

Agrostis mertensii Trin.

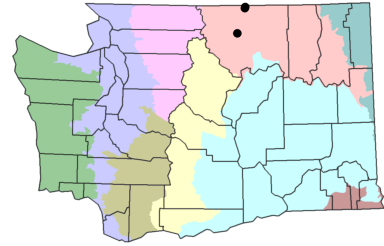
synonym: *Agrostis borealis* Hartm.

northern bentgrass

Poaceae - grass family

status: State Threatened, BLM sensitive, USFS sensitive

rank: G5 / S1S2



General Description: Tufted perennial (5) 10-40 cm tall; stems erect with 2-4 nodes. Leaf blades 2.5-13 cm x 1-3 mm, flat (sometimes rolled or folded). Ligules usually rounded, 1-3 mm long, margins jagged or irregularly toothed but not fringed with hairs.

Floral Characteristics: Panicle narrow but not greatly congested, 3-12 cm long, purplish; branches ascending to erect, bearing spikelets or branched to below the middle. Glumes pointed, keel slightly roughened by short, stiff hairs, 2-4 mm long; second glume slightly shorter than the first. Lemma nearly equal to the second glume, 1.6-2.6 mm long, awned from midlength or just below. Awns mostly (2) 3-4.4 mm long, abruptly bent, persistent. Palea 0.2-0.5 mm long; rachilla not prolonged. Anthers 3, 0.5-0.7 mm long. Flowers July to August.

Fruits: Caryopses 1.4-2 mm, endosperm solid.

Identification Tips: *Agrostis variabilis* can be distinguished by its lemmas, which are unawned or occasionally have a weak, straight awn. *Podagrostis humilis* and *Agrostis idahoensis* have unawned lemmas. Additionally, *A. mertensii* tends to grow in better-drained habitats than *A. idahoensis*. *A. scabra* has awned or unawned lemmas, relatively loose and open panicles, smaller spikelets, fewer culm nodes, and smaller anthers.

Range: AK to Newfoundland, Greenland, south to WA and in the Rocky Mts. to CO and UT, south in the eastern U.S. to NC and TN. Also in Scandinavia, Russia, northern Japan, and the mountainous regions of Mexico.

Habitat/Ecology: Arctic-alpine species of moist areas, riverbanks, gravel bars, grasslands, and rocky mountain slopes and cliffs; often near or above timberline. In WA it grows on alpine talus slopes and in dry meadows at 2200-2330 m (7200-7650 ft). Associated species include white dryas (*Dryas octopetala*) and cascade willow (*Salix cascadiensis*).

Comments: This species is rare in several states and Canadian provinces. In WA it has a small range and small number of known occurrences (fewer than 5); additional inventory is needed.

References: Flora of North America 1993+, vol. 24.



Illustration by Jeanne R. Janish,
©1969 University of Washington
Press



photo by John Gamon



photo by John Gamon