

Oregon semaphore grass (*Pleuropogon oregonus*)



THREATENED



Flowering spike (left), habit (center), and habitat (right) of Oregon semaphore grass. Photos by Jordan Brown (left) and ODA staff (center and right). If downloading images from this website, please credit the photographer.

Family Poaceae

Plant description

Oregon semaphore grass is a perennial arising from slender rhizomes with purplish red scales and long soft internodes. The culms are erect, soft and spongy, and 55-90 cm tall. Sheaths are overlapping and closed for 3/4 their length, the lower sheaths loose, purplish red, and nearly smooth, the upper ones scaberulous and striate. Ligules are white, lacerate, membranous, and 4-5 mm long. Leaf blades are erect, flat, slightly scaberulous on the upper surface and sometimes also the lower, abruptly narrowed to an acute, mucronate apex, and 8-18 cm long by 0.4-0.7 cm wide, the uppermost blades reduced. Racemes are somewhat erect with slender axes 6-20 cm long bearing 6-8 spikelets on 2-12 mm-long pedicels. Spikelets are erect or ascending, spreading toward one side of the raceme, 2-4 cm long, and green tinged with purple, each bearing 7-14 flowers, the upper florets pistillate, the lower perfect. Glumes are pale and membranous, unequal, and 2-4 mm long; rachilla joints are 2-3 mm long; lemmas are strongly 7-nerved, 5.5-7 mm long by about 3 mm wide, with an erect awn 6-10 mm long at the apex; paleas are approximately equal to the lemmas, each of the two palea keels bearing a slender, erect to spreading awn 2-7 mm long attached about one-third from the base of the palea; anthers are brown to purple, 4 mm long.

Distinguishing characteristics

Pleuropogon refractus is the only other species of *Pleuropogon* that occurs in Oregon. Although similar in appearance to Oregon semaphore grass, *P. refractus* is taller (100-150 cm tall versus 55-90 cm tall), has awnless paleas (versus paleas with a pair of awns), and occurs west of the Cascade Mountains (versus east of the Cascades).

When to survey

Surveys for Oregon semaphore grass should be completed when the species is in flower and/or fruit, from June through July.

Habitat

Oregon semaphore grass is an obligate wetland species occurring in wet meadows and marshlands in areas of sluggish moving water at elevations ranging from about 1000-1700 m (3300-5600 feet).

Associated grasses and sedges include *Beckmannia syzigachne*, *Deschampsia caespitosa*, *D. danthonioides*, *Glyceria borealis*, *Hordeum brachyantherum*, *Carex athrostachya*, *C. nebrascensis*, *C. saxatilis*, and *Eleocharis palustris*.

Range

One of the rarest grasses in North America, this species is known from several small occurrences divided between two disjunct population centers in eastern Oregon, one in southern Lake County and one in southern Union County, separated by a distance of approximately 370 km (230 miles). The majority of Oregon semaphore grass plants are located on private lands, and thus are not protected by state threatened and endangered species legislation. Attempts have been made to create three new populations of Oregon semaphore grass on administratively protected lands in Lake and Grant Counties, but transplant success rates have been mixed and the long term survival of these created populations is tenuous.

Oregon counties

Lake, Union

Federal status

Species of Concern

Threats

Possible threats to Oregon semaphore grass include heavy grazing by livestock and habitat loss due to agricultural development or hydrological alterations within sites occupied by the species. A few extant occurrences are very small and at risk of extirpation due to chance events.

Did you know?

Oregon semaphore grass was first collected in 1886 by W. C. Cusick in Hog Valley, probably near Union in Union County, Oregon. It was collected again in 1901 by A. B. Leckenby in Union, Oregon, then in 1936 by M. E. Peck from a location west of Adel in Lake County, Oregon. Unobserved for decades afterward, the species was reported as extinct or endangered in the late 1970s by state and federal watch groups, until it was rediscovered in Lake County in 1979, likely from the same location where it was last collected by Peck, 47 years earlier.

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