

***Poa bulbosa* L.**
Bulbous Bluegrass

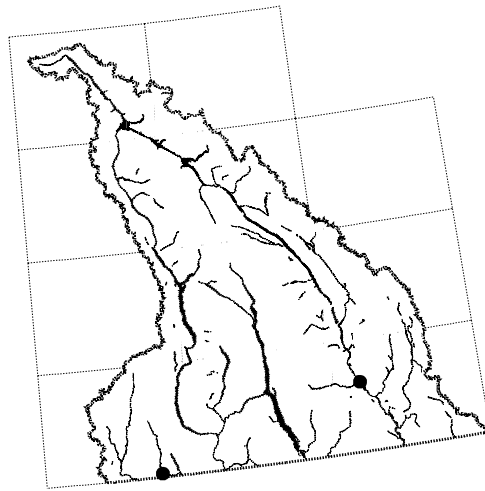
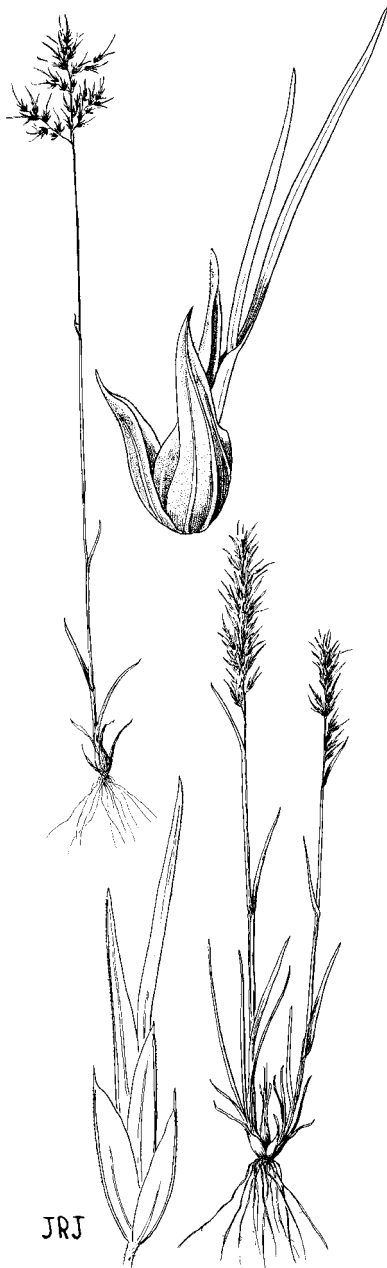
Plant: *Poa bulbosa* is an introduced species that grows 15–50 cm tall. It is a tuft-forming perennial that grows leafy bulblets in place of some flowers. The flowerhead looks purplish and is leafy.

Leaves and Stem: Stem bases sometimes develop a narrow, bulb-like form surrounded by old, dry leaf sheaths. Sheaths are open nearly to the base. The soft leaf blades are 1 mm wide and flat to folded, and wither away. Leaf tips are not really prow-like. Ligules are 1.5–3.0 mm long and have a smooth to slightly jagged margin with the highest point in the middle. You can see the ligules easily with the naked eye. There are no auricles.

Flowerhead and Flowers: The leafy flowerhead is 10 cm long, and may have an open or narrowed form that has branches with several spikelets. The spikelets are 3.5 mm long and crowded with purplish, bulbous mini-plants, which may be up to 2 cm long. The purple base of the mini-plant extends into green, hair-like leaves. The glumes are 2–3 mm long, nearly equal, and much shorter than the flowers. Normal non-bulbil lemmas (when you can find them) are small and prominently keeled and have a cobwebby base.

Habitat: Bulbous Bluegrass grows in disturbed sites. It can become very weedy in dry, disturbed sites such as roadsides and paths, and is widespread throughout the Columbia Basin region.

Similar Species: Leafy flowerheads combined with bulbous leaf bases distinguish Bulbous Bluegrass from other bluegrasses, especially the somewhat similar Fowl Bluegrass (*Poa palustris*).



