**POLYPOGON Beardgrass** 

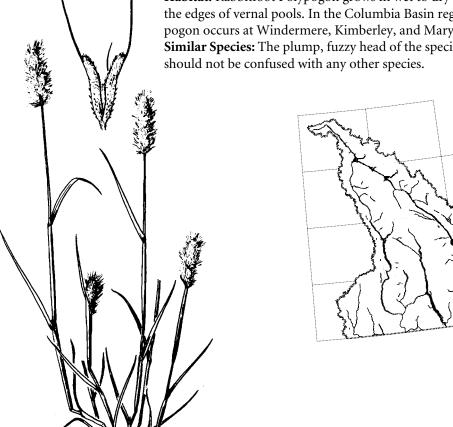
This small, Old World genus derives its name from the poly (= many) long glume awns, which give the flowerhead a *pogon* (= beard-like texture).

Polypogon monspeliensis (L.) Desf. Rabbitfoot Polypogon

**Plant:** *Polypogon monspeliensis* is an introduced species that grows 20–70 cm tall. It is a tufted annual with a dense, "fuzzy," egg-shaped flowerhead. **Leaves and Stem:** The stem is often bent along the ground and rooting when growing in standing water. Open sheaths are smooth to rough to the touch. There are no auricles. The ligules are 3–10 mm long and membrane-like, with short, rough hairs. The ligule shape varies from narrow with a short point to blunt with a ragged tip. The leaf blades are flat, 4–7 mm wide, and rough. Flowerhead and Flowers: The dense, "fuzzy" flowerhead reaches 2-15 cm long. Spikelets are one-flowered and cluster in a dense, tight flowerhead. The roughened glumes are tawny with age and awned from between short, rounded lobes at the tip. The glume awn is 6–10 mm long. The lemma is about 1/2 as long as the glumes, smooth and shiny, and toothed at the rounded tip. The lemma awn is slender and exceeds the glumes by as much as 1.5 mm.

**Habitat:** Rabbitfoot Polypogon grows in wet to dry waste places and around the edges of vernal pools. In the Columbia Basin region Rabbitfoot Polypogon occurs at Windermere, Kimberley, and Marysville.

Similar Species: The plump, fuzzy head of the species is diagnostic, and should not be confused with any other species.



JRJ

Pseudoroegneria is another genus to which species were transferred from Agropyron. This name change has affected the most common species in the Columbia Basin region—Agropyron spicatum, or "Ag spic," as it is called by range managers. (Somehow "Pseudoroeg spic" does not have the same ring!) The glumes of Pseudoroegneria can be more than 15 mm long, and are lance-like and veined the entire length. The lemma awns, when present, are more than 10 mm long.

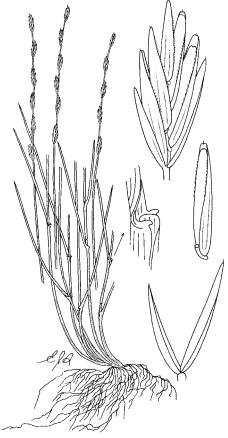
**Pseudoroegneria spicata** (Pursh) A. Löve **Agropyron spicatum** (Pursh) Scribner J. Smith Bluebunch Wheatgrass

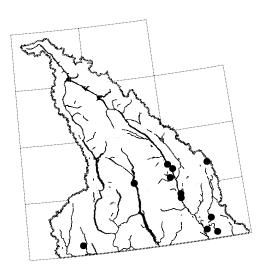
**Plant:** *Pseudoroegneria spicata* is a native species that grows to 1.5 m tall. It is a strongly bunched perennial with a spike-like flowerhead. The bunch can form a clump up to 1.5 m wide, but there are no rhizomes.

**Leaves and Stem:** The sheaths are smooth or covered in very short backward-pointing hairs. The ligules are barely 1 mm long and appear as a ring of hairs. The flat or somewhat inrolled leaf blades are 1.5–4.5 mm wide. They are smooth underneath but have some hairiness on the upper surface. The clasping auricles are well developed.

