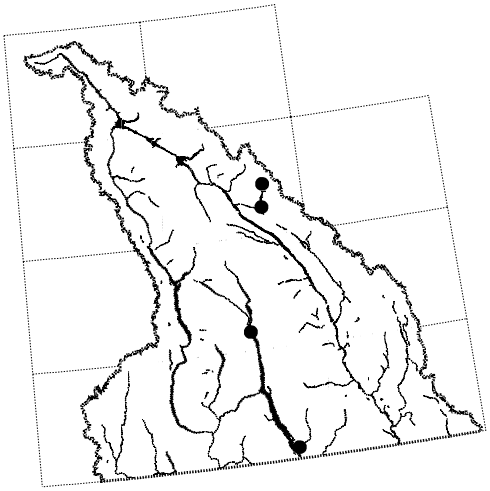
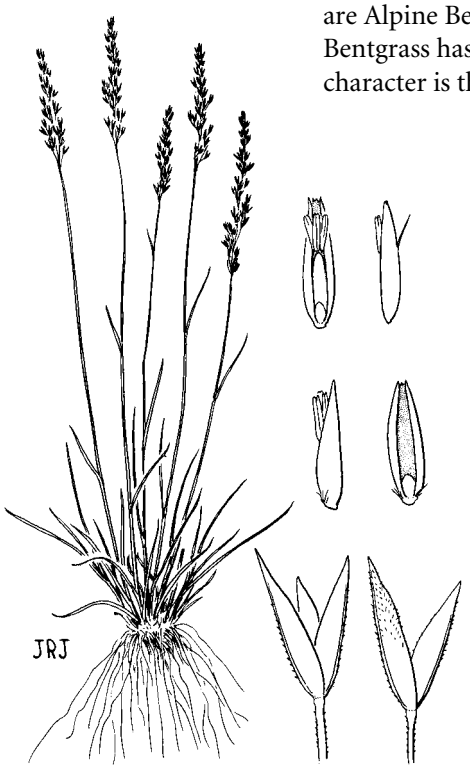
***Agrostis stolonifera*** L.
Creeping Bentgrass

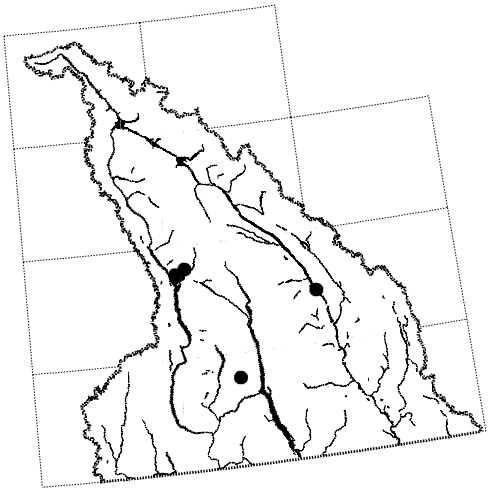
**Plant:** *Agrostis stolonifera* is an introduced species that grows to 60 cm tall. It is a perennial with stolons, and a large, open but narrowed flowerhead.
**Leaves and Stem:** The lower part of the stem reclines against the soil and roots at the nodes (stolon-forming). Sheaths are open. Flat to folded leaf blades are more than 4 mm wide. Ligules reach 3–6 mm. There are no auricles.
**Flowerhead and Flowers:** The flowerhead is openly branched, but somewhat narrowed compared to Colonial Bentgrass. One-flowered spikelets are borne to the base of the branches. The small glumes are nearly equal and longer than the first flower. The tiny lemma is 2/3 to 3/4 the length of the glume. There is usually no awn. The palea is 1/2 to almost equal to the lemma.
**Habitat:** Creeping Bentgrass grows in moist lawns and fields, along ditches, and at the margins of salt marshes, ponds, and lakes. In the Columbia Basin region, Creeping Bentgrass occurs at Emerald Lake, Lardeau, and Creston.
**Similar Species:** See Colonial Bentgrass (*Agrostis capillaris*) and Redtop (*Agrostis gigantea*).