Poa compressa L.
Canada Bluegrass

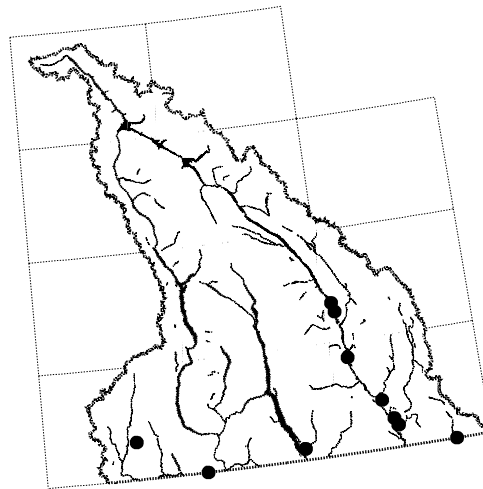
Plant: *Poa compressa* is an introduced species that grows 20–60 cm tall. It is a bluish green perennial with flattened stems, slender rhizomes, and narrowed flowerheads.

Leaves and Stem: Plants grow from a strong rhizome system and may sometimes produce stolons. The stems are strongly flattened with two edges. Sheaths are open nearly to the base. The flat to folded leaf blades are 2–4 mm wide and have a prow-like tip that is sharply pointed. Leaf blade edges are slightly rough. Slightly hairy ligules are 0.5–1.5 mm long and have a smooth margin. There are no auricles.

Flowerhead and Flowers: The flowerhead is compact, narrowed, and 3–12 cm long. Spikelets have mostly three to six flowers held inside two, nearly equal glumes. The glumes are about 1/2 as long as the spikelet. Flowers contain both male and female parts, and have strongly keeled lemmas, which may have webbing at the base.

Habitat: Canada Bluegrass is a weedy species of relatively moist disturbed sites, roadsides, and gardens that occasionally spreads into meadows and open woods. In the Columbia Basin region it also occurs in dry sites. It is sometimes used in pasture mixes.

Similar Species: Canada Bluegrass resembles other bluegrasses, but in British Columbia it is distinguished at first sight by the flattened stems.



Poa cusickii Vasey
Cusick's Bluegrass

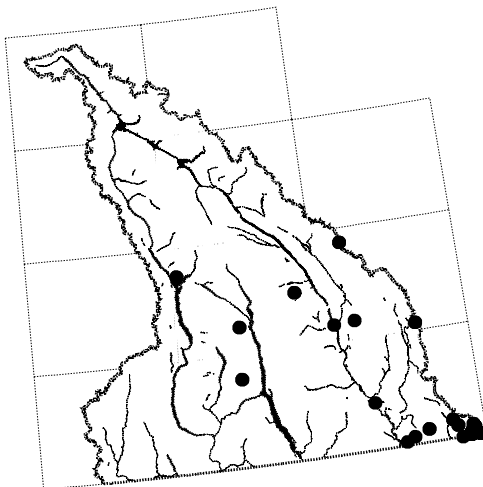
Plant: *Poa cusickii* is a native species that grows 20–60 cm tall. It is a densely tufted perennial with no rhizomes, but very fibrous roots and a narrow, closed, compact flowerhead.

Leaves and Stem: The leaf sheaths are closed to almost 1/2 their length and the dead sheaths persist at the base of the living leaf sheaths. The leaves are 0.5–1 mm wide and mostly basal and inrolled, and may feel rough. The ligules are 1–3 mm high and pointed, but the edge may be jagged so the point may be difficult to distinguish. There are no auricles.

Flowerhead and Flowers: The flowerhead is 2–9 cm long, narrow, and compact. It has an oblong shape, rather than the pyramidal shape of many *Poa* species. The slightly keeled glumes are unequal and shorter than the spikelet. The keeled lemmas have five prominent nerves with short, rough hairs on the keel. The back of the lower half of the lemma may sometimes be rough. There is no webbing at the base.

Habitat: Cusick's Bluegrass is widespread in low elevations and in alpine meadows. In the Columbia Basin region it has been found primarily at Akamina-Kishinena Creek, Kokanee Park, Paradise Mine, and Commerce Peak and throughout the Flathead region.

