English name Poverty Clover

Other English name Cowbag Clover, Dwarf Sack Clover

Scientific name *Trifolium depauperatum* var. *depauperatum* Desv.

Other scientific name *Trifolium depauperatum* var. *laciniatum* (Greene) Jeps.

Family *Fabaceae* (Pea Family)

Risk status

BC: vulnerable (S3); blue-listed

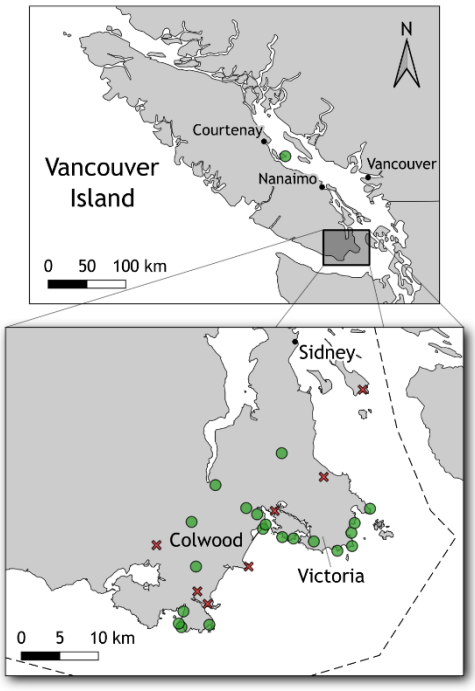
Canada: N3

Global: secure (G5T5?)

Elsewhere: Washington, Oregon, California not ranked (SNR); Michigan, South Carolina not applicable (SNA)

Range/Known distribution In Canada, Poverty Clover has been reported from over thirty locations, most of which have extant populations. It occurs from the Sooke Hills to the Victoria area and Salt Spring Island, with a disjunct population on Hornby Island. It is also known from the San Juan Islands.

In the United States, there is a major gap between the San Juan Island populations and the Portland area (represented by a single collection made in 1910, and another gap between Portland and southwestern Oregon, where it is widespread. It is found through much of western and central California south to about San Luis Obispo and east to the foothills of the Sierra Nevada.

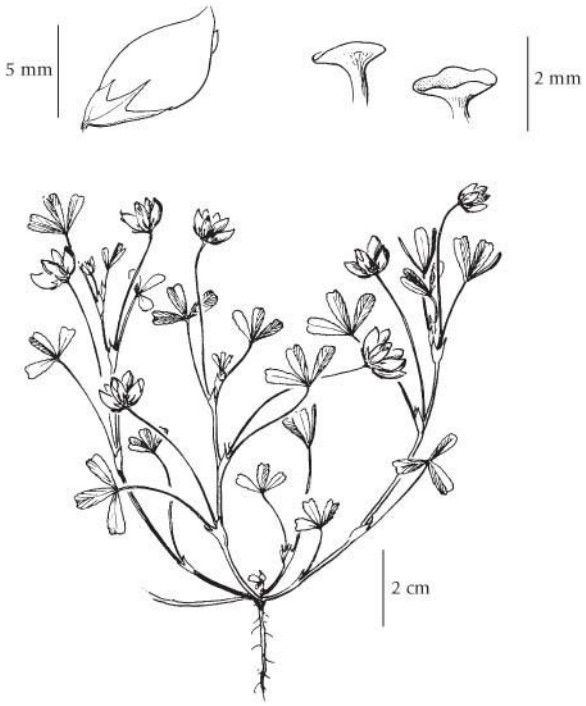


Distribution of *Trifolium depauperatum*
Confirmed Sites
Extirpated Sites

Field description Poverty Clover is an annual plant with several sprawling stems, 5-40 cm long, arising from a taproot. Its leaves are divided into three leaflets, as in most species of clover. The leaflets are 5-20 mm long, and narrowly wedge- to egg-shaped with finely toothed margins. The tips of the leaflets may be squared-off, lobed, or notched. The foliage is glabrous or sparsely glandular-hairy.

