# Euphrasia gibbsiae subsp. wellingtonensis



Images by Richard Schahinger

FAMILY: SCROPHULARIACEAE

**BOTANICAL NAME:** *Euphrasia gibbsiae* subsp. *wellingtonensis* W.R.Barker, *J. Adelaide Bot. Gard.* 5: 120 (1982)

**COMMON NAME:** mount wellington eyebright

COMMONWEALTH STATUS (EPBC Act): Not Listed

TASMANIAN STATUS (TSP Act): rare

## **Description**

Euphrasia gibbsiae subsp. wellingtonensis is a perennial herb usually 5 to 10 cm tall, with many ascending or more-or-less erect branches. The uppermost leaves of the flower-bearing branches are obovate or spathulate in outline, 5 to 9 mm long by 4 to 6 mm broad, with 1 to 2 teeth along each margin; the leaves have a sparse to dense covering of usually short glandular hairs (as do the stems and calyx). The hooded flowers are arranged in spikes at the end of the flowering stems. Corolla white, with a yellow blotch on lower side of the mouth and deep in the tube, with purple to indigo striations on the tube and hood, extending well out onto the lobes. Flowering mostly from mid-November to mid-December. The fruit is a two-celled capsule (description from Barker (1982) and Kirkpatrick (1997)). Confusing species: Two other Euphrasia species may co-occur with the mount wellington eyebright: Euphrasia striata also has white flowers with prominent (red-purple) striations, but its leaves lack hairs and are purple-brown and shiny; Euphrasia collina subsp. diemenica is a much larger plant with purple or pink flowers, and again, is mostly hairless ... both taxa begin flowering in Mount Wellington's alpine zone from early to mid-December.

#### **Distribution and Habitat**

Euphrasia gibbsiae subsp. wellingtonensis is endemic to Tasmania, and is thought to be restricted to Mount Wellington in the State's south (Barker 1982). It occurs in a variety of alpine and subalpine vegetation types, viz., sedgeland, heathland, Eucalyptus coccifera low woodland, bolster heath and sphagnum bogs, typically growing in poorly-drained areas with a degree of shelter. Most records are in the altitude range 1150 to 1230 metres above sea level, though 'outliers' have been recorded as low as 1020 m; the underlying substrate is Jurassic dolerite or Quaternary alluvium.







Plate 1. Euphrasia gibbsiae subsp. wellingtonensis: foliage and habit

### **Key Sites and Populations**

Mount Wellington.

#### **Known Reserves**

The only known population occurs in Wellington Park.

## **Ecology and Management**

Euphrasia gibbsiae subsp. wellingtonensis is restricted to alpine and subalpine areas. The vegetation and species in such areas are adapted to harsh and variable conditions, ranging from extremely low winter temperatures and snow lie, through to hot and dry summers. Changes to rainfall patterns and an increase in extreme events associated with climate change may pose a risk to the species in the future

Euphrasia species are semi-parasitic plants that have a wide range of 'host' species (Barker 1982). Eyebrights are insect pollinated, with native bees being the main pollination vector (Barker 1982). Dispersal of seed is localised (Barker 1982), with movement by water a likely vector.

#### **Conservation Status Assessment**

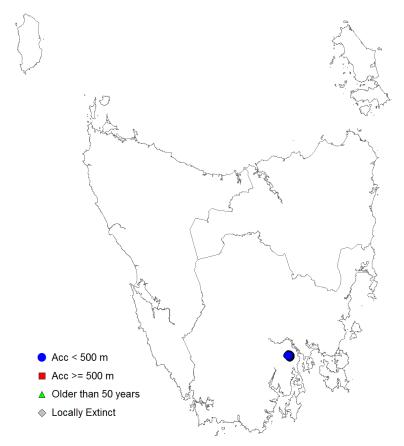
No current need for reassessment. Targeted surveys for the species were undertaken on Mt Wellington in late November and early December 2015: 600+ flowering plants were recorded in an area of 3 km<sup>2</sup>, with a linear range of 3 km. The total population is likely to number in the low thousands.

#### **Further Information**

- ➤ Barker, W.R. (1982). Taxonomic studies in *Euphrasia* L. (Scrophulariaceae). A revised infrageneric classification, and a revision of the genus in Australia. *Journal of Adelaide Botanical Gard*ens 5: 1–304.
- ➤ Kirkpatrick, J.B. (1997). *Alpine Tasmania*, Oxford University Press, Melbourne.

#### **Tasmanian Distribution**

(As per Threatened Species Section records, May 2016)



## 1:25 000 Map Sheets

Collinsvale, Longley.

Date last modified: 04/06/2016

#### View

www.dpipwe.tas.gov.au/threatenedspecieslists

#### **Contact details**

Threatened Species Section, Department of Primary Industries, Parks, Water and Environment, GPO Box 44, Hobart, Tasmania, Australia, 7001. Phone (03) 6165 4340.

#### **Permit**

It is an offence to collect, disturb, damage or destroy this species unless under permit.