

Epilobium torreyi

Why the species is at risk

There are only two populations of *E. torreyi* in British Columbia. One is in a Capital Region Park and the other on private land along a roadside. These populations are potentially under threat due to changes in local hydrological patterns that result from development in the surrounding areas. The park population is threatened by motorbikes traversing the meadow, and by the spread of common hawthorn (*Crataegus monogyna*).

What you can do to help this species

The current sites need to be protected and nearby management carried out in such a way that does not impact hydrology. 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

- Raven, Peter H., and David M. Moore. 1965. A revision of *Boisduvalia* (Onagraceae). *Brittonia* 17:238-254.
- Raven, Peter H. 1979. A survey of reproductive biology in Onagraceae. *New Zealand Journal Bot.* 17:575-593.

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

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Epilobium torreyi

English name brook spike-primrose

Scientific name *Epilobium torreyi*

Family Onagraceae (Willow herb)

Other scientific names *Boisduvalia stricta*

Risk status

BC: critically imperilled (S1); red-listed

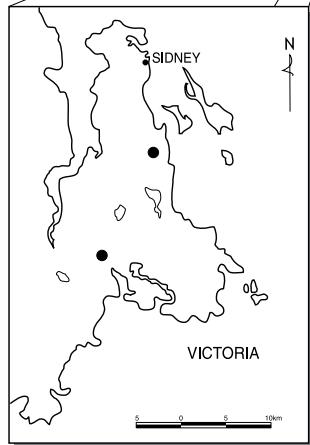
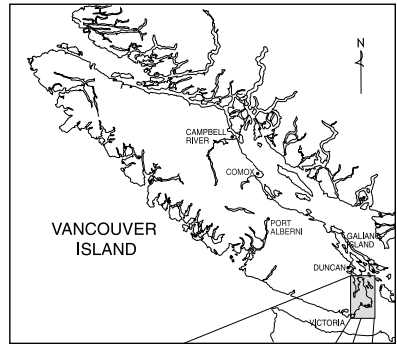
Canada: endangered (N1)

Global: stable (G5)

Elsewhere: California, Idaho, Nevada, Oregon, Washington – reported (SR)

Range/Known distribution

Brook spike-primrose occurs in North America from British Columbia to California and east to Idaho and Nevada. In British Columbia this species is only found in the Victoria area. Currently in British Columbia, there are 2 known occurrences and no unconfirmed historic localities.



Distribution of *Epilobium torreyi*.

● recently confirmed sites

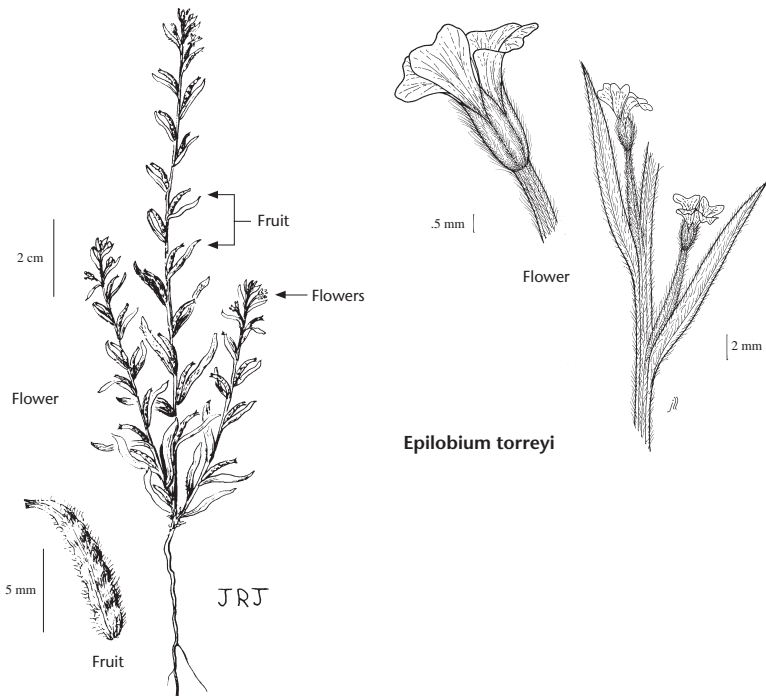
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Field description

A pink or white annual herb from a taproot. Stems are ascending to erect, 10-60 cm tall, usually branched from the base. Outer layer of epidermis peeling on lower part of stem. Plants are covered in greyish spreading hairs. The opposite and hairy leaves occur only near the base, have a linear or narrowly lance-shaped form, 5-45 mm long and are nearly stalkless. Leaf margins are entire (untoothed) or finely toothed. The inflorescence is loose to somewhat crowded into a leafy, terminal spike. It has glandular leaves that are smaller than the stem leaves and have untoothed margins. Flowers are fertilized in the bud, and hence do not open. Petals are 1-3 mm long, pink or white. Sepals are 0.7-2 mm long. The fruit is a cylindrical capsule, 8-13 mm long with a curved tip. The 4-chambered capsules are covered in long hairs and have 6-8 seeds per chamber. Seeds are smooth, glabrous and lack a tuft of hairs at the tip.

IDENTIFICATION TIPS

Brook spike-primrose is distinguished from dense spike-primrose (*Epilobium densiflorum*) by having shorter and more linear leaves, a less congested flower head and smaller petals. However, at the end of the season when plants dry out, the two species are difficult to tell apart.



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Life history

Annual, flowering in July or August. Seeds germinate after being submerged for a time. The seedlings have round, opposite leaves that are hairless; they differ from the mature leaves which are narrow, hairy and spiral in form. Pollination is thought to be predominately by bees, and to a lesser extent by syrphid flies.

Habitat

Epilobium torreyi occurs in seasonally wet shallow depressions, in moist grasslands and on open slopes. It is associated with introduced species, particularly grasses. Elevations: 20 – 50 m.