

**WRITTEN FINDINGS OF THE  
WASHINGTON STATE NOXIOUS WEED CONTROL BOARD  
(October 2008)**

**Scientific Name:** *Brachypodium sylvaticum* (Huds.) P. Beauv.

**Synonyms:** *Festuca sylvatica* Huds.  
*Bromus sylvaticus* (Huds.) Pollich

**Common Name:** false brome, slender false brome, wood false-brome

**Family:** Poaceae

**Legal Status:** Class A noxious weed

**Description and variation:**

Overall Habit: *Brachypodium sylvaticum* is a perennial, caespitose graminoid with ascending or erect culms and noticeably pilose blades, sheaths, and nodes. It lacks rhizomes. It is often described as having a distinctive lime-green coloration, which persists when many grasses go dormant in the fall. According to Kaye (2001), *B. sylvaticum* can be differentiated from native perennial bromes by the open sheaths (sheaths of native bromes are closed 1/4 of length) and by the short-to-absent pedicels (native bromes have prominent pedicels).

Culms: Unbranched and hollow culms are 30-120 cm in length, typically ascending or erect. There are 4-5 pubescent nodes with the pubescence extending onto the culm but generally the internodes are smooth and glabrous.

Blades: Open sheaths are round or keeled; smooth and typically loosely covered with spreading to reflexed hairs; rarely glabrous. Leaf blades are flat and relaxed, giving them an arched or nodding appearance, and are between 8-35 cm long and 4-12 mm wide. The dorsal and ventral surfaces of the blades are sparsely covered with long, soft hairs 0.8-1.8mm in length and blades are scabrous in texture. Veins pale, and sparsely covered with hairs. Ligules are obtuse, membranous, 1-6mm in length, may be pubescent, and typically lack ciliate hairs.

Flowers: Inflorescence consists of single, bilateral raceme, 6-20 cm long, and comprised of 5-10 spikelets with short-to-absent pedicels; Each spikelet is between 1.5-4 cm, cylindrical, narrowly oblong or lanceolate, and consists of 7-13 flowers. Glumes usually hairy, often lanceolate, though the upper glume is sometimes narrowly oblong. They are shortly pointed or the upper glume contains a very short awn. Upper glume is 6-11 mm in length and 7-9-nerved; lower glume is 6-8 mm in length and 5-7-nerved; lemmas 7-11 mm long, typically covered with short, stiff hairs; acute, and has 12-mm awn; anthers 3.5-4 mm long.



**Fruits:** Fruit is a caryopsis (typical achene-like fruit of grasses) that is hairy at the dorsal tip. Seed scar the length of the fruit.

**Habitat:** Kaye (2001) notes that *B. sylvaticum* occurs in many different habitats and under a range of environmental factors. For example, it thrives under the low-light conditions of riparian, upland, and coniferous forests, but seems to grow equally well in full sun along roadsides and forest edges, and in prairies.

### **Geographic distribution:**

**Native Distribution:** Native to Pakistan, Europe, and temperate regions of Asia, as well as mountainous regions of tropical Asia (Flora of Pakistan, 2008); Northern Africa and Macronesia (Clayton et al., 2008).

**North American distribution:** According to Kaye (2001), *B. sylvaticum* currently occurs in the Willamette Valley in Oregon. It was first documented as an escaped ornamental near Eugene, OR in 1939, and by 1966 there were two large populations in the Corvallis, OR area (Chambers, 1966 in Tu, 2002). It was also sampled from several locations in San Mateo County, California, during November and December of 2003 (CA Consortium of Herbaria, 2008) .

**History and Distribution in Washington:** This species was first detected in Washington State along a portion of the Hamilton Mountain trail at Beacon Rock State Park in Skamania County in July, 2007. This small population is being actively managed and treated. A second, smaller population was spotted at the Toutle River rest area off I-5 (northbound) in Cowlitz County in July, 2007 and known plants were subsequently hand-pulled and shoveled. Monitoring of the site will continue.

### **Biology:**

#### **Growth and Development:**

Blooms between June and September. Although plants do not spread rhizomatously, individual plants grow closely together and eventually coalesce into dense, monotypic patches (Kaye, 2001).

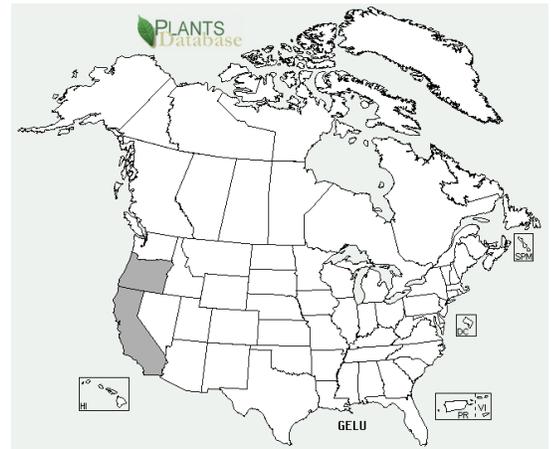
**Reproduction:** *Brachypodium sylvaticum* reproduces through seed and is not rhizomatous (Kaye, 2001). Seeds may be viable for only one year (Tu, 2002), but no research has been conducted on seed viability.