The 2-15 flowers are borne in dense, globe-shaped heads, 5-15 mm wide, set in small involucres that are sometimes so small they are not readily apparent. The 2.5-3.5 mm long calyx is funnel-shaped with a 5-6-veined tube and narrow, bristle-tipped lobes. The pea-shaped corolla is at least twice as long as the calyx, pinkish purple to white, and has an inflated banner. The pods are egg-shaped and contain 2-4 seeds.

Identification tips Within its range in Canada, there are several other annual species of clover but none of the others have a distinctive inflated banner.



Trifolium depauperatum

Life history Poverty Clover is an annual that relies upon seed for reproduction. It flowers in April and May, and fruits in June before dying in the summer drought. Like most clovers, it is probably capable of self-pollination but is generally cross-pollinated by insects – likely bees. And like other clovers its roots support nodules containing nitrogen-fixing *Rhizobium* bacteria.

Habitat In Canada, Poverty Clover generally occurs on vernally moist areas including coastal bluffs. The native vegetation is dominated by small forbs including Spring Gold (*Lomatium utriculatum*), White Triteleia (*Triteleia hyacinthina*), Tomcat Clover (*Trifolium willdenovii*), White-tipped Clover (*T. variegatum*), Harvest Brodiaea (*Brodiaea coronaria*), Sea Blush (*Plectritis congesta*), Dwarf Owl-clover (*Triphysaria versicolor*), Slender Plantain (*Plantago elongata*), Thrift (*Armeria maritima*), Grassland Saxifrage (*Micranthes integrifolia*), and Blue-eyed Mary (*Collinsia parviflora*).

Why this species is at risk In Canada, threats to Poverty Clover have not been addressed in detail, but it likely suffers from competition with many invasive species that grow within its populations, including Small-flowered Catchfly* (*Silene gallica*), Hairy Cat's-ear* (*Hypochaeris radicata*), Dove's-foot Geranium* (*Geranium molle*), Common Stork's-bill* (*Erodium cicutarium*), Wall Speedwell* (*Veronica arvensis*), Hairy Vetch* (*Vicia hirsuta*), Shepherd's Cress* (*Teesdalia*

nudicaulis), Parsley-piert* (*Aphanes arvensis*), Sticky Chickweed* (*Cerastium glomeratum*), Cheatgrass* (*Bromus tectorum*), Barren Brome* (*B. sterilis*), Soft Brome* (*B. hordeaceus*), Hedgehog Dogtail* (*Cynosurus echinatus*), annual fescues* (*Vulpia* sp.), and hairgrasses* (*Aira caryophyllea* and *A. praecox*).

Development may have destroyed much of the suitable habitat for Poverty Clover, especially since the coastal bluffs and headlands where it often occurs are highly desirable for residential sites. Some of the remaining populations occur on private land and may be threatened by road building and construction. Recreational impacts in steep bluff areas may cause trampling, soil disturbance and erosion. Fire suppression may have altered habitat and increased fuel loading, increasing the potential harm caused by future fires. The impact of grazing is unclear however it appears that Poverty Clover increases with light to moderate, yearly grazing which suppresses some of its larger and more palatable competitors.

What you can do to help this species Further surveys would help clarify the distribution and abundance of Poverty Clover and assess the level of threats it faces, as well as actions that can be taken to address these threats. There appear to be many viable populations in Canada, so there is little likelihood it will qualify for protection under the Canada Species-At-Risk Act.

References

B.C. Conservation Data Centre. 2024. BC Species and Ecosystems Explorer. B.C. Minist. of Environ. Victoria, B.C. Available: https://a100.gov.bc.ca/pub/eswp/ (accessed Mar 15, 2024)

Michael A. Vincent 2023, Trifolium depauperatum var. depauperatum, in Jepson Flora Project (eds.) Jepson eFlora, Revision 12, https://ucjeps.berkeley.edu/eflora/eflora_display.php?tid=67267, accessed on March 31, 2024.

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

*Refers to non-native species