Similar Species: All plants of this species complex in the Columbia Basin region are female. Consequently, there are no anthers or else they are non-functional. Wheeler's Bluegrass (*Poa wheeleri*) is similar to Cusick's Bluegrass, but Cusick's Bluegrass has a more closed flowerhead, thinner ligules, and no rhizome. In British Columbia there are three subspecies of *Poa cusickii*: *pallida*, *epilis*, and *cusickii*. Within subspecies *epilis*, there has been one variety described: variety *purpurascens*. The table below is an outline of the major differentiating characters of Cusick's Bluegrass subspecies. For more detail, Soreng (1991) has provided a key to the subspecies in the *Epiles* group, which is a group within *Poa*.



Subspecies	Basal tuft of leaves	Stem nodes exposed	Lower panicle branch	Habitat	Flowerhead
ssp. <i>cusickii</i>	dense	0–1	> 17 mm long	moist or dry	
ssp. <i>pallida</i>	dense	0–1	< 17 mm long	dry alpine ridges	
ssp. <i>epiles</i>	sparse	1–2			lemmas smooth, flowerhead compact, > 20 spikelets
ssp. <i>epiles</i> var. <i>purpurascens</i>	sparse	1–2			lemmas hairy at the base of the keel, flowerhead loosely contracted, < 20 spikelets

Poa glauca Vahl
Poa interior Rydb. pro parte
Glaucous Bluegrass

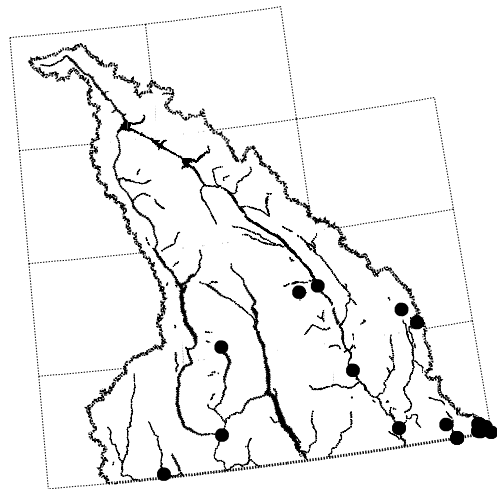
Plant: *Poa glauca* is a native species that grows 5–50 cm tall. It is a densely tufted, perennial with a narrow, lance-shaped, bluish grey flowerhead.

Leaves and Stem: The height varies between the two subspecies—one is a dwarf alpine form. The hairless sheaths are closed only at the base. Stems and leaves are hairless except that the stem has a rough patch just below the flowerhead. The ligules are 0.5–1.5 mm high and variable, and may be blunt to rounded with a slightly jagged margin. The leaf blades are short, stiff, 1–1.5 mm wide, and folded rather than inrolled. There are no auricles.

Flowerhead and Flowers: The narrowly lanceolate flowerhead has rough branches. Glumes are sharp and lance-shaped. Keeled lemmas are rough-textured. Sparsely spaced hairs occur along the keel and the edge nerves. There are no cobwebby hairs at the base of the lemma.

Habitat: Glaucous Bluegrass occurs commonly throughout the Columbia Basin region on dry, open slopes and gravelly meadows in the montane to alpine zones, such as those at Mount Festubert, Ashman Lake, and Observation Mountain.

Similar Species: Soreng (1994) includes *Poa interior* in the description of Glaucous Bluegrass and describes form *P. interior* Rydb. as having true green—rather than bluish green—leaves, short hairs on the lemma keel, and nerves at the edge of the lemma. Hitchcock et al. (1969) also describe Glaucous Bluegrass as having longer ligules than *P. interior*. Glaucous Bluegrass has two subspecies in British Columbia. *P. glauca* ssp. *rupicola*, which is the dwarf alpine form, has densely short hairs between the keel and the nerves at the edge of the lemma. There are no cobwebby hairs on the callus. The other subspecies, *P. glauca* ssp. *glauca*, has lemmas that are covered in short hairs throughout.



