

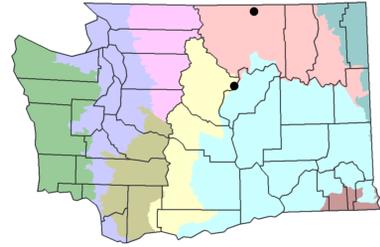
Spiranthes diluvialis Sheviak

Ute ladies' tresses

Orchidaceae - orchid family

status: State Endangered, Federal Listed Threatened

rank: G2G3 / S1



General Description: Perennial 20-50 cm tall. Leaves usually restricted to base of stem, ascending, narrow, linear-lanceolate, up to 28 x 1.5 cm, reduced to bracts upward.

Floral Characteristics: Spikes terminal, dense, with many tightly spiraled flowers; stem sparsely hairy above, with obviously stalked glands. Flowers white to ivory, 7.5-15 mm long, ascending, strongly gaping at the mouth (lip prominently diverges from sepals and petals). Sepals distinct or fused at the base, 7.5-15 mm; lateral sepals broadly spreading to loosely incurved. Petals linear. Lip often yellow centrally, ovate to lanceolate or oblong, with a central constriction, 7-12 x 2.5-6.8 mm; margins entire, crinkled, or toothed. Ovary mostly 4-10 mm. Flowers mid-July through September, depending on hydrology.

Fruits: Capsules.

Identification Tips: This species is not in Hitchcock & Cronquist (1973). *S. romanzoffiana* has its upper sepal and petals fused into a curved tubular hood; more densely congested, shorter spikes; and more closely appressed, ascending flowers. *S. porrifolia* has cream-colored to yellowish slenderly tubular flowers, not gaping at the mouth; its lip has a dense cushion of peg-shaped outgrowths above. Additionally, both *S. romanzoffiana* and *S. porrifolia* have hairless or sparsely hairy inflorescence stems, with usually sessile (sometimes short-stalked) glands.

Range: WA east to MT and NE, south to NV, UT, CO.

Habitat/Ecology: Low-elevation wetland complexes and moist meadows; restricted to temporarily flooded sites with stable subsurface moisture and low vegetation cover. Sites in WA include an alkaline flat adjacent to a lake, and stabilized shorelines of Columbia River dam pools. Associates include ponderosa pine (*Pinus ponderosa*), sagebrush (*Artemisia* spp.), bitterbrush (*Purshia tridentata*), willows (*Salix* spp.), sedges (*Carex* spp.), rushes (*Juncus* spp.), and bentgrass (*Agrostis stolonifera*). Elevations in WA: 220-560 m (720-1830 ft).

Comments: This taxon is rare throughout its range. Surveys of potential habitat should be conducted for multiple years, due to the species' tendency for prolonged dormancy.

References: Flora of North America 1993+, vol. 26; Montana Natural Heritage Program 2010; Sheviak 1984; Sipes & Tepedino 1995.



photo by Joe Arnett



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