

Approved Conservation Advice for *Newcastelia velutina*

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

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

Newcastelia velutina, Family Lamiaceae, is an erect perennial shrub, growing up to 1.5 m. Leaves are opposite, sessile, broadly lanceolate, 16-45 mm long and 5-12 mm wide. Stems and leaves have a soft velvety surface. Terminal inflorescence are 2–12 cm long and 1.5-2 cm wide. The fruit is obvoid, very sparsely hairy in upper part, glabrous below. (Leverington et al., 2006).

Conservation Status

Newcastelia velutina is listed as **vulnerable**. This species is eligible for listing as vulnerable 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 vulnerable under Schedule 1 of the *Endangered Species Protection Act 1992* (Cwlth). *Newcastelia velutina* is also listed as