***Poa leptocoma* Trin.**
Bog Bluegrass

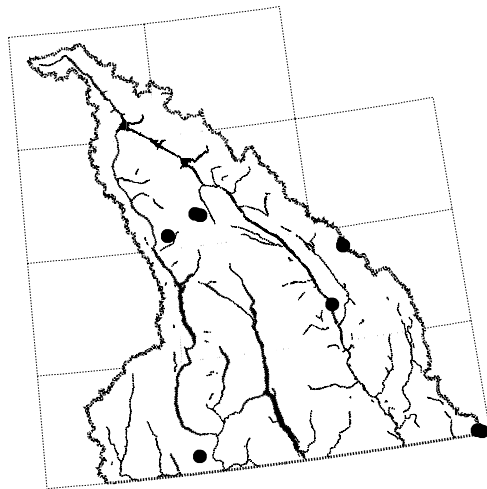
Plant: *Poa leptocoma* is a native species that grows 15–30 cm tall. It is a densely tufted grass with a slender stem and an open, drooping flowerhead.

Leaves and Stem: The smooth stems often recline or lie on the ground and occasionally have stolons. Smooth or slightly rough leaf sheaths are closed to almost 1/2 their length. The flat and lax leaves have a prow-like tip and are 1–4 mm wide. The ligule is 1.5–2 mm high and blunt. There are no auricles.

Flowerhead and Flowers: The open flowerhead has paired branches and a droopy appearance, because long, thin branchlets carry the spikelets. The flowerheads are often purplish. Glumes have sharp points, and both glumes are keeled and slightly rough along the keel. The lower glume has one vein. The lemmas have a strong keel and a broad, transparent margin. The keel and lemma edges are covered with dense, long silky hairs. *Lepto* is Greek for “fine,” and *coma* is Latin for “hair” in reference to these hairs. The lemmas are cobwebby at the base. Elsewhere, except on the keel and the marginal nerves, the lemmas are hairless.

Habitat: Bog Bluegrass has been collected from moist meadows in the alpine and subalpine zones in Glacier National Park, Fairmont Hot Springs, and Old Glory Mountain.

Similar Species: Cody (1996) placed Bog Bluegrass and Western Bluegrass together as Bog Bluegrass. Douglas et al. (1994) distinguished these two species in their key. Bog Bluegrass has a longer flowerhead than Western Bluegrass (4–15 cm compared to less than 7 cm) and rough branchelets. The first glume of Bog Bluegrass has one nerve rather than one to three nerves as in the Western Bluegrass. The glumes of Bog Bluegrass are awl-shaped rather than broadly lance-shaped. For the purpose of this work we have combined Bog Bluegrass and Western Bluegrass.



Poa nemoralis L.
Poa interior Rydb.
 Wood Bluegrass

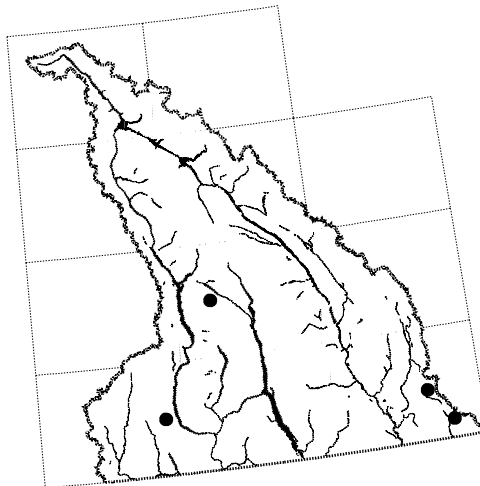
Plant: *Poa nemoralis* is an introduced species that grows 30–70 cm tall. It is a tufted perennial with a stem that appears to scramble along the ground before becoming upright with an erect, drooping, narrow flowerhead.

Leaves and Stem: Stolons may be present. The sheaths are closed for less than a 1/4 of the length, and there are no auricles. The blunt and very short ligules are 0.3–0.6 mm long. The flat or inrolled leaf blades are 1.5–3 mm wide.