Flowerhead and Flowers: The flowerhead is a spike with an open but unbranched construction, 8–15 cm long. The five-to eight-flowered spikelets are spaced along the axis at a distance slightly longer than their length. The two lance-shaped, unequal glumes are shorter than the spikelet and can be smooth to covered in short hairs. The glume awns vary in length. Lemmas are smooth to slightly rough and may bear prominent or slightly bent awns. Habitat: Bluebunch Wheatgrass grows on dry, open sites in the steppe and montane zones and is the most common species of the open grassland in British Columbia. It is considered one of the most important native forage bunchgrasses. In the Columbia Basin region it grows at Reco Mountain, along the Pend'Oreille River, in Cranbrook, Invermere, and Canal Flats, and at Fairmont Hot Springs (to name a few localities).

Similar Species: Bluebunch Wheatgrass specimens in the Royal BC Museum's collection are annotated as belonging to two subspecies: ssp. *spicata* and subspecies *inermis*. Douglas et al. (1994) do not describe these subspecies, but allude to the existence of awned and unawned types. M. Barkworth (pers. comm. 1999) feels that the subspecies are valid, and that subspecies *inermis* differs from subspecies *spicata* due to a lack of awns. She has observed that subspecies *inermis* occurs in the southern part of the range, and that subspecies *spicatum* occurs in the northern portion of the range. T.C. Brayshaw (pers. comm. 1999) has observed both subspecies in Kelowna.





**PUCCINELLIA** Alkaligrass

Named after the Italian botanist Benedetto Puccinelli, this genus favours saline or alkaline habitats. *Puccinellia* species are somewhat palatable as forage, but tend to get easily trampled by livestock in muddy sites. The *Puccinellia* flowerhead resembles that of *Glyceria*, but *Puccinellia* has open, rather than closed, sheaths.

## Puccinellia—Adapted from Cody (1996)

1a. Glumes more or less keeled and sp	arsely hairy; lemmas pointed
	Puccinellia nuttalliana
<b>1b.</b> Glumes not keeled; lemmas blunt	Puccinellia distan

Puccinellia distans (Jacq.) Parl.

Weeping Alkaligrass

**Plant:** *Puccinellia distans* is an introduced species that grows 10–40 cm tall. It is a tufted perennial with rough branches and an open, narrowly branched flowerhead.

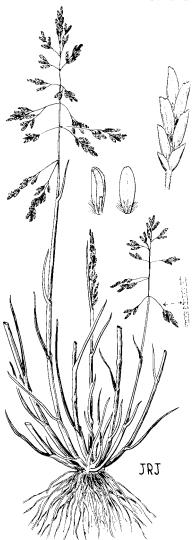
**Leaves and Stem:** The smooth to rough sheaths are fully or partially open. There are no auricles. Membrane-like ligules are blunt and 1 mm long and have a smooth edge (not toothed). Flat to inrolled leaves are 1.5–3.5 mm wide.

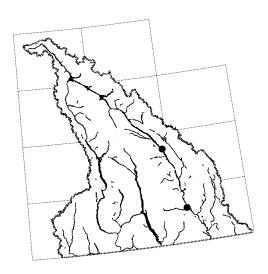
**Flowerhead and Flowers:** The narrowly open flowerhead has spikelets with five to six flowers in each spikelet. The nearly equal glumes are oval, have tiny hairs over the surface as well as along the edge, and are shorter than the first flower. Broadly oval lemmas have a blunt, ragged tip and bear scattered hairs at the base.

**Habitat:** Weeping Alkaligrass grows in salt flats and along lakeshores in the lowland to montane zones. In the Columbia Basin region, Weeping Alka-

ligrass occurs at Kimberley and Hahas Lake.

**Similar Species:** Weeping Alkaligrass differs from other similar alkaligrasses, such as Nuttall's Alkaligrass (*Puccinellia distans*), by having lower branches that spread or point downward, 2.0-mmlong lemmas, and lemma tips that are always blunt.





