

Approved Conservation Advice
(s266B of the *Environment Protection and Biodiversity Conservation Act 1999*)

Approved Conservation Advice for
***Leschenaultia laricina* (Scarlet Leschenaultia)**

This Conservation Advice has been developed based on the best available information at the time this Conservation Advice was approved; this includes existing plans, records or management prescriptions for this species.

Description

Leschenaultia laricina, Family Goodeniaceae, also known as Scarlet Leschenaultia, is a small, widely spreading shrub, growing to 70 cm tall, with many branches curving upwards that often sucker. The bark is rough, except on new growth. The leaves, 5.5–11.5 mm long, are small, narrow, and somewhat fleshy, densely crowded and circular in cross-section. The solitary flowers, usually at the ends of the branches, vary from scarlet to orange red, and are usually more orange in the centre. Petal lobes have broad wings with a small point in between. The petals are hairy inside but only at the base. Two of the petals are erect above the tube but not joined. The style is straight. Fruits are 17–29 mm long and flowering occurs in late October to late December (Brown et al., 1998).

Conservation Status

Scarlet Leschenaultia is listed as **endangered**. This species is eligible for listing as endangered under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act) as, prior to the commencement of the EPBC Act, it was listed as endangered under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). The species is also listed as declared rare flora under the *Wildlife Conservation Act 1950* (Western Australia).

Distribution and Habitat

Scarlet Leschenaultia was once common between Meenaar, Meckering, Northam and Kekerin but is now confined to eight populations from areas around Northam to north-west of Brookton in Western Australia. Most populations occur within conservation estates, with the others in road verges, private property, unallocated Crown land, State forest and a railway reserve. The total population size is around 610 mature plants recorded in the wild, with 550 mature plants in conservation estates. There has been an increase in numbers at four populations and a decrease at the others. The extent of occurrence is approximately 1050 km². There are insufficient data to be able to determine the area of occupancy (DEC, 2008).

Scarlet Leschenaultia inhabits white sand over laterite, adjacent to winter-wet seepage areas, in open woodlands of Flooded Gum (*Eucalyptus rudis*) and Wandoo (*E. wandoo*). Associated species include Slender Banksia (*Banksia attenuata*), Mohan (*Melaleuca viminea*) and *Jacksonia* spp. (Brown et al., 1998; Durell & Buehrig, 2001; DEC, 2008). This species occurs within the Avon (Western Australia) Natural Resource Management Region.

The distribution of this species is not known to overlap with any EPBC Act-listed threatened ecological community.

Threats

The main identified threats to Scarlet Leschenaultia are land clearing and invasive weeds. Extensive land clearing for agriculture is a major factor in the decline in the number and size of populations (Brown et al., 1998; Durell & Buehrig, 2001).

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16/12/2008

The main potential threats to the species include excessive grazing and habitat disturbance by feral rabbits (*Oryctolagus cuniculus*), goats (*Capra hircus*) and livestock (Durell & Buehrig, 2001; DEC, 2008). Other potential threats to Scarlet Leschenaultia include road works, salinity, drought and changing hydrology, fire, recreational activities, wildflower picking, and railway maintenance (Durell & Buehrig, 2001; DEC, 2008).

Research Priorities

Research priorities that would inform future regional and local priority actions include:

- Design and implement a monitoring program or, if appropriate, support and enhance existing programs.
- More precisely assess population size, distribution, ecological requirements and the relative impacts of threatening processes.
- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants.
- Undertake seed germination and/or vegetative propagation trials to determine the requirements for successful establishment.
- Develop a genetic tagging system to establish a means of identifying collections from the wild, and providing evidence required for prosecution (see for example Palsboll et al., 2006).

Regional and Local Priority Actions

The following regional and local priority recovery and threat abatement actions can be done to support the recovery of Scarlet Leschenaultia.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.
- Monitor the progress of recovery, including the effectiveness of management actions and the need to adapt them if necessary.
- Identify populations of high conservation priority.
- Ensure road widening and railway maintenance activities (or other infrastructure or development activities) involving substrate or vegetation disturbance in areas where Scarlet Leschenaultia occurs does not adversely impact on known populations.
- Manage any changes to hydrology that may result in changes to water table levels, increased run-off and salinity.
- Control access routes to suitably constrain public access to known sites on public land.
- Suitably control and manage access on private land.
- Minimise adverse impacts from land use at known sites.
- Investigate formal conservation arrangements, management agreements and covenants on private land, and for crown and private land investigate inclusion in reserve tenure if possible.

Invasive Weeds

- Identify and remove weeds in the local area, which could become a threat to Scarlet Leschenaultia, using appropriate methods.
- Manage sites to prevent introduction of invasive weeds, which could become a threat to the species, using appropriate methods.
- Ensure chemicals or other mechanisms used to eradicate weeds do not have a significant adverse impact on Scarlet Leschenaultia.

Trampling, Browsing or Grazing

- Develop and implement a management plan for the control and eradication of feral rabbits and goats in the region.

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- Manage known sites to ensure appropriate grazing regimes occur.
- Manage total grazing pressure at important sites through exclusion fencing or other barriers.

Fire

- Develop and implement a suitable fire management strategy for Scarlet Leschenaultia.
- Provide maps of known occurrences to local and state Rural Fire Services and seek inclusion of mitigative measures in bush fire risk management plans, risk register and/or operation maps.

Conservation Information

- Raise awareness of Scarlet Leschenaultia within the local community. The development and distribution of fact sheets may benefit this species.
- Maintain liaisons with private landholders and land managers of land on which populations occur.

Enable Recovery of Additional Sites and/or Populations

- Undertake appropriate seed collection and storage.
- Investigate options for linking, enhancing or establishing additional populations.
- Implement national translocation protocols (Vallee et al., 2004) if establishing additional populations is considered necessary and feasible.

This list does not necessarily encompass all actions that may be of benefit to Scarlet Leschenaultia, but highlights those that are considered to be of highest priority at the time of preparing the conservation advice.

Existing Plans/Management Prescriptions that are Relevant to the Species

- Declared Rare and Poorly Known Flora in the Narrogin District (Durell & Buehrig, 2001),
- Threat Abatement Plan for Competition and Land Degradation by Feral Goats (EA, 1999a), and
- Threat Abatement Plan for Competition and Land Degradation by Feral Rabbits (EA, 1999b).

These prescriptions were current at the time of publishing; please refer to the relevant agency's website for any updated versions.

Information Sources:

Brown, A, Thomson-Dans, C & Marchant, N (Eds) 1998, *Western Australia's Threatened Flora*, Department of Conservation and Land Management, Western Australia.

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Environment Australia (EA) 1999a, *Threat Abatement Plan for Competition and Land Degradation by Feral Goats*, Biodiversity Group, Environment Australia, viewed 16 January 2008, <<http://www.environment.gov.au/biodiversity/threatened/publications/tap/goats/index.html>>.

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Palsboll, PJ, Berube, M, Skaug, HJ & Raymakers, C 2006 'DNA registers of legally obtained wildlife and derived products as means to identify illegal takes', *Conservation Biology*, vol. 20, pp. 1284-1293.

Vallee, L, Hogbin, T, Monks, L, Makinson, B, Matthes, M & Rossetto, M 2004, *Guidelines for the Translocation of Threatened Plants in Australia* (2nd ed.), Australian Network for Plant Conservation, Canberra.