#### **Control:**

**Prevention:** Because seeds of *B. sylvaticum* may be carried via footwear or hiking gear, precautions should be taken to prevent dispersal from infested sites.

**Response to Herbicides:** Non-selective herbicides such as those containing glyphosate or grass-specific herbicides such as Poast can be applied from mid-summer through fall or after the rainy season in fall (with the exception of Poast) (NWMP, 2008). To reduce the amount of herbicide used at an infestation, NWMP (2008) also suggests a multi-year mowing regime to exhaust the seed bank while preventing any further seed production. A combination of mowing in early July and following with a fall herbicide treatment is also effective.

Please refer to herbicide labels for site specific control information. For more information, please refer to the [PNW Weed Management Handbook](#)



Response to Cultural Methods: None known.

Response to Mechanical Methods: According to the NWMP (2008), properly timed mowing can prevent new production of seeds. Small patches of *B. sylvaticum* can be hand-pulled in spring (April-early May), but be careful to remove all the roots. NWMP (2008) also notes that weed-free mulch has been effective to suppress *B. sylvaticum*.

Biological Control Potential: None known.

### **Economic Importance:**

Detrimental: According to Kaye (2001), this invasive grass species can form dense, monotypic colonies in both forest understories as well as in open woodland and can displace native flora. It may be a threat to some endangered species, including Kincaid's lupine (*Lupinus sylvaticus* subsp. *Kincaidii*), which is the host plant for the endangered butterfly Fender's blue (*Icaria icaroides fenderi*). It is a particular concern in the rare oak ecosystems in Oregon (FOBP&MP, 2008).

Beneficial: Has neither agricultural nor grassland value (eFlora.org)

**Rationale for Listing:** *Brachypodium sylvaticum* is a fast-spreading, invasive grass that is rapidly expanding in the Willamette Valley in Oregon. It is already listed as a Class B in Oregon (ODA, 2008). Kaye (2001) notes that this species is capable of expanding quickly into California, Washington, and British Columbia. This species meets the criteria of a Class A noxious weed, being non-native, invasive, difficult to control, and limited in distribution. With only two known infestations in Washington, a Class A listing will allow us to eradicate currently existing populations and to prevent new infestations through education and outreach.

### **References Cited:**

Chambers, K.L. 1966. Notes on some grasses of the Pacific Coast. Madrono 18: 250-251

Clayton, W.D., Harman, K.T. and Williamson, H. 2008. GrassBase - The Online World Grass Flora. <http://www.kew.org/data/grasses-db.html>. [Accessed 03 September 2008]

Hitchcock, C. L. and A. Cronquist. 1973. Flora of the Pacific Northwest. University of Washington Press.

Consortium of California Herbaria; Data provided by the participants of the Consortium of California Herbaria ([ucjeps.berkeley.edu/consortium/](http://ucjeps.berkeley.edu/consortium/)). [Accessed 4 September 2008] .

Flora of Pakistan. 2008. *Brachypodium sylvaticum*. [http://www.efloras.org/florataxon.aspx?flora\\_id=5&taxon\\_id=200024979](http://www.efloras.org/florataxon.aspx?flora_id=5&taxon_id=200024979) [Accessed 17 July 2008]

Friends of Buford Park and Mt. Pisgah. 200? Invasive weeds at Mt. Pisgah. [http://www.bufordpark.org/WorstWeedsatHBRA\\_Flyer11-2.pdf](http://www.bufordpark.org/WorstWeedsatHBRA_Flyer11-2.pdf) [Accessed 4 January 2008]

Kaye, T. 2001. *Brachypodium sylvaticum* (Poaceae) in the Pacific Northwest. Botanical Electronic News No. 277, 29 Nov 2001. [www.ou.edu/cas/botany\\_micro/ben/ben277.html](http://www.ou.edu/cas/botany_micro/ben/ben277.html) [Accessed 24 June 08]

Oregon Department of Agriculture, ODA Plant Division, Noxious Weed Control. [http://www.oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml#B\\_list](http://www.oregon.gov/ODA/PLANT/WEEDS/statelist2.shtml#B_list) [Accessed 30 October 2008].

Tu, M. 2002. Weed alert! *Brachypodium sylvaticum* (Huds.) P. Beauv. The Nature Conservancy, Invasive Species Initiative. <http://tncweeds.ucdavis.edu/alert/alrtbrac.html> [Accessed 10/30/2008].

USDA, NRCS. 2005. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). Data compiled from various sources by Mark W. Skinner. National Plant Data Center, Baton Rouge, LA 70874-4490 USA. [Accessed 3 January 2008]