribution and characteristics as the Ute Ladies'-Tresses. This look-alike orchid has a much tighter arrangement of flowers, however.

**Habitat:** Occurs in both riparian and wetland habitats, at elevations between 4,200-7,000 ft., in flat areas with a high water table not dense in vegetation. The orchid can be found in altered wetland and in ditches, berms, and irrigated meadows. The orchid is shade intolerant and is found in clayey, silty and sandy soils.

## Background

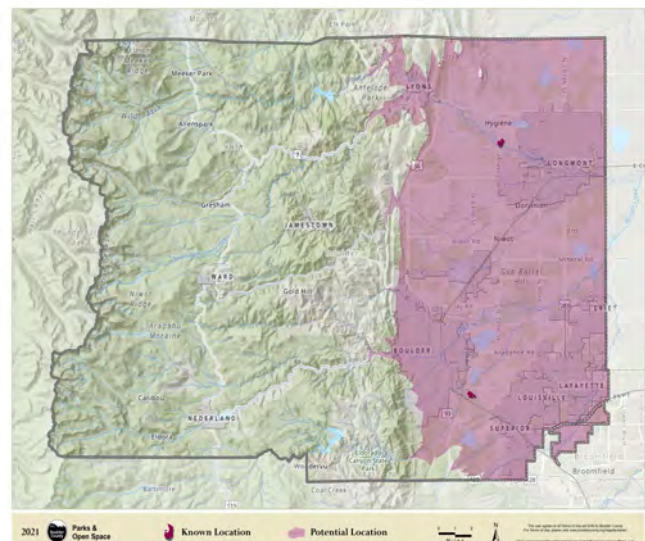
Ute Ladies'-Tresses belongs to the Orchidaceae family. There are several populations of Ute Ladies'-Tresses that occur within Boulder County and on Boulder County managed land.

## Distribution & Range

Ute Ladies'-Tresses are found throughout the intermountain west. In Boulder County, it is found within the South Boulder Creek floodplain.



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## Threats

**Habitat loss & degradation:** As more of Boulder County is developed to accommodate our rapidly growing population, habitat for Ute Ladies'-Tresses is degraded or lost. Some impacts include increased recreation activities and public infrastructure development and repair.

**Invasive species:** Invasive species found in riparian and wetland habitats, such as Canada Thistle (*Cirsium arvense*) and Common Teasel (*Dipsacus fullonum*), have the ability to crowd out native species through aggressive reproductive strategies and a lack of natural predators.

**Grazing:** Grazing is detrimental if livestock overgraze the site, if grazing occurs while the plant is flowering, and if grazing leads to the site being thoroughly trampled.

**Climate change:** Climate change poses a complex, multi-pronged threat to Ute Ladies'-Tresses. The impacts can be broadly categorized in two ways: climatic alterations and human response to climatic alterations. On one hand, it is unknown how the species will respond to climate change from a phenological context. On the other, as the climate gets hotter and drier, human demand on water resources will increase and could result in changes to riparian and wetland habitat.



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Ute Ladies'-Tresses (*Spiranthes diluvialis*) habitat.  
Photo Credit: BCPOS Staff

## Management Considerations

**Policy & planning:** Try to identify possible habitat and look for Ute Ladies'-Tresses before working on or altering that habitat. Avoid changing hydrologic systems in order to prevent habitat degradation. Identify areas that could be strong candidates for future reintroduction and/or habitat restoration efforts.

**Invasive plant management:** If chemical control is required, use a chemical that will not impact Ute Ladies'-Tresses. The applicator should follow the manufacturer's label and material safety data sheets. It is important to note that Ute Ladies'-Tresses, and other forbs that support pollinators that the orchid relies on are vulnerable to broadleaf herbicides.

**Agriculture:** Agricultural activities, such as grazing, mowing, or haying, should occur before the start of the flowering period in July or after the plant has gone to seed in October. If agricultural operations inside this seasonal window cannot be avoided, then the area should be kept to a maximum of one operational disturbance per year. The area should also be allowed at least one year of inactivity every five years, which will allow for seed development and dispersal.

2021

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


## *Spiranthes diluvialis*



Ute Ladies'-Tresses

Ute Ladies'-Tresses is a rare orchid found throughout the interior west in riparian and wetland habitats in flat areas with a high water table that are not dense in vegetation. It can be found in altered wetlands, near ditches, berms, and irrigated meadows. The orchid is listed as a federally threatened species, and it is critically imperiled (S1) in Colorado, where it is also a Boulder County Species of Special Concern.

This map shows only potential locations of this species in Boulder County based on its known elevation range and its proximity to riparian areas.

 Potential Location