***Agrostis variabilis*** Rydb.
Mountain Bentgrass

**Plant:** *Agrostis variabilis* is an introduced species that grows to 25 cm tall. It is a tuft-forming perennial with a small, spike-like flowerhead and erect stems.
**Leaves and Stem:** Stems arise from dense masses of basal leaves. Sheaths are smooth and open. There are no auricles. The flat to folded leaves are from 1.0–2.5 cm wide, and range from smooth to rough. Ligules are 0.5–2.5 mm long, and have a torn to slightly hairy margin.
**Flowerhead and Flowers:** The narrow, dense, purple flowerhead is 3–6 cm long and up to 1 cm wide. Spikelets have small, nearly equal glumes that are mostly smooth on the back. The usually unawned lemma is slightly shorter to much shorter than the glumes. The palea is 0.2–0.4 mm long, so it is considered as "none."
**Habitat:** Mountain Bentgrass grows in subalpine to alpine meadows and on open ridges. This species is known from Lake Windermere, Kokanee Park, and Hamilin Lake in the Columbia Basin region.
**Similar Species:** There are two species similar to Mountain Bentgrass. They are Alpine Bentgrass and Spike Bentgrass. The difference is that Mountain Bentgrass has no palea, whereas the other two do. Another distinguishing character is that the glumes of Mountain Bentgrass are mostly smooth.



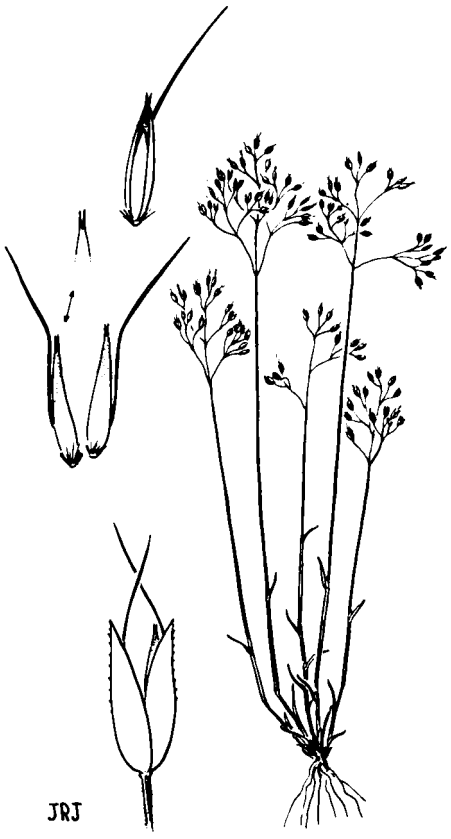



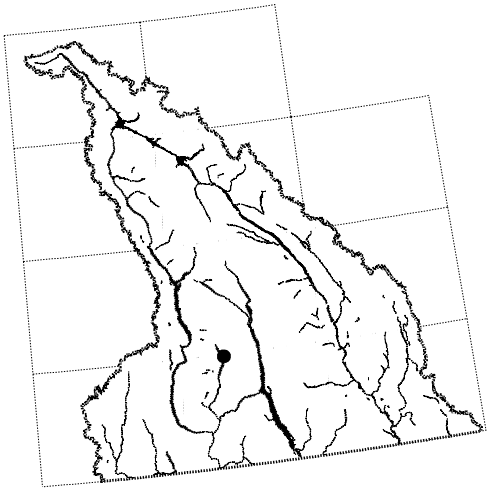
Hairgrasses originated from Europe, where there are nine species. They are generally delicate annuals with extremely fine leaves. They have little forage value and are not considered troublesome. In British Columbia there are two species, *Aira caryophyllea* and *A. praecox*. Only *A. caryophyllea* has been collected in the Columbia Basin region.

