

***Spiranthes diluvialis*** Sheviak**UTE LADY'S TRESSES****FAMILY:** *Orchidaceae*, the orchid family.**SYNONYMS:** *Spiranthes romanzoffiana* (misapplied)**STATUS:****Heritage Program SENSITIVE LIST, ranks: G2 SH****USFWS/ESA:** LISTED THREATENED. **STATE OF NEVADA:** FULLY PROTECTED. **BLM:** Special Status Species in Nevada. **USFS:** Threatened. **NNNPS:** THREATENED. **CITES:** Appendix II.**POPULATION CENSUS (NEVADA):** 1 occurrence mapped; total estimated individuals unknown, total estimated area unknown. **TREND:** unknown.**IMPACTS AND MAJOR THREATS (NEVADA):** Heavy summer livestock grazing and hay mowing, agricultural conversion, private developments. Last seen in Nevada in 1936, and may already be extirpated.**INVENTORY EFFORT (NEVADA):** Systematic surveys have been conducted in Nevada, but likely remain incomplete. Most recent entered survey 1997. **Years since last entered survey** (percent of mapped records at various survey ages): **0-5 yrs:** 100%.**LAND MANAGEMENT (NEVADA):** private lands.**RANGE:** Lincoln and White Pine (?) counties, Nevada; also in CO, ID, MT, NE, UT, and WY.**ELEVATIONS RECORDED (NEVADA):** 4750 feet (1448 meters).**HABITAT (NEVADA):** Moist to very wet, somewhat alkaline or calcareous native meadows near streams, springs, seeps, lake shores, or in abandoned stream meanders that still retain ample ground water, global elevation range 4200-5300. Aquatic or wetland-dependent in Nevada.**PHENOLOGY:** flowering summer. Range of most frequent **survey months:** July.**LIFE-FORM AND HABIT:** cormous perennial herb.**DESCRIPTION:** Ute Ladies' Tresses is a perennial orchid with usually 1 stem that is 20-50 cm tall and arising from tuberously thickened roots. Its narrow leaves are 1 cm wide, can reach 28 cm long, are longest at their base, and persist during flowering. The inflorescence consists of few to many white or ivory flowers clustered in a spike of 3-rank spirals at the top of the stem. The sepals and petals are ascending or perpendicular to the stem. The lateral sepals often spread abruptly from the base of the flower, and sepals are free or only slightly connate at the base. The lip petal is somewhat constricted at the median. **Distinguishing features:** *S. DILUVIALIS* is intermediate between its putative progenitors, *S. ROMANZOFFIANA* and *S. MAGNICAMPORUM*; the latter is not known from Montana. *S. DILUVIALIS* is distinguished from *S. ROMANZOFFIANA* by its whitish, stout, ringent (gaping at the mouth) flowers, by its lip petal being exposed in lateral view, and by its sepals being free or connate at the base for a short distance rather than fused to form a hood above the lip.**PHOTOGRAPHS:** Atwood et al. (1991), Fertig et al. (1994); Nevada Natural Heritage Program images web page (1998-present).**ILLUSTRATIONS:** Atwood et al. (1991), Fertig et al. (1994).**OTHER GENERAL REFERENCES** (listed separately): Albee et al. (1988), Welsh et al. (1993).**SPECIFIC REFERENCES:**

Colorado Native Plant Society. 1989. Rare plants of Colorado. Estes Park: Colorado Native Plant Society and Rocky Mountain Nature Association. 73 pages.

Morefield, J. D. 1994. Status report for *Spiranthes diluvialis* Sheviak (1984). Carson City: Nevada Natural Heritage Program, prepared for the U. S. Fish and Wildlife Service, Reno.Sheviak, C. J. 1984. *Spiranthes diluvialis*, a new species from the western United States. *Brittonia* 36: 8-14.U. S. Fish and Wildlife Service. 1990. Proposal to list the plant *Spiranthes diluvialis* (Ute ladies'-tresses) as a threatened species. *Federal Register* 55(219): 47347-47350.U. S. Fish and Wildlife Service. 1992. Final rule to list the plant *Spiranthes diluvialis* (Ute ladies'-tresses) as a threatened species. *Federal Register* 57(12): 2048-2054.