

Juncus kelloggii

Why the species is at risk

There is only one occurrence in British Columbia in a public park (Uplands Park, Victoria) at a site that is subject to frequent foot traffic. The plant is very small and it is easily overlooked, so there are likely to be more locations.

What you can do to help this species

Management practices should be tailored to the needs of the site. Potential management tools will depend on the specific circumstances and may require experimentation prior to implementation. **Before taking any action, expert advice must be obtained and no action taken without it. Please refer to the introductory section of this manual.**

References

Ertter, B. 1986. The *Juncus triformis* Complex. Memoirs of the New York Botanical Garden. 39:1-90.

For further information, contact the Garry Oak Ecosystems Recovery Team, or see the web site at: www.goert.ca.

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Juncus kelloggii

English name Kellogg's rush

Scientific name *Juncus kelloggii*

Family Juncaceae (Rush)

Other scientific names none

Risk status

BC: critically imperilled (S1); red-listed

Canada: endangered (N1)

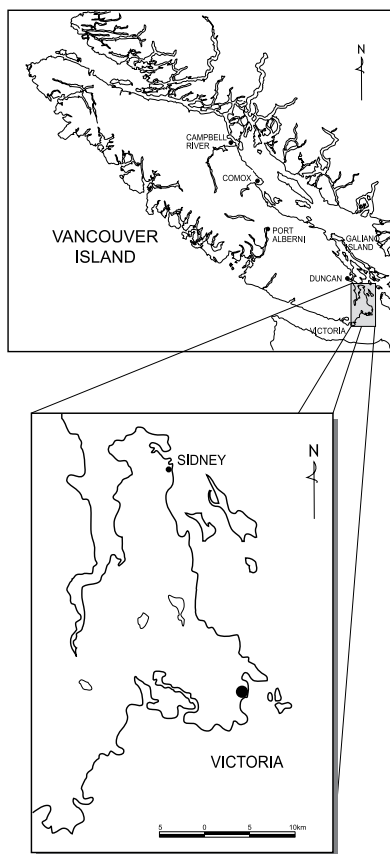
Global: vulnerable (G3)

Elsewhere: California – reported (SR); Oregon – unrankable (SU);

Washington – critically imperilled (S1)

Range/Known distribution

In North America, Kellogg's rush occurs at one locality in British Columbia and at one locality in Washington (Klickitat County). Kellogg's rush occurs from Oregon (Columbia and Hood River counties through to the Willamette Valley and southwest Oregon), and in most of California. Within British Columbia, the species is restricted to southeastern Vancouver Island where it is known from one locality in Victoria. There are no known historic localities.



Distribution of *Juncus kelloggii*.

● recently confirmed sites

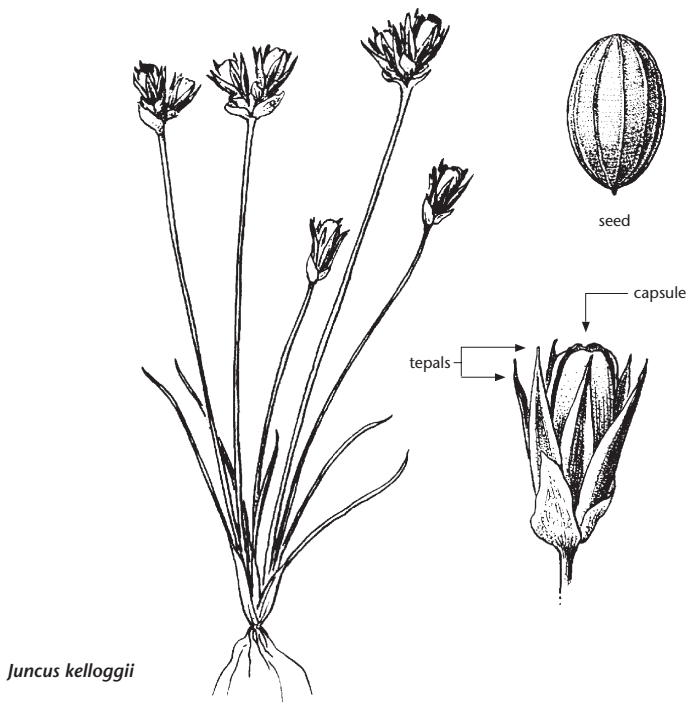
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Field description

A small annual herb from a short root. **Stems are erect, 0.4-4 cm tall.** **Leaves are basal, bristlelike,** nearly circular in cross-section and tapered. **Flowers occur singly** or in pairs at the top of a leafless stem. The **perianth (petals and sepals) segments are brown or reddish-brown, 2.5-3.5 mm** long, pointed, and unequal. There are 3 stamens. The 0.4 mm long anthers are shorter than the filaments. **Involucral bracts (bracts below the flowers) are scalelike and inconspicuous.** The fruit is a blunt capsule and is as long as the perianth segments. The barrel-like seeds have prominent longitudinal ribs and honeycombed cross-walls. The seeds are about 0.4 mm long and lack tail-like appendages (a feature common to some *Juncus* species).

IDENTIFICATION TIPS

This diminutive annual species grows only at one location within British Columbia, that being Uplands Park, Victoria. It may be potentially confused with toad rush (*Juncus bufonius*), another small annual rush. The latter species has an involucral bract that appears as a continuation of the stem, whereas *J. kelloggii* has only scalelike involucral bracts. *J. kelloggii* is identifiable April through July.



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Life history

Flower production is triggered by long days and flowers remain open for only a few hours. The species is known to be both self- and cross-pollinated, but no insects have been observed visiting the flowers. Seeds require a cold period for germination and usually germinate approximately two days after treatment. Seed dispersal is possibly by birds that may pick up the seeds in their feet and/or feathers from muddy soils.

Habitat

Generally, *Juncus kelloggii* is found in seasonally wet depressions and vernal pools throughout the range. It is often found in low spots in fields and meadows. Plants growing with this species in British Columbia include chaffweed (*Anagallis minima*), the red-listed species, Muhlenberg's centaury (*Centaureum muehlenbergii*), heterocodon (*Heterocodon rariflorum*), toad rush (*Juncus bufonius*) and the red-listed species, tall woolly-heads (*Psilocarphus elatior*). Elevations: to 10 m.

Juncus kelloggii requires sites that are moist to wet in the winter and spring, but that dry up during the summer. In other parts of the range, this species occurs on sandy to clayey soils. The wet period is necessary for germination and growth, as annual flooding followed by desiccation reduces competition by other plants. Other annual *Juncus* species do not handle competition well and are therefore usually found growing on bare ground.