***Aira caryophyllea*** L.
Silver Hairgrass

**Plant:** *Aira caryophyllea* is an introduced species that grows 5–30 cm tall. It is a tufted annual with an open, widely branched flowerhead.
**Leaves and Stem:** The sheaths are open and the leaf blades are extremely narrow (0.3–0.7 mm), occurring mostly at the base of the stem. The ligule is 1.5–3.5 mm long, slightly hairy, and tattered at the tip. There are no auricles.
**Flowerhead and Flowers:** The broad and diffuse flowerhead is 2–6 cm long, with tiny, shiny, silvery spikelets at the ends of the thin branches. The two glumes are equal, 3 mm long, and enclose two flowers. The lemmas are 2–2.5 mm long and bear bent, twisted awns that are 2.5–3.5 mm long and attached below the midpoint.
**Habitat:** Silver Hairgrass grows in dry, open, rocky sites and sometimes invades rock gardens. In the Columbia Basin region it grows at Hamilin Lake.

**Similar Species:** Early Hairgrass (*Aira praecox*) is very similar to Silver Hairgrass, but has not been collected in the Columbia Basin region. The two are easily distinguished by the different flowerheads. The flowerhead on Silver Hairgrass is open and widely branched, compared to the tightly closed flowerhead of Early Hairgrass. In addition, Silver Hairgrass has shorter lemmas than Early Hairgrass. Annual Bluegrass (*Poa annua*) is another small-tufted annual grass similar to Silver Hairgrass, but Silver Hairgrass does not have folded leaves and does not root at the nodes like Annual Bluegrass.



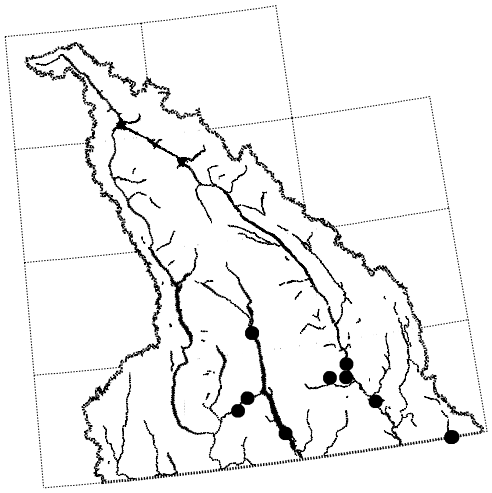
The common name Foxtail aptly describes the shape of the flowerhead of this genus. The species that make up *Alopecurus* have a dense, cylinder-like spike for a flowerhead. This genus has an appearance similar to *Phleum pratense*, a common pasture grass introduced from Europe. The *Alopecurus* species have blunt-tipped glumes with soft hairs along the keel, and the lemma has a short awn. The glume of *Phleum pratense* has a stiff bristle, but the lemmas are awnless. *Alopecurus* species are often found growing partially submerged in wet sites. The species generally provide good forage but are rarely abundant.

***Alopecurus*—Adapted from Douglas et al. (1994)**

**1a.** Straight awn arising from near middle of the lemma; extending less than 1.5 mm longer than the glumes . . . . . *Alopecurus aequalis*
**1b.** Bent awn arising from lower third of the lemma; extending more than 1.5 mm beyond the glumes . . . . . *Alopecurus geniculatus*

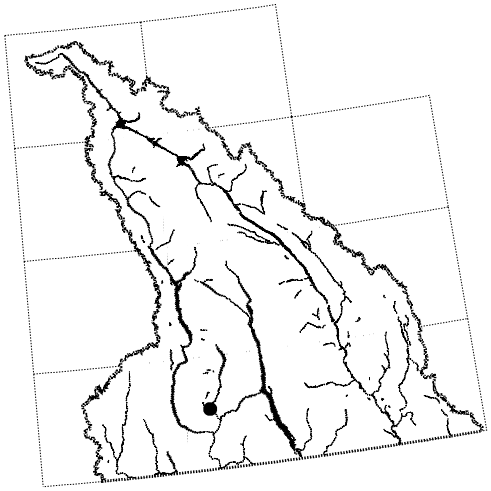
***Alopecurus aequalis*** Sobol.
Little Meadow-foxtail

