

Puccinellia wrightii* ssp. *wrightii (Scribn. & Merr.) Tzvelev **Poaceae**

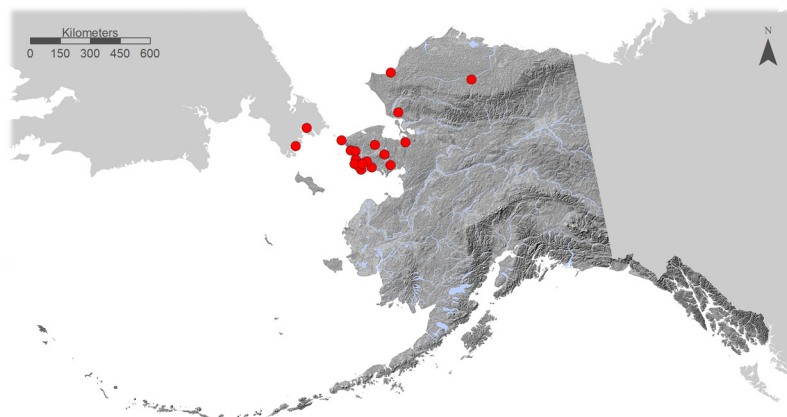
Synonyms: *Colpodium wrightii*

Global Distribution: Amphi-Beringian (ssp. *colpodioides* is known only from Wrangel Island).

Alaska Distribution: Arctic Tundra, Bering Tundra; a single occurrence in the Intermontane Boreal region as well.

Ecoregions Occupied: Seward Peninsula, Kotzebue Sound Lowlands, Kobuk Ridges and Valleys, Brooks Foothills.

Conservation Status: S3 G3G4TNR; BLM Sensitive.



Description^{25, 159}

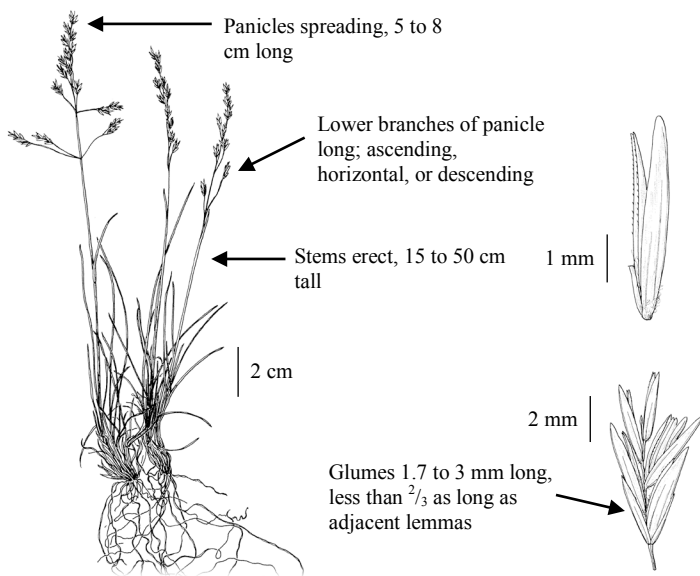


Illustration by Cindy Talbot Roché, courtesy of Intermountain Herbarium

Puccinellia wrightii ssp. *wrightii*

- General:** Perennial, tufted grass from thick, curled roots; stems erect, 15 to 50 cm tall.
- Leaves:** Blades mostly basal, flat or folded, 2 to 8 mm wide; ligules entire, 1.5 to 3 mm long.
- Inflorescences:** Panicles 5 to 8 cm long, spreading, glabrous; lower branches of panicle long, ascending, horizontal, or descending.
- Spikelets:** Spikelets few at apices of branches, purple-tinted, 4 to 7 mm long with 3 to 5 florets; glumes narrow, not enfolding the base of the lower lemmas, lower glumes 1.7 to 3 mm long, upper glumes 2.5 to 4 mm long; lemmas lanceolate, 5-veined, hairy on the lower half, 4 to 5 mm long; palea scabrous towards the tips, hairy on the veins in the lower half.