Flowerhead and Flowers: The erect to drooping flowerhead is narrow and 8–20 cm long. The spikelets are strongly flattened. The unequal glumes are sharp-pointed and shorter than the spikelet. The lower glume has three veins. The lemmas are hairy on the keel and about 3 mm long. The lemma has a cobwebby base, but you may have to look at several spikelets to see this character.

Habitat: Wood Bluegrass grows in moist forests and on streambanks. It occurs commonly along the Kootenay River near Castlegar and along the Elk River, as well as other sites. The word *nemoralis* is Latin for a grove or woodland.

Similar Species: *Poa nemoralis* and *P. interior* are considered by several authors to be the same species. Douglas et al. (1994, p. 136) describe the similarities under the *P. glauca* description and suggest that “this species (*Poa nemoralis*) should include *P. glauca* since nearly continuous variation occurs between them with *P. interior*.” Hitchcock et al. (1969) describe *P. interior* as a separate species from *P. nemoralis* and differentiate the two based on smaller spikelets in *P. interior* and glumes that are shorter and less pointed than those of *P. nemoralis*. Hitchcock et al. (1994) go on to say that *P. interior*, as well as *P. rupicola*, could be treated as races of *P. glauca*. In this treatment we have included *P. interior* as part of *P. nemoralis*, but we have treated *P. glauca* as a separate species.



Poa palustris L.
Fowl Bluegrass

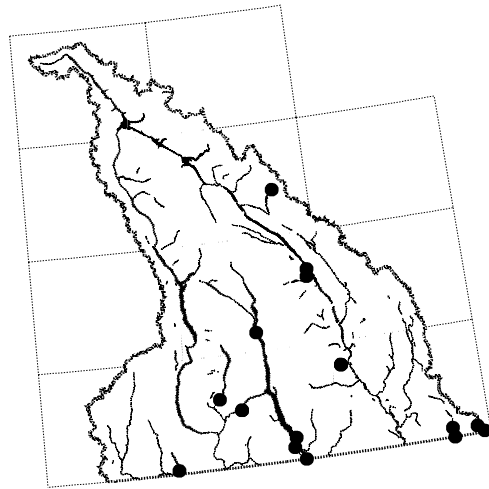
Plant: *Poa palustris* is an introduced species that grows 40–120 cm tall. It is a fibrous-rooted, tufted perennial with curved purplish lower stems and an open-branched flowerhead.

Leaves and Stem: The lower parts of stems lie upon the ground and root at the nodes like stolons. Stem bases are purplish. The sheaths are open and overlapping to the node below. The leaf blades are flat to folded, up to 20 cm long, 1.5–3 mm wide, and droopy, and end in prow-shaped tips. Ligules are 2–5 mm high and the margin is wavy or jagged. There are no auricles.

Flowerhead and Flowers: The flowerhead is 10–30 cm long, and open and loose, with whorls of four to six branches at the widely separated lower nodes. Spikelets contain two to four flowers. The nearly equal, narrow glumes reach half-way up the spikelet. The strongly keeled lemmas have masses of webbed hairs at the base and up the keel.

Habitat: Fowl Bluegrass occurs in moist forests and forest openings and often grows at the edge of water such as streams, wetlands, sloughs, and ditches. Fowl Bluegrass occurs at Radium, Nelson, Natal, Field, Creston, Flathead Valley, and Forum Lake. The word *palustris* comes from the Latin and means marsh or swamp.

Similar Species: Fowl Bluegrass is similar to Bulbous Bluegrass, but Fowl Bluegrass is distinguished by its large, open flowerhead and lack of purplish plantlets in the spikelets.



