

## *Meconella oregana*

**English names** white meconella, Oregon meconella, white fairypoppy, Oregon poppy

**Scientific name** *Meconella oregana*

**Family** Papaveraceae (Poppy)

**Other scientific names** *Platystigma oreganum*, *Playtystemon oreganus*

### **Risk status**

BC: critically imperilled (S1); red-listed

Canada: imperilled (N2); COSEWIC: endangered (2005)

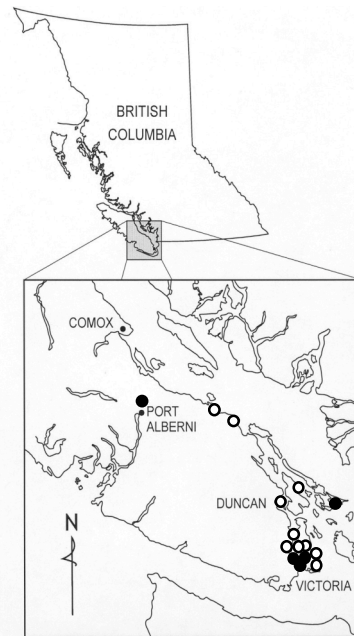
United States: imperilled (N2)

Global: imperilled/vulnerable (G2G3)

Elsewhere: California, Oregon - critically imperilled (S1); Washington - imperilled (S2)

### **Range/known distribution**

White meconella is a globally rare species restricted to a few widely scattered locations in southwestern British Columbia, Washington, Oregon and California. In British Columbia, it is known only from southern Vancouver Island and the Gulf Islands. Out of 15 populations on record for British Columbia, only five are still known to be extant. Confirmed populations are limited to the Greater Victoria area (3 populations), Saturna Island and Port Alberni. These populations represent the northern limit of the geographic range of the species in North America. The Vancouver Island populations are about 50 km north of the nearest Washington population on Whidbey Island.



**Distribution of *Meconella oregana***  
● recently confirmed sites  
○ unconfirmed or extirpated sites

Species at Risk in Garry Oak and Associated Ecosystems in British Columbia

## *Meconella oregana*

### Field description

White meconella is a **slender annual herb** growing from a taproot. It has a single or branched stem and ranges from **1 to 8 cm tall** when in bloom, and has a **blue-green appearance**. The lower leaves are **spoon-shaped**, 3-18 mm long, and form a **basal rosette**. The stem leaves are **lance-shaped to linear** (grass-like), **oppositely arranged**, 5-9 mm long and **sessile** (unstaked). The **small white flowers usually have 6 petals and 3 sepals** (although irregularities in number do occur), and are borne singly at the ends of slender erect pedicels (stalks) that are often longer than the main stem. The fruits are brown linear capsules containing numerous seeds.

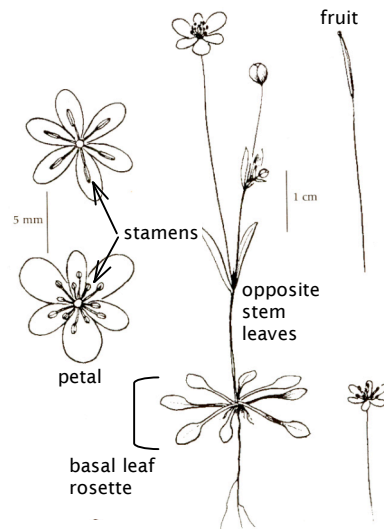
### IDENTIFICATION TIPS

White meconella is only one of three species (worldwide) belonging to the genus *Meconella* and the only representative of the genus in Canada. Nevertheless, the species superficially resembles several other small, white flowered annuals with opposite leaves (e.g. *Arenaria* spp.) for which it could be mistaken. White meconella can be distinguished from most of these by its unusual combination of 6 petals and 3 sepals, the latter which are shed as the flower opens.



Hans Roemer

*Meconella oregana*



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### **Life history**

White meconella is an annual plant that flowers in March to early April. It reproduces only by seed, with germination usually occurring after a warm spell in late January. The flowering population can vary considerably in size from year to year depending on conditions (especially spring soil moisture conditions). In poor reproductive years, populations may go largely undetected because the small plants are very difficult to see when not in bloom. The seeds have no obvious dispersal mechanisms, and most seeds likely end up close to the parent plant. The small patch size of populations, together with their highly fragmented distribution, suggests that short-range dispersal is an intrinsic limiting factor for the species. Consequently, banked seeds may be important to the persistence of populations.

### **Habitat**

In Canada, white meconella is found only within Garry oak and associated ecosystems, where it occurs exclusively on open rocky or grassy sites, in extremely shallow soils over bedrock where local topographic features enable slight early-season seepage. These sites all tend to dry out completely when precipitation decreases and temperatures rise in spring. Plants generally establish on short turf composed of bryophytes and other annual vascular plants. The species may be intolerant of competition, as populations tend to occur only in sites where few invasive introduced species are present. Some of the slopes inhabited by white meconella are grazed regularly by feral goats. This could benefit the microhabitat by keeping brush down and maintaining open areas, a function that fires would have served in the past.

### **Why the species is at risk**

The number of white meconella populations in Canada has declined precipitously in recent decades, from 15 to 5 known occurrences. As of 2004, the total recorded population size was only 3325 individuals over a 50-100 m<sup>2</sup> area. One of the occurrences is very small (52 individuals) and likely not viable in the long term. Only one of the sites has any degree of protection, by virtue of its location within a regional park. Some occurrences are threatened by residential development over the long term. All five populations are additionally threatened with habitat degradation due to invasion by non-native vascular plants.



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### **What you can do to help this species**

Management practices should be tailored to the specific circumstances at the site. Potential management tools will depend on the specific circumstances and may require experimentation on artificially established populations 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.**

Additional protection for this species is urgently needed, especially for those populations occurring entirely or partly on private land. Public and private landowners should be made aware of new populations of this species if they are discovered, and appropriate management practices suggested. Management needs include protecting occupied sites from any type of development; limiting foot traffic as well as off-road motorized and non-motorized vehicle traffic; and preventing disruption of seepage flows. Existing populations should be monitored on an ongoing basis to determine their viability, as well as for any negative impacts stemming from encroachment of introduced species.

### **References**

- British Columbia Conservation Data Centre. Botany Program. 2007. Database containing records of rare plant collections and observations in the province of British Columbia.
- COSEWIC. 2005. COSEWIC assessment and status report on the white meconella *Meconella oregana* in Canada. Committee on the Status of Endangered Wildlife in Canada. Ottawa. vi + 25 pp. ([www.sararegistry.gc.ca/status/status\\_e.cfm](http://www.sararegistry.gc.ca/status/status_e.cfm)).
- Fairbarns, Matthew. 2006. Recovery Strategy for White Meconella (*Meconella oregana*). Unpublished draft report prepared for the Canadian Wildlife Service.

For further information, contact the Garry Oak Ecosystems Recovery Team, or see the web site at: [www.goert.ca](http://www.goert.ca).

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\*Refers to non-native species.

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