**Plant:** *Alopecurus aequalis* is a native species that grows 20–70 cm tall. It is a tufted perennial with a dense, cylinder-like spike. There is a single flower in each spikelet.
**Leaves and Stem:** The sheaths are open and there are no auricles. The ligules are 4–8 mm high and are membrane-like, pointed, and either ragged or smooth along the edge. The flat leaf blades are 2–5 mm wide and sometimes drooping. The upper surface of the leaves feels rough.
**Flowerhead and Flowers:** The flowerhead is a pale green, dense spike, varying between 1.5 and 7 cm long. The glumes are 1.8–2.5 mm long with blunt tips and long soft hairs on the back and along the nerves. The lemma is shorter than the glumes, and usually only the lemma awn is visible slightly above the glumes. The straight awn is attached at or below the midpoint of the lemma.
**Habitat:** Little Meadow-foxtail grows along wet lakeshores, ditches, and streambanks from the lowland to subalpine elevations. In the Columbia Basin region, Little Meadow-foxtail is widespread and has been collected from Kootenay Landing, Nelson, Kokanee Creek Park, Lardeau, Wasa, and the Flathead River.
**Similar Species:** Little Meadow-foxtail resembles Water Meadow-foxtail (*Alopecurus geniculatus*) in general appearance, but if you look closely you will notice that Water Meadow-foxtail has a bent awn. This feature is obvious when the glumes are removed. The lemma awn of Water Meadow-foxtail is almost twice as long as the lemma.

***Alopecurus geniculatus*** L.
Water Meadow-foxtail

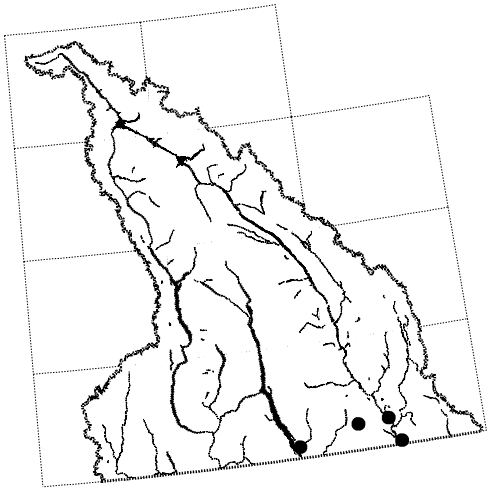
**Plant:** *Alopecurus geniculatus* is an introduced species that grows 30–50 cm tall. It is a tufted perennial with a dense cylinder-shaped spike.
**Leaves and Stem:** The sheath is open and there are no auricles. The ligules extend 3–5 mm high and are pointed or blunt with smooth or ragged edges. The flat leaf blades are rough on the upper surface, and are 2–6 mm wide.
**Flowerhead and Flowers:** The pale green to purplish flowerhead is 2–7 cm long and cylinder-shaped. The glumes have long hairs on the keel and more or less silky hairs across the back. The blunt glume tips appear transparent at the edges. The lemma is shorter than the glumes, and the bent awns are attached 0.5 mm above the lemma base but extend well beyond the glumes.
**Habitat:** Water Meadow-foxtail was introduced from Eurasia and grows along wet shorelines and ditches from the lowland to montane zones. In the Columbia Basin region, Water Meadow-foxtail has been collected only along the Slocan River.
**Similar Species:** The flowerhead of Water Meadow-foxtail appears fuzzier than that of Little Meadow-foxtail because of its longer awns.

*Apera* is a small genus with only three species world-wide, and is native to Europe and Asia. In British Columbia there is only one species, *Apera interrupta*, and this was formerly included in the genus *Agrostis*. Firm lemmas, a long awn originating below the end of the lemma, and a well-developed palea are the distinguishing features of *Apera*. The name comes from the Greek *a* = not, and *peros* = maimed, possibly referring to the long awn.