Poa pratensis L.
Kentucky Bluegrass

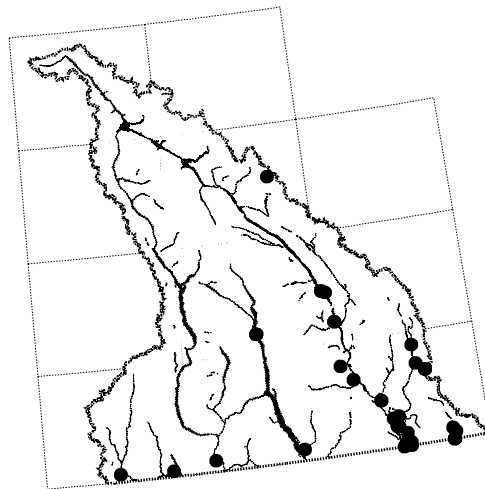
Plant: *Poa pratensis* is both native and introduced. It grows 30–100 cm tall. It is a perennial with long, creeping rhizomes that form a dense sod. The flowerhead ranges from somewhat condensed to open, and often droops or sweeps to one side.

Leaves and Stem: The leaves are thin and up to 30 cm long, have inrolled margins, and typically form a mass at the base of the smooth stems. Sheaths are closed for about 1/2 their length. The leaf blades of the stem are mostly 2–4 mm wide and flat to folded, and end in the distinctive prow-shaped tip. Ligules are 1–3 mm long with entire to slightly irregular to rough margins. There are no auricles.

Flowerhead and Flowers: The narrowed but moderately loose flowerhead ranges from 3 to 15 cm long and has three to five branches per node (lower ones). The form is weakly pyramid-like, but the branches may droop or sweep to one side, especially with age. The strongly flattened spikelets are three- to five-flowered. One glume is slightly smaller, and both have well-developed keels. Flowers extend beyond the glumes. Lemmas are strongly keeled and cobwebby at the base.

Habitat: Kentucky Bluegrass occurs on roadsides, disturbed or waste sites, dry to moist meadows, uncut lawns, pastures, and woodland clearings. Expect this species in settled areas throughout the Columbia Basin region. The word *pratensis* comes from the Latin word *pratens*, which means “found in meadows.”

Similar Species: This species has several subspecies in British Columbia. Some of these are introduced from Europe (subspecies *pratensis*, subspecies *irrigata*, and subspecies *angustifolia*) and there are three native subspecies (subspecies *agassizensis*, subspecies *alpigena*, and subspecies *colpodea*). For greater detail and a key of these subspecies consult Douglas et al. (1994).



Poa secunda J.S. Presl.

P. ampla Merr., *P. juncifolia* Scribn., and *P. nevadensis* Vasey = *Poa secunda* ssp. *juncifolia*

P. canbyi (Scribn.) Howell, *P. gracillema* Vasey, *P. incurva* Scribn., *P. sandbergii* Vasey, and *P. scabrella* (Thurb.) Benth. = *Poa secunda* ssp. *secunda*
Sandberg's Bluegrass

Plant: *Poa secunda* is a native species that grows 30–45 cm tall. It is a strongly tufted, purplish perennial with relatively narrow heads on mostly leafless stems.

Leaves and Stem: Mostly leafless purplish stems arise from a mass of basal leaves. Sheaths are closed for about 1/6 of their length. Very narrow leaf blades are inrolled or folded, almost never flat, 0.5–1.5 cm wide, and 2–3+ cm long. Ligules of stem leaves are 1.5–3 mm long. There are no auricles.

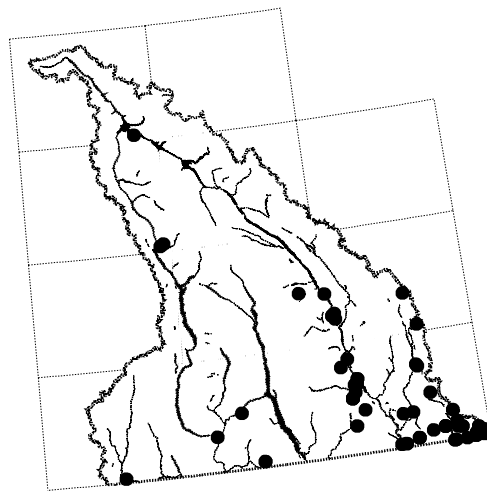
Flowerhead and Flowers: The flowerhead is 3–10 cm long and narrowed to somewhat open, and has erect to ascending branches. The purplish spikelets are three- to five-flowered and 0.5–0.8 cm long. Slightly unequal glumes are 1/2 to 1/3 the length of the spikelet. Lemmas are about 4 mm long and convex or rounded on the back, and there are no cobwebby hairs at the base. The lemmas are not prominently keeled like other bluegrasses.

