

Heritage Ranking Form - Global Rank

Scientific Name: Pleuropogon oregonus

Common Name: Oregon Semaphore Grass

Classification: Vascular Plant

Range Extent: D = 1,000-5,000 sq km (~400-2,000 sq mi)

Known from disjunct locations in Lake and Union Counties, Oregon. Each disjunct population occupies about 10km. Total range as calculated by convex hull of all populations is 4785km. No intermediate populations were located in spite of a fairly extensive search during the 1986 field season.

Population Size: Not assessed

Comments: Over 10,000 stems based on last observation dates ranging from 1986 to 2010. Often recorded in patch size rather than individuals so exact population number is unknown. Species is strongly rhizomatous which further complicates the counting of individual plants; true number of individuals may be much lower than 10,000.

Number of

Occurrences: B = 6 - 20

Comments: Rediscovered by Dr W. Hopkins (Reg. Ecol. ORNF) in 1983, several new populations found in 1986. 8 natural (non-introduced) populations and one planted population in 2012, though several sites have not been revisited since 1986.

Area of Occupancy: D = 6-25 4-km² grid cells

Comments: 9 4km² grid cells occupied.

Good Viability: C = Few (4-12) occurrences with excellent or good viability or ecological integrity

Comments: 5 EOs with excellent or good viability.

Environmental

Specificity: A = Very narrow. Specialist or community with key requirements scarce

Comments: Occurs in montane meadows typically characterized by a series of creeks and channels with standing or slow-moving water. This species is dependent on natural flooding for maintaining this habitat (Kagan and Yamamoto 1987). While this habitat may once have been common, many have been significantly altered by grazing, ditching, and other developments.

Short Term Trends: EF = Decline of 10 - 50%

Comments: Few revisits upon which to determine trends. Of three sites revisited in the 2000-2010s, two were noted as healthy and one had declined by 95%.

Long Term Trends: U = Unknown

Comments: This species was thought to be extinct before it was rediscovered in 1982; it was previously known from a few collections made before 1940. It is unknown what its historic range and population size may have been.

Threat Impact: A = Very High

Comments: This species is palatable to cattle and is grazed at most sites; it is probably also grazed by native herbivores although it is doubtful that they cause extensive damage. Cattle grazing and water manipulations such as diking are the most serious factors limiting these populations. Conversion of land for farming, recreation, or housing would remove suitable habitat, as would damming of streams (Kagan and Yamamoto 1987). Calculated as extremely vulnerable to climate change.

Intrinsic Vulnerability: B = Moderately vulnerable

Comments: Populations are apparently limited primarily from extrinsic factors: grazing and habitat alteration. Plants are wind pollinated, seeds are likely dispersed by water, and plants spread rhizomatously (Kagan and Yamamoto 1987). For the number of possible fruits that plants could produce, an extremely low number typically develop and are viable. The low rate of successful sexual reproduction may contribute to the rarity of this species (But et al. 1985).

Heritage Rank: G1

Comments: An Oregon endemic, currently known from 2 areas of the state. This species had not been collected in nearly half a century and was feared extinct when it was rediscovered in 1983 in southcentral Oregon. The previous collections had been made in northeastern Oregon, and the species was rediscovered in that area in 1986. There are now 8 populations known, one portion of which is being protected by The Nature Conservancy. Otherwise all sites are on private land with no protections. Changes in hydrology or grazing regime thus threaten all natural populations. Climate change may further reduce suitable habitat. Revisiting sites from 1980s would help to clarify short-term trend.

Rank Notes: None

Reference: Kagan and Yamamoto 1987. NatureServe 2012.

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