***Apera interrupta*** (L.) Beauv.
***Agrostis interrupta*** L. L. Dense
Silky Bentgrass

**Plant:** *Apera interrupta* is an introduced species that grows 10–40 cm tall. It is a tufted to single-stemmed annual with a narrow, softly hairy flowerhead. The branches are pressed close to the stem axis, and the spikelets are spaced along the stem axis so that the flowerhead appears interrupted.
**Leaves and Stem:** The sheaths are open and there are no auricles. The ligules are 2–5 mm high, blunt, but very ragged along the upper edge. The flat or folded leaf blades are 1–3 mm wide.
**Flowerhead and Flowers:** The 5- to 10-cm-long flowerhead is narrow—almost resembling a spike—but the branches are pressed close to the stem axis. The first glume is 1/4 the length of the second glume. The second glume is longer than the flower. The 2-mm-long lemma has an awn that is attached below the tip and is 6–7 mm long. The flowerhead appears soft and silky because of the lemma awn.
**Habitat:** Dense Silky Bentgrass grows in dry, disturbed sites and, although introduced from Europe, it has spread widely in dry waste areas. In the Columbia Basin region Dense Silky Bentgrass occurs at Creston, Cranbrook, and Kikomun Creek, as well as along the Kootenay River.
**Similar Species:** Dense Silky Bentgrass resembles *Agrostis* spp. Hitchcock (1969) places it in the *Agrostis* genus, but Douglas et al. (1994) have placed it in a separate genus. Their treatment separates *Apera* from *Agrostis* based on the lemma awn. In *Apera* the lemma awn is longer than 5.5 mm, and arises from just below the tip—whereas in *Agrostis* it arises at or below the midpoint. The callus of *Agrostis* can also be minutely bearded.

This genus of 300 species thrives in stony, arid soils. The name derives from the Latin *arista* = awn, because many of the species have extremely long awns. There are two species of *Aristida* occurring in British Columbia, *Aristida oligantha* (an annual) and *A. longiseta* (a perennial).

***Aristida longiseta*** Steud. var. ***robusta*** Merr.
Red Three-awn

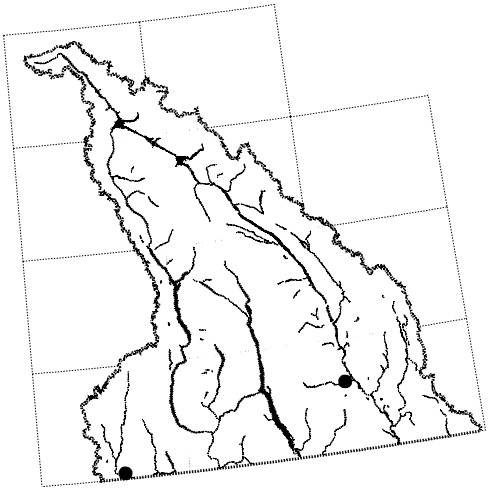
**Plant:** *Aristida longiseta* is a native species that grows 20–40 cm tall. It is a rough, strongly tufted perennial. The narrow pyramid-shaped flowerhead has open upward-pointing branches and is dominated by long, sharp awns.

**Leaves and Stem:** The sheaths are open and the ligules are less than 0.5 mm high in the front and often appear as a short fringe of hairs. In front of the ligules there are several long hairs (2–3 mm). The inrolled leaf blades are rough and are 1–2 mm wide.

**Flowerhead and Flowers:** The flowerhead is 5–10 cm long and is narrow with a few open upward-pointing branches. The glumes are awn-tipped. The hardened, flattened callus is sharply pointed and extends approximately 1 mm. The lemma tip splits into three 5- to 8-cm-long awns, with the lateral awns widely separated from the central one. The overall impression of this grass in flower is one of many diverging awns.

**Habitat:** Red Three-awn grows on dry grassland sites and bare rocky soils in the steppe and montane zones. In the Columbia Basin region the species occurs at Kimberley and Midway.