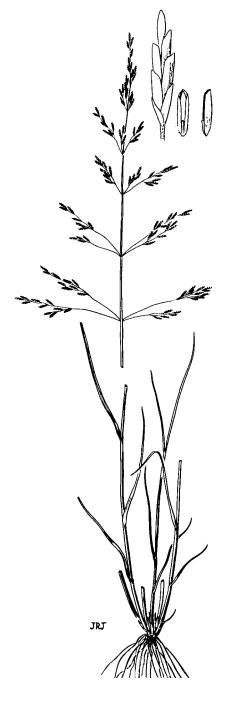
**Puccinellia nuttalliana** (Schult.) A.S. Hitchc. Nuttall's Alkaligrass

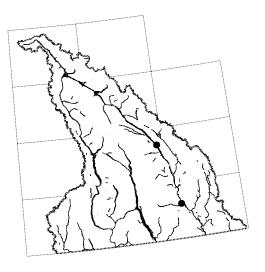
**Plant:** *Puccinellia nuttalliana* is a native species that grows 40–100 cm tall. It is a tufted perennial with a large, open, widely branched flowerhead. **Leaves and Stem:** Sheaths are open to partially closed. Leaf blades are 1–3 mm wide and sometimes inrolled. There are no auricles. Ligules reach 1–3 mm high.

**Flowerhead and Flowers:** The flowerhead is 6–20 cm long, open, and widely branched, with about four branches at each node. Spikelets have four to seven flowers. The two, unequal glumes are much shorter than the spikelet and slightly keeled. The lemmas are 2.5–3.2 mm long, which is as long or

longer than the largest glume. The lemma tip narrows abruptly to a small, irregular tip.

**Habitat:** This predominantly interior species grows in relatively moist alkaline meadows but also occurs in saline meadows along the coast. In the Columbia Basin region, Nuttall's Alkaligrass grows along the Kettle River and the Saint Mary's River. **Similar Species:** The lower branches of the flowerhead of Nuttall's Alkaligrass are either slightly upward-pointing, perpendicular, or even drooping. This contrasts with European Alkaligrass, which has downward-pointing branches.



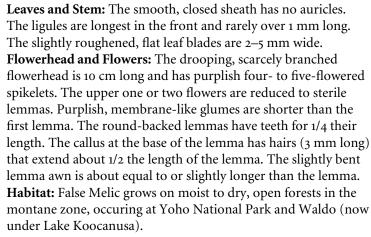


SCHIZACHNE False Melic

This is a genus of two species, with only one occurring in North America. The name is derived from the Greek words *schizo*, meaning split, in reference to the lemma tip, and *achne*, meaning chaff.

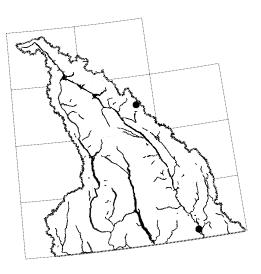
**Schizachne purpurascens** (Torr.) Swallen False Melic

**Plant:** *Schizachne purpurascens* is a native species that grows 60–100 cm tall. It is a perennial with a reclining base, no rhizome, and a long, drooping, purplish flowerhead.



**Similar Species:** False Melic resembles Nodding Trisetum (*Trisetum cernuum*), but False Melic lacks a sharp tip on the larger glume, and it has longer callus hairs.





SCHIZACHYRIUM Bluestem

Schizachyrium is a large genus well represented in the subtropical-tropical grasslands. Several members of this genus form an important component of the prairie grassland complex, in particular the tall-grass prairie. In British Columbia, only Schizachyrium scoparium occurs.

 ${\it Schizachyrium\ scoparium\ } ({\it Michx.}) \ {\it Nash\ in\ Small\ } {\it Andropogon\ scoparius\ } {\it Michx.}$ 

Little Bluestem

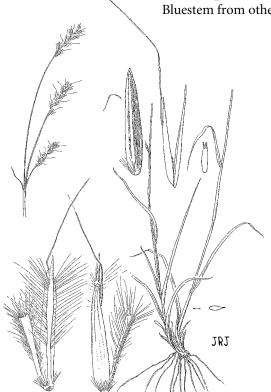
**Plant:** *Schizachyrium scoparium* is a native species that grows 80–100 cm tall. It is a clump-forming perennial with a short rhizome and an open, purplish, upright flowerhead.

