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Woolly foxglove

Endangered flora of Western Australia

If you think you've seen this plant, please call the Department of Environment and Conservation's (DEC's) Geraldton District on (08) 9921 5955 or Avon-Mortlock District on (08) 9622 8940.

Woolly foxglove (*Pityrodia axillaris*) occurs in the Midwest region of Western Australia, between Caron and Buntine, about 200 kilometres south-east of Geraldton. It is known from 94 plants in six populations.

The species is listed as rare flora under the Western Australian *Wildlife Conservation Act 1950* and is ranked as critically endangered. According to records held at the WA Herbarium, woolly foxglove was first collected by John Septimus Roe in the early 19th century.

The Greek generic name *Pityrodia* refers to the scale-like leaves of the type species while the Latin species name *axillaris* refers to the flowers which grow from the leaf axil.

Woolly foxglove is a small shrub to 30 centimetres high. The stems, leaves and calyx are covered with dense white woolly hairs. Leaves are stalkless, egg-shaped, tapered toward the base and wrinkled beneath the woolly covering. They are two to four centimetres long and one to 1.5 centimetres wide.

Flowers are either solitary or arranged in clusters of three to five along a main stem. Flowers are deep red to yellowish scarlet and are 2.5 to three centimetres long. Each flower tube consists of five petals with wavy to tooth-like edges and the flower tube is smooth on the outside and with a dense hairy ring inside. Four stamens extend beyond the flower tube with the style extending further beyond them.



Flowers of woolly foxglove. Note the tooth-like edges to the petals. Photo – Catherine Page

Recovery of a species

DEC is committed to ensuring that critically endangered taxa do not become extinct in the wild. This is done through the preparation of a Recovery Plan or Interim Recovery Plan (IRP), which outline the recovery actions that are required to urgently address those threatening processes most affecting the ongoing survival of the threatened species in the wild and begin the recovery process.

IRPs are prepared by DEC and implemented by regional or district recovery teams consisting of representatives from DEC, Botanic Gardens and Parks Authority, community groups, private landowners, local shires and various government organisations.



Woolly foxglove plant. Photo – Catherine Page

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Department of Environment and Conservation

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An Australian Government Initiative

Woolly foxglove

E n d a n g e r e d f l o r a o f W e s t e r n A u s t r a l i a

Plants are covered in abundant flowers between August and October, however, the species has historically been recorded as flowering as early as July. The fruit is egg-shaped with two humps at the top.

The species is closely related to native foxglove (*Pityrodia terminalis*) and Mt Augustus foxglove (*P. augustensis*). Native foxglove is distinguishable by its oblong leaves and deep purple-pink to claret red or pale pink flowers, with fine, short hairs on the outside of the flower tube and smooth inside, apart from a dense hairy ring. Native foxglove is also a taller, more erect plant. Mt Augustus foxglove can be distinguished by its narrowly elliptic leaves, globular fruit and deep lilac flowers, with branched hairs inside the flower tube and sparsely woolly hairs on the inside of petals.

Woolly foxglove is a disturbance opportunist, germinating from soil-stored seed and quickly growing to maturity following a disturbance event. It grows

in shrub land on yellow sand plains. Associated species include *Allocasuarina campestris*, *A. acutivalvis*, *Melaleuca cordata*, *Acacia* sp, *Dampiera* sp, *Verticordia* sp, *Hakea* sp and *Grevillea* sp.

DEC has set up the Geraldton and Avon-Mortlock districts threatened flora recovery teams to coordinate recovery actions that address the greatest threats to the survival of the species in the wild.

The main threats to woolly foxglove are land clearing, road maintenance, weed intrusion and lack of appropriate disturbance regimes.

The species is currently only known from six populations and DEC is keen to know of any others. Ideal conditions for survey are in late August to October, particularly in areas that have undergone fire or soil disturbance in recent years.

If you are unable to contact the district offices, please phone DEC's Species and Communities Branch on (08) 9334 0455.



The egg-shaped woolly leaves typical of woolly foxglove. Photo – Catherine Page



The disturbed habitat in which the species germinates. Photo – Catherine Page

IRPs will be deemed a success if the number of individuals within the population and/or the number of populations have increased.

This project is funded by the Australian and State governments' investment through the Natural Heritage Trust, administered in the Midwest Region by the Northern Agricultural Catchments Council.

Avon Catchment Council projects and activities are delivered with investment from the Australian and State governments' National Action Plan for Salinity and Water Quality and the Natural Heritage Trust.

Recovery actions that have been, or will be, progressively implemented to protect the species include:

- ongoing monitoring of population numbers and threats;
- liaison with land managers and landowners;
- long-term protection of habitat;
- collection of seed and genetic material;
- implementation of disturbance trials;
- promotion of the species within the community;
- weed control;
- investigation of fire requirements, and development and implementation of a fire management strategy; and
- installation of rare flora markers to ensure road workers in the vicinity of the plants are aware of the species and its significance.