Githopsis specularioides

English name Common Bluecup

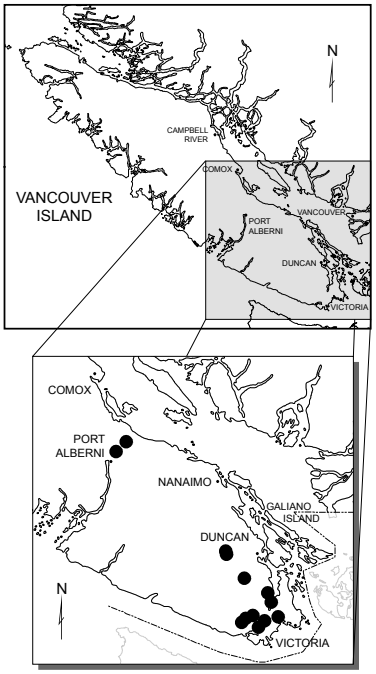
Scientific name *Githopsis specularioides*

Family Campanulaceae (Bellflower)

Other scientific names *Githopsis calycina, Githopsis calycina* var. *hirsuta, Githopsis specularioides* var. *hirsuta*

Risk status
BC: imperilled or vulnerable (S2S3); Blue-listed; Conservation Framework Highest Priority – 2 (Goal 3, Maintain BC diversity)
Canada: imperilled or vulnerable (N2N3); COSEWIC – unranked
Global: secure (G5)
Elsewhere: Montana – critically imperiled (S1); Washington – vulnerable (S3); California and Oregon – reported (SNR)

Range/Known distribution
Common Bluecup ranges from southern Vancouver Island south into southeastern Washington and the Columbia Gorge of Washington and Oregon, west to the Pacific. It is absent (or overlooked) in central and southern Oregon but occurs throughout much of northern and central California. In Canada, this species is restricted to southeast and east-central Vancouver Island where it is known from about 14 locations, from Victoria to Horne Lake.



Distribution of *Githopsis specularioides*
● Recently confirmed sites

Githopsis specularioides

Field description

Common Bluecup is a small and **easily overlooked** annual plant commonly 5-30 cm tall. The stem, which is branched in larger individuals, bears long and narrow (4-20 mm long, 1-3.5 mm wide), alternate leaves that are sparsely toothed. Its **flowers are solitary and terminal** (at the ends of stems). Each flower is composed of an outer calyx of five long (5-15 mm), narrow lobes that enclose a deep blue 5-lobed corolla. The fruits are 6-15 mm long capsules which are prominently ribbed, and open at the tip.

Identification tips

There are a number of small annual plants with narrow, sparsely-toothed leaves in vernally moist habitats on southern Vancouver Island, but no others have a calyx with long narrow lobes enclosing a blue flower.

Paul Slichter

Githopsis specularioides

Githopsis specularioides

Life history

Common Bluecup is a short-lived annual. Little is known about its life cycle in British Columbia, where it is at the northern limit of its range. Extrapolating from life history studies of the species further south, Common Bluecup probably germinates in the late spring and usually flowers in late May or June (occasionally early July, at upper elevations). It is capable of self-pollinating. It may be that seeds are dispersed by birds that pick them up on their feet or feathers from muddy soils.

Habitat

In Canada, Common Bluecup usually occurs at an elevation of between 150-550 m above sea level. It occurs in rocky seepage areas, usually on open, windswept, warm slopes. Such sites are moist to wet in the winter and spring, providing conditions necessary for germination, growth, and maturation. The sites become very dry in the summer, which prevents more robust perennial competitors from dominating the vegetation. The most common native species associating with Common Bluecup include grasses such as Roemer's Fescue (*Festuca roemeri*) and California Oatgrass (*Danthonia californica*); forbs such as Woolly Sunflower (*Eriophyllum lanatum*), Pretty Shooting-star (*Dodecatheon pulchellum*), Spring Gold (*Lomatium utriculatum*), Hooker's Onion (*Allium acuminatum*), Fool's Onion (*Triteleia hyacinthina*), saxifrages (e.g., *Saxifraga rufidula*), and annual clovers (e.g., *Trifolium willdenovii*), and mosses and moss-like plants such as Grey Rock Moss (*Racomitrium elongatum*) and Wallace's Selaginella (*Selaginella wallacei*). Several non-native species have invaded seeps containing Common Bluecup, including Soft Brome* (*Bromus hordeaceus*), Barren Fescue* (*Vulpia bromoides*) and annual hairgrasses* (*Aira praecox* and *A. caryophyllea*). Rare species that have been found growing with Common Bluecup include White Meconella (*Meconella oregana*) and Rare-flowering Heterocodon (*Heterocodon rariflorum*).

Why this species is at risk

Many of the Canadian populations of Common Bluecup are small and isolated and can, therefore, be lost to chance events. The species appears to be a weak disperser, which means that new populations may rarely establish. Vernal seeps are fragile habitats that are vulnerable to alteration. The main threats to Common Bluecup include invasive grasses and forbs that may dominate seeps, and invasive shrubs such as Scotch Broom* (*Cytisus scoparius*) which may encroach on the outer edges of occupied sites and provide competition and shading. Native trees and shrubs such as Common Snowberry (*Symphoricarpos albus*) may also encroach as the result of a loss of fire, although they are unlikely to overtake the low-lying seasonally wet sites. Human disturbance from trampling or off-road vehicles, and activities that would alter the hydrology of occupied sites, such as soil compaction, trail construction, or road building, may pose a threat. As an annual species of moist openings, Common Bluecup is more

likely to be affected by climate change than many other species. Climatic fluctuations which affect annual temperature and rainfall patterns may affect factors such as moisture availability, germination timing, and seedling survival, potentially leading to population declines.

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 should be obtained, and no action taken without it. Please refer to the introductory section of this manual.**

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 the natural hydrology of occupied sites, limiting access to sensitive habitat, and removing invasive species. Regular inventories of known populations should be conducted to monitor their status and identify any negative impacts. Efforts should also be undertaken to search for new populations.

References

Klinkenberg, Brian. (Editor) 2012. E-Flora BC: Electronic Atlas of the Plants of British Columbia [eflora.bc.ca]. Lab for Advanced Spatial Analysis, Department of Geography, University of British Columbia, Vancouver.

Morin, N. 1983. Systematics of Githopsis (*Campanulaceae*). Systematic Botany 8: 436-468

Morin, N. 1993. *Campanulaceae* (in part). pp. 459-468. In: Hickman, J.C. (ed.) The Jepson Manual: Higher plants of California. University of California Press, Berkeley.

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

*Refers to non-native species.