**Similar Species:** Red Three-awn is a distinctive species. The diverging awns are sometimes confused with Needle-and-thread Grass (*Stipa comata*), which has long awns but only one awn per spikelet.

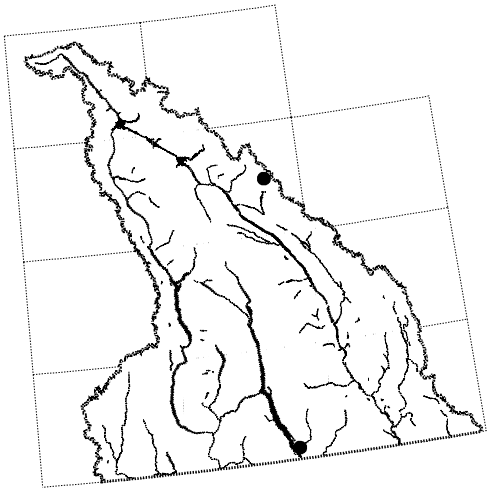
Oats (called *Avena* in Latin) comprise a small group of species from the Old World. They have large, drooping flowerheads and stout, twisted, bent awns growing from the back of the lemmas.

***Avena*—Adapted from Douglas et al. (1994)**

**1a.** Lemmas hairy with bent awns on the lower two lemmas; awns extend from the spikelet. . . . . *Avena fatua*
**1b.** Lemmas smooth with straight awns on the lower lemmas or awnless. . . . . *Avena sativa*

***Avena fatua*** L.
Wild Oat

**Plant:** *Avena fatua* is an introduced species that grows to 80 cm tall. It is an annual with large, open, drooping flowerheads.
**Leaves and Stem:** The sheaths are open and there are no auricles. The membrane-like ligules are 3–6 mm high and have a hairy upper edge. The flat leaf blade is 3–10 mm wide and feels rough due to scattered long hairs.
**Flowerhead and Flowers:** The open flowerhead has two or three flowers per spikelet. The membrane-like glumes are equal and extend past the flowers. The flowers readily break from the stem axis at maturity above the glumes. The lemmas are hardened and densely hairy at the base near the callus. The pointed callus is covered in a dense beard. The lemma point is membrane-like and has two teeth that are 1 mm long. The first two flowers have twisted and bent awns that are up to 4 cm long.
**Habitat:** Wild Oat was introduced from Eurasia. It occurs most often on waste ground, and is a weed in grain fields. In the Columbia Basin region it grows at Creston and Yoho National Park.
**Similar Species:** Wild Oat resembles Common Oat (*Avena sativa*), but Wild Oat has a more hairy lemma and a long, bent awn, whereas Common Oat does not. The lemma tip on Common Oat is thickened, unlike Wild Oat, which has a thin membrane-like tip.



***Avena sativa*** L.
Common Oat

**Plant:** *Avena sativa* is an introduced species that grows to 80 cm tall. It is an annual with large, open, drooping flowerheads.
**Leaves and Stem:** The sheaths are open and there are no auricles. The stem ranges from smooth to rough. The membrane-like ligules have 2- to 4-mm-high hairs along the edge.


**Flowerhead and Flowers:** The open pyramid-shaped flowerhead has spikelets that are two- to three-flowered. The glumes are unequal and exceed the flowers in length. The lemmas are smooth and thickened at the tip. The lemma may have two shallow teeth at the tip. The callus may be either bearded or naked. When present, the lemma awn is 15 mm longer than the lemma and is not bent. The lemma of the first flower can be awned, but there is no awn on the second flower.
**Habitat:** Common Oat grows on roadsides, railways, and waste places. Introduced from Eurasia, it does not persist as an escape from cultivation for more than a year. In the Columbia Basin region it was collected only at Kokanee Glacier Park.
**Similar Species:** Common Oat resembles Wild Oat, but Common Oat has a less hairy lemma and does not have a bend in the awn. The lemma tip on Common Oat is thickened and firm, unlike Wild Oat, which has a thin membrane-like tip.