Habitat: Sandberg's Bluegrass occupies dry meadows, ridges, and rocky knolls. In the Columbia Basin region this apomictic complex (reproduces asexually), ranges widely from the Flathead to Windermere Lake. Douglas et al. (1994) describe subspecies *juncifolia* as common in saline and alkaline meadows to rich meadows in the steppe and montane zone whereas subspecies *secunda* is common in well-drained grasslands in the steppe and montane zone.

Similar Species: This "species" includes a complex of different types that need a systematic study. Generally, members of this group are distinguished from other *Poa* species by their bunchgrass habit, narrow, dense flowerheads, non-flattened spikelets, and lemmas without cobwebby hairs at the base. Soreng (1991) has grouped together a number of taxa in this species (*P. ampla*, *P. canbyi*, *P. gracillema*, *P. incurva*, *P. juncifolia*, *P. nevadensis*, *P. sandbergii*, and *P. scabrella*). *P. juncifolia*, *P. sandbergii*, and *P. scabrella* were well recognized as individual species before Soreng's treatment.



JRJ



Subspecies	Lemmas	Palea nerves	Ligules
ssp. <i>juncifolia</i>	smooth or rough	rough	< 2 mm; blunt
ssp. <i>secunda</i>	hairy with long hairs	long hairs on nerves	> 2 mm; sharp

***Poa stenantha* Trin.**
Narrow-flowered Bluegrass

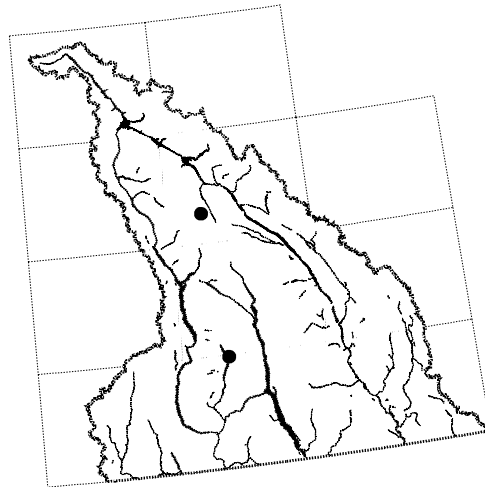
Plant: *Poa stenantha* is a native species that grows 25–60 cm tall. It is a tufted perennial with basal leaves and an open flowerhead that spreads or droops. The word *stenantha* comes from the Latin for narrow flower.

Leaves and Stem: The smooth sheaths are closed at the base for about 1–2 cm. The 1- to 3-mm-high ligules are sharply pointed and have rough hairs. Leaf blades are 1–2 mm wide, inrolled to flat, and lax not stiff. There are no auricles.

Flowerhead and Flowers: The open, drooping flowerhead reaches 7–15 cm long. There are two to three branches per node at the base of the flowerhead. The three-nerved glumes are unequal in length and extend about 1/2 the length of the spikelet. Strongly keeled lemmas have long hairs at the base and along the edge of the lower portion but they do not have a cobwebby callus below the base of the lemma.

Habitat: Narrow-flowered Bluegrass grows in wet meadows and forest openings in the montane to subalpine zones. In the Columbia Basin region it grows in Glacier National Park and near New Denver.

Similar Species: Narrow-flowered Bluegrass resembles Bog Bluegrass. It is easy to mistake the two. Look carefully at the base of the lemma because Narrow-flowered Bluegrass does not have a cobwebby base, whereas Bog Bluegrass does.



JRJ

***Poa trivialis* L.**
Rough Bluegrass

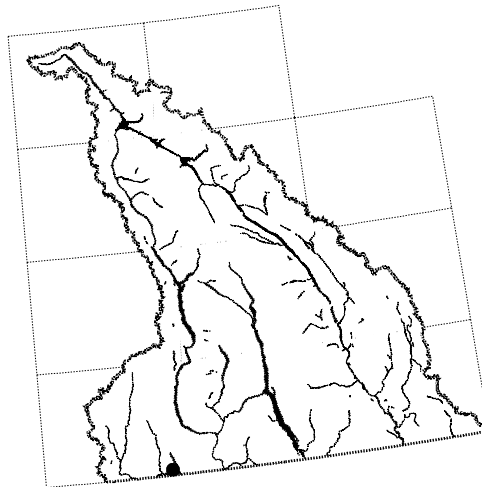
Plant: *Poa trivialis* is an introduced species that grows 40–100 cm tall. It is a stolon-bearing plant with drooping leaves and an open, pyramid-shaped flowerhead.

Leaves and Stem: The slightly roughened sheaths are open and may appear to overlap. The drooping, flat leaf blades are 15–20 cm long by 2–4 mm wide. Tips are only slightly prow-like. The prominent, pointed ligules are 3–7 mm high. There are no auricles.

Flowerhead and Flowers: The open flowerhead is 8–15 cm long, with as many as five branches at the lower nodes. Spikelets have two to three flowers. The two nearly equal, sharply pointed glumes reach slightly more than 1/2 the height of the spikelet. Lemmas are smooth except for the short scattered hairs along the keel. There are long, tangled, cobwebby hairs at the base.

Habitat: The typical environment for Rough Bluegrass includes moist disturbed woods and wet sites. It occurs in the Columbia Basin region at Mount Morrissey.

Similar Species: Rough Bluegrass may at first appear to have a rhizome, but on closer examination it is obvious that the rhizome is a stolon that roots at the nodes. Rough Bluegrass may also look like Fowl Bluegrass, but the nerves on the longer lemmas are more pronounced in Rough Bluegrass. The ligules are longer (3–7 mm long for Rough Bluegrass vs 2–5 mm long for Fowl Bluegrass).



Poa wheeleri Vasey

Poa nervosa var. *wheeleri* (Vasey) C.L. Hitchc.

Wheeler's Bluegrass

Plant: *Poa wheeleri* is a native species that grows 35–80 cm tall. It is a loosely tufted perennial that grows from short rhizomes and has an open to contracted flowerhead with slender branches.

Leaves and Stem: The leaf sheaths are open $\frac{1}{3}$ to $\frac{2}{3}$ their length. The lower end of the sheaths have dense, short hairs that are curved backwards and the collar of the sheath is short-hairy to rough, but does not have long hairs. The blunt or rounded ligules are 0.5–2 mm high. The soft to firm leaf blade can be flat or folded, but generally the stem leaf blades are inrolled and have a finely hairy upper surface. There are no auricles.

Flowerhead and Flowers: The open to oval-shaped flowerhead is 5–12 cm long. Its spreading branches are sparse and thread-like. Pointed glumes are shorter than the first flowers. The blunt to rounded lemma is smooth to sparsely hairy or rough. There are only female flowers without anthers because this species reproduces apomictically (without sex).

Habitat: Wheeler's Bluegrass grows in moist meadows, scree seepage areas, and open forests in the montane to subalpine zones. In the Columbia Basin region it grows in the Flathead area.

Similar Species: Wheeler's bluegrass is very similar to Coastal Bluegrass (*Poa nervosa*). In fact, some people consider it a variety of *P. nervosa*. The two species are separated, in part, by geographic range. Wheeler's Bluegrass occurs east of the Coast-Cascade Mountains, whereas Coastal Bluegrass is found only west of the Coast-Cascade Mountains. There is also a difference in the length of the lemma (3–6.5 mm for Wheeler's Bluegrass compared to 2.5–3.5 mm for Coastal Bluegrass). The lower culm sheaths of Wheeler's Bluegrass are hairy with short backward-facing hairs, whereas the lower culm sheaths of Coastal Bluegrass are rarely hairy. Wheeler's Bluegrass also resembles Cusick's Bluegrass in that they both have only pistillate flowers. However, Wheeler's Bluegrass has a more open panicle and has a rhizome, whereas Cusick's Bluegrass has creeping stolons and no rhizome.

