Brachypodium sylvaticum (Huds.) Beauv.

Slender false-brome

Family: Poaceae
Range: Currently found only in Oregon, Washington and California.
Habitat: Shaded woodlands, coniferous forest understories, open prairies, and roadsides. Grows well under both sun and shade conditions, in dry or moist soils.
Origin: Native to Eurasia and North Africa. Apparently escaped from cultivation as an ornamental.
Impacts: Can outcompete native forest understory and grassland vegetation and quickly become the dominant species, even forming a solid mat. False brome has low palatability for wildlife and livestock. It also builds up a heavy thatch layer that increases fire hazard.
Western states listed as Noxious Weed: Oregon
California Invasive Plant Council (Cal-IPC) Inventory: Moderate Invasiveness (Alert)

Slender false-brome is a perennial bunchgrass from 1 to 2.5 ft tall. It can remain green throughout the year under favorable conditions. The leaves are broad (up to 0.5 inch wide), flat and bright green, and the culms (stems) are soft-hairy at the nodes, as are the sheath and margins of the sheath. Ligules are membranous and about 1 to 2.5 mm long.

The spikelets are pale green and droop at the tips of the inflorescence. The number of spikelets per inflorescence is only between 5 and 10. Each spikelet is 1 to 2 inches long with 7 to 17 flowers per spikelet. The lemmas have a straight awn 0.5-0.75 inch long. Although stems can resprout from small stem or root fragments when cut, slender false-brome reproduces primarily by seed. The seedbank apparently only survives a year or so.

Brachypodium can be distinguished from *Bromus* because it has an open sheath, unlike the closed sheath of *Bromus*. In addition, the spikelets of *Brachypodium* are sessile or have a very short pedicel, whereas those of *Bromus* are on long pedicels.

NON-CHEMICAL CONTROL

Mechanical (pulling, cutting, disking)	Because the roots are fairly weak for a perennial bunchgrass, it is possible to mechanically remove the plants with a shovel, fork or other instrument when the soil is moist. Hand pulling has been successful at some sites, but generally only when patches are very small. Hand pulling in larger patches has been very labor intensive and has not resulted in lasting success. Hand pulling small patches is best in April and early May and needs to be repeated. It is important to remove the entire root system, or the plant will resprout. Mowing alone is unlikely to eliminate the plants, but can reduce the population provided it is repeated often. Repeated mowing should be conducted before the seeds become viable to eventually exhaust the short-lived seedbank. If native and/or rare species are present, they must be allowed to go through reproductive cycle before mowing.
Cultural	Grazing is not recommended because slender false-brome contains a fungal endophyte (*Epichloe sylvatica*) that produces an alkaloid toxic to mammals. Toxicity in sheep is known as "sheep-stagger". In Europe, however, slender false-brome was absent in heavily grazed sites, suggesting that repeated aboveground removal may eventually eliminate this species. Prescribed burning has not been an effective control method. In fact, slender false-brome is frequently found in recently burned sites. Any treatment, however, that can remove the above-ground biomass and deplete the seedbank will eventually reduce the population. Such treatments can also be used in

	conjunction with herbicide treatments to increase the efficacy of the herbicide.
Biological	European populations of the false-brome endophyte *Epichloe sylvaticum* are sexual and produce a disease called "choke" in false-brome. "Choke" can reduce or even prevent seed production. However, the North American populations of *E. sylvaticum* are an asexual strain and do not produce "choke."

CHEMICAL CONTROL

The following specific use information is based on reports by researchers and land managers. Other trade names may be available, and other compounds also are labeled for this weed. Directions for use may vary between brands; see label before use. Herbicides are listed by mode of action and then alphabetically. The order of herbicide listing is not reflective of the order of efficacy or preference.

LIPID SYNTHESIS INHIBITORS	
Fluazifop *Fusilade*	**Rate:** 8 to 16 oz product/acre (2 to 4 oz a.i./acre) **Timing:** Postemergence. Spring is best to control seedlings, but established plants can be treated in mid-summer to fall. **Remarks:** Two to three years of treatment are necessary. Fine-leaf fescues are tolerant of fluazifop. Fluazifop is a grass-specific herbicide and will not impact native forbs.
Sethoxydim *Poast*	**Rate:** 1 to 1.5 pt product/acre (3 to 4.5 oz a.i./acre) **Timing:** Postemergence. Spring is best to control seedlings, but established plants can be treated in mid-summer to fall. **Remarks:** Two to three years of treatment are necessary. Fine-leaf fescues are tolerant to sethoxydim. The activity is very similar to fluazifop. Sethoxydim is a grass-specific herbicide and will not impact native forbs.
AROMATIC AMINO ACID INHIBITORS	
Glyphosate *Roundup*, *Accord XRT II*, and others	**Rate:** Broadcast foliar treatment: 2 to 3.3 qt product (*Roundup ProMax*)/acre (2.25 to 3.7 lb a.e./acre). Spot treatment: 1.5% v/v solution **Timing:** Postemergence. Mid-summer to fall is the best timing to kill slender false-brome and minimize injury to natives that are dormant or have completed their life cycle. It may be necessary to make a follow-up application in the subsequent spring to control germinating seedlings. **Remarks:** Glyphosate is considered the best option for control in pure stands. Two to three years of treatment are necessary. Herbicide treatment can be used after repeated mowing to reduce the necessity for a spring treatment to kill seedlings.
PHOTOSYNTHETIC INHIBITORS	
Hexazinone *Velpar L*	**Rate:** 1 gal product/acre (2 lb a.i./acre) **Timing:** Preemergence in spring to control seedlings. **Remarks:** Hexazinone is typically recommended in combination with glyphosate. Glyphosate is used in mid-summer to fall to control existing plants, and hexazinone is used the following spring to control new germinants. High rates of hexazinone can create bare ground, so only use high rates in spot treatments.

RECOMMENDED CITATION: DiTomaso, J.M., G.B. Kyser et al. 2013. *Weed Control in Natural Areas in the Western United States*. Weed Research and Information Center, University of California. 544 pp.