Ecology

- Elevation:** Known from near sea level to 640 m in Alaska.
- Landform:** Alpine slopes, rock outcrops, seepages, wet meadows.
- Soil Type:** Associated with calcareous substrates.
- Moisture regime:** Mesic to wet.
- Slope:** Flat to moderately sloped.

- Aspect:** No particular aspect.
- Vegetation type:** Dwarf shrub and herbaceous graminoid meadows, *Dryas* heath, eutrophic tundra.
- Associated species:** *Acomastylis rossii*, *Armeria scabra*, *Claytonia sarmentosa*, *Dryas* spp., *Erigeron humilis*, *Gentianella propinqua*, *Juncus biglumis*, *Juncus castaneus*, *Kobresia sibirica*, *Micranthes calycina*, *Primula anvilensis*, *Primula pumila*.
- Longevity:** Perennial, longevity unknown.
- Population estimate:** There are 18 known occurrences in Alaska; population sizes unknown.

Similar Species^{25, 159}

Many *Puccinellia* species are known to occur in Northwest Alaska and all can potentially be confused with one another. The table below shows the morphological and habitat characteristics that distinguish the *Puccinellia* species of Northwest Alaska. (Table continues on next page).

Species	Panicles	Lower Glumes	Palea Veins	Habitat
<i>Puccinellia wrightii</i> ssp. <i>wrightii</i>	Spreading, 5 to 8 cm long; panicle branches smooth	1.7 to 3 mm long, less than $\frac{2}{3}$ as long as the adjacent lemmas	Curly, intertwined hairs on lower half	Alpine slopes, terraces, seepages, wet meadows
<i>Puccinellia vahliana</i>	Compact, sometimes slightly diffuse at maturity, 2 to 4 cm long; panicle branches smooth	2 to 3.5 mm long, $\frac{2}{3}$ to nearly as long as the adjacent lemmas	Curly, intertwined hairs on lower half	Alpine slopes, ridges, stream banks, fens
<i>Puccinellia phryganodes</i>	Usually not developed, diffuse if present, 1 to 7 cm long; panicle branches scabrous	1.5 to 2.2 mm long	Glabrous	Seashores at high tide line, wet saline meadows, salt marshes
<i>Puccinellia tenella</i>	Usually contracted, 1.6 to 5.5 cm long; panicle branches smooth	0.7 to 1.3 mm long	Glabrous	Seashores above high tide zone, salt marshes

Puccinellia wrightii ssp. *wrightii*

Species	Panicles	Lower Glumes	Palea Veins	Habitat
<i>Puccinellia pumila</i>	Dense to diffuse at maturity, 3 to 20 cm long; panicle branches smooth or slightly scabrous	1.4 to 2 mm long	Glabrous	Protected intertidal areas
<i>Puccinellia andersonii</i>	Contracted to diffuse at maturity, 5 to 8 cm long; panicle branches smooth or scabrous	1 to 2 mm long	Glabrous	Seashores near high tide line
<i>Puccinellia nutkaensis</i>	Dense to diffuse at maturity, 5 to 30 cm long; panicle branches scabrous	1 to 1.6 mm long	Glabrous or with short hairs on the lower half	Protected intertidal areas
<i>Puccinellia nuttalliana</i>	Dense to diffuse at maturity, 5 to 30 cm long; panicle branches scabrous	0.5 to 1.5 mm long, usually less than ½ as long as the adjacent lemmas	Glabrous, short-ciliate, or with a few long hairs on the lower half	Alkaline soil on coast or in interior
<i>Puccinellia vaginata</i>	Contracted to diffuse at maturity, 6 to 12 cm long; panicle branches slightly scabrous	1.3 to 2.1 mm long	Glabrous	Coastal marine sediments, eroding raised marine sediments inland