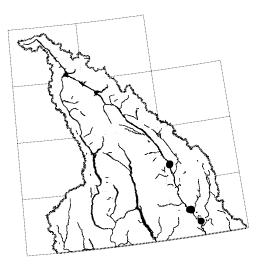
**Leaves and Stem:** The stem has grooves above the nodes. The smooth sheath is usually strongly keeled. The ligules are 1–1.5 mm long and have a finely hairy or finely jagged margin. Flat to folded leaf blades are 2–5 mm wide and are smooth to sparsely hairy.

Flowerhead and Flowers: The flowerhead consists of several 3- to 5-cm-long loose spikes. Branches of the flowerhead each end in spikelets of two forms. The fertile spikelet has no stalk and a 10- to 13-mm-long twisted awn; the sterile spikelet is stalked with a 1- to 4-mm-long awn. There are two sterile spikelets. The central rachis of the spikelet is covered in fine white hairs. The lemma is shorter than the longest glume.

**Habitat:** Little Bluestem grows on dry sites in the lower montane zones. In British Columbia it occurs only at Fairmont Hot Springs, Kikomun Provincial Park and near the Bull River. It is Red listed by the Conservation Data Centre. (Douglas et al. 1998)

**Similar Species:** The branched purple flowerhead distinguishes Little Bluestem from other species.





**SCOLOCHLOA** Rivergrass

This genus has two species worldwide; one in eastern Asia, the other in Eurasia and North America. The name *Scolochloa* comes from the Greek *scolops*, which means prickle, and *chloa*, which means grass. The species occurring in British Columbia is not prickly.

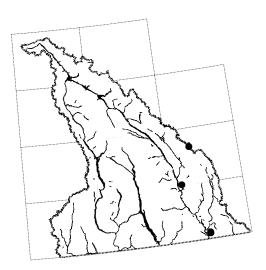
**Scolochloa festucacea** (Willd.) Link **Fluminea festucacea** (Willd.) Rivergrass

**Plant:** *Scolochloa festucacea* is a native species that grows 1–1.5 m tall. It is a stout perennial with a thick rhizome. The flowerhead is long and open, and the long branches are mostly naked below the midpoint, with the spikelets located at the end of branches.

Leaves and Stem: The papery sheaths are open. The membrane-like ligule is 2–6 mm long and ragged along the edge. Flat leaf blades are 5–10 mm wide with long slender tips and a rough upper surface. There are no ligules. Flowerhead and Flowers: The open flowerhead is 15–25 cm long and the diverging branches are upward-pointing and mostly naked below the midpoint. The spikelets are three- to four-flowered. The unequal glumes are thin and pointed and the longest glume is equal in length to the lemma of the first flower. There are no awns, but the glumes and the lemmas are pointed. The lemmas have seven noticeable nerves that are raised and converge at the tip.



Habitat: Rivergrass is a Blue-listed species in the B.C. Conservation Data Centre database. (Douglas et al. 1998) It grows in standing water of shallow ponds along streambanks and lakeshores in the steppe and montane zones. It has a restricted distribution in British Columbia, and in the Columbia Basin region it is found only at Grasmere and Canal Flats. Similar Species: Superficially, Rivergrass resembles the hybrid *Festulolium*, but the presence of the rhizome in Rivergrass is diagnostic.



**SECALE** Rye

*Secale* is the classical name for rye, and the genus contains five Old World species. A small amount of *Secale cereale* is cultivated in North America and occasionally it grows along roadsides and in waste places, but never becomes established outside cultivation.

## Secale cereale L.

Rye

**Plant:** *Secale cereale* is an introduced species that grows 60–150 cm tall. It is a tufted annual with a dense, bushy, terminal spike.

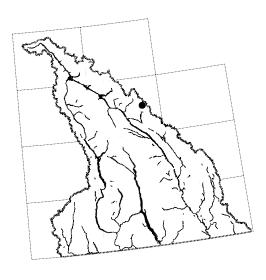
**Leaves and Stem:** The sheaths are open and have prominent auricles. The ragged membrane-like ligules are 1 mm long. The flat leaf blades are 3–10 mm wide with a smooth to rough surface.

Flowerhead and Flowers: The flowerhead consists of a bushy terminal spike that is 8–15 cm long, often nodding slightly. Two flowers are contained in each spikelet. The equal glumes are stiff, slender, and about 1/2 as long as the lemma. The lemmas are keeled and curved, with stiff hairs along the keel as well as the exposed edges. The lemma awns are 4–7 mm long and give the spike a bushy look.

**Habitat:** Rye was introduced from Eurasia as a cultivated cereal and occurs occasionally in disturbed sites and roadsides, but rarely persists in British Columbia. In the Columbia Basin region there is a single record of occurrence at Yoho National Park along a railway embankment.

**Similar Species:** Rye has a distinctive form and is often dried for commercial flower arrangements.





**SETARIA** Bristlegrass

There are approximately 100 species of *Setaria* worldwide, mostly in tropical locations. This weedy genus commonly occurs along drainage ditches and on irrigated land. *Seta* is bristle in Latin, in reference to the sterile bristles beneath the spikelet.

*Setaria viridis* (L.) Beauv.

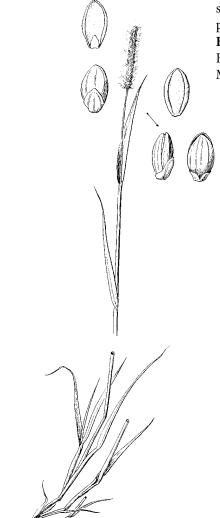
Green Bristlegrass

**Plant:** *Setaria viridis* is an introduced species that grows to 1 m tall. It is an annual with an occasionally bending culm base. The bristly spike flowerhead resembles a woolly caterpillar.

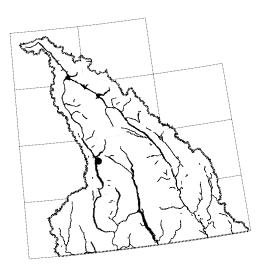
**Leaves and Stem:** The smooth, open sheath has a slightly hairy collar. The half-membrane ligules are 2 mm high and have a hairy upper edge. The flat leaves are smooth with slight hairiness at the throat. There are no auricles.

**Flowerhead and Flowers:** The spike-like flowerhead is rarely longer than 10 cm. The two-flowered spikelets have two to four sterile bristles below the fertile flower. The fertile lemma and palea are enclosed by a second glume and a sterile lemma. **Habitat:** This species is probably common in the Columbia

Basin region, but there is only one specimen in the Royal BC Museum collected from Revelstoke along the railway bed.



JRJ



SPARTINA Cordgrass

Species in this small genus typically bear one-flowered spikelets packed tightly together on one side of the inflorescence axis. *Spartina* is a genus characteristic of coastal saltmarshes, but also occurs in inland alkaline habitats. The name originates from the Greek word *spartine*, a term refering to the cord woven from *Spartina juncea*, a European species.

## Spartina gracilis Trin.

Alkali Cordgrass

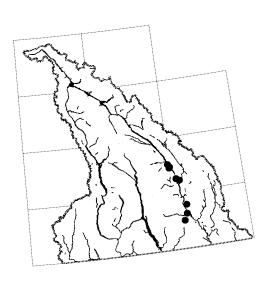
**Plant:** *Spartina gracilis* is a native species that grows 30–60 cm tall. It is a perennial with stout rhizomes and a spike-like flowerhead that consists of compressed spikelets in two rows on one side of the spike axis.

**Leaves and Stem:** The sheaths are open and there are no auricles. Ligules consist of a fringe of fine hairs 1 mm high. The rough leaves are sometimes inrolled or sometimes not. When inrolled, they are not more than 5 mm wide at the base.

**Flowerhead and Flowers:** The spike-like flowerhead consists of compressed spikelets arranged in two rows along one side of the stem axis. The unequal glumes (one is 1/2 the size of the other) are hairy on the keel and pointed. The blunt lemma is equal in size to the shorter glume.

**Habitat:** Alkali Cordgrass grows in marshes, wet ditches and meadows, and dry, often saline sites. In the Columbia Basin region it occurs at Kootenay, Windermere, Cranbrook, and Armstrong Bay, and along the Saint Mary's River.

**Similar Species:** Two species of *Spartina* occur in British Columbia: *S. gracilis* and *S. patens. Spartina patens* inhabits coastal saltmarshes.





JRJ