

***Subularia aquatica* L.**  
water awlwort  
Brassicaceae (Mustard Family)

**Status:** State Review Group 1  
**Rank:** G5SNR

**General Description:** Adapted from Hitchcock et al. (1964) and Hickman (1993): *Subularia aquatica* is a hairless aquatic annual,  $\frac{3}{4}$  to 4  $\frac{3}{4}$  in. (2-12 cm) tall. The tufted leaves are  $\frac{3}{8}$  to 2 in. (1-5 cm) long, narrowly awl-like, and somewhat rounded. The inflorescence arises from a leafless stalk, and the 2 to 8 minute flowers are borne on ascending to erect, straight pedicels  $\frac{1}{16}$  to  $\frac{3}{16}$  in. (2-5 mm) long. The white petals are less than  $\frac{1}{16}$  in. (1 mm) long and are somewhat longer than leafy bracts beneath. The oblong fruit is  $\frac{1}{16}$  to  $\frac{1}{8}$  in. (2-3 mm) long and more or less flattened. The oblong seed is less than  $\frac{1}{16}$  in. (1 mm) long and wingless.

**Identification Tips:** This is the only species of *Subularia* in the Americas. The only other species in the mustard family that is a submerged plant and occurs in the same counties is watercress (*Nasturtium officinale*). *N. officinale* is a much larger plant, 4 to 24 in. (1-6 dm) tall, and it has dissected leaves rather than the simple leaves of *Subularia*. A technical key is recommended for identification.

**Phenology:** *Subularia aquatica* blooms from June through August in Washington.

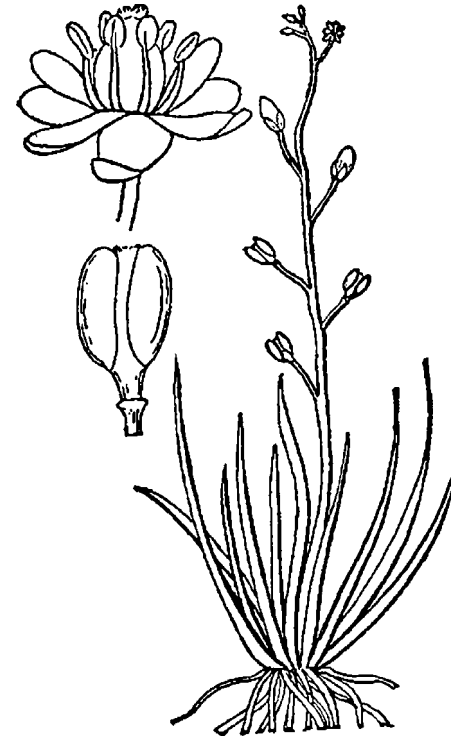
**Range:** This species is found from Alaska to California, eastward through the Rocky Mountains, as far south as Wyoming, and to the Atlantic coast. In Washington, it is found in Clallam, Whatcom, and Chelan counties.

**Habitat:** *Subularia aquatica* is often submerged and blooming beneath the surface in shallow water near the margins of freshwater lakes and ponds and on streambanks. In Washington, it has been found at elevations from 30 to 750 feet (9-230 m).

**Ecology:** This is an obligate wetland species.

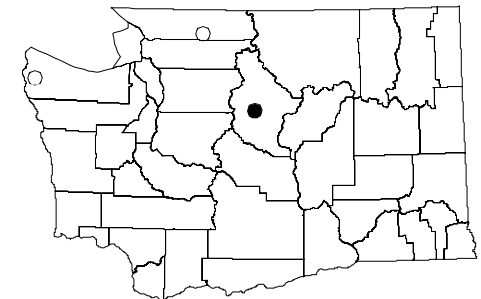
**State Status Comments:** This species is known in Washington from

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water awlwort



USDA-NRCS PLANTS Database / *Britton, N.L., and A. Brown. 1913. Illustrated flora of the northern states and Canada. Vol. 2: 159.*

Known distribution of  
*Subularia aquatica*  
in Washington



● Current (1980+)  
○ Historic (older than 1980)

## ***Subularia aquatica***

water awlwort



Peter Morrison



Peter Morrison

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water awlwort

less than five historical occurrences, and one recent occurrence. Because *Subularia aquatica* was recently added to the Washington rare plant list, not much is known about the degree of its rarity in the state at this time.

**Inventory Needs:** Historical sites for this species need to be revisited.

**Threats and Management Concerns:** The greatest threats to this species are hydrological alteration and water quality issues.

**Comments:** Our North American Plants are also known as *Subularia aquatica* L. var. *americana* G. Mull.

### **References:**

Hickman, J.C. 1993. *The Jepson Manual: Higher Plants of California*. University of California Press, Berkeley. 1400 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1964. *Vascular Plants of the Pacific Northwest Part 2: Salicaceae to Saxifragaceae*. University of Washington Press, Seattle, WA. 597 pp.

Kartesz, J.T. 2004. *Synthesis of North American Flora*. Phylcosystems Corporation. 1996.

Rickett, H.W. 1971. *Wild Flowers of the United States Volume Five: the Northwestern States*. McGraw-Hill Book Company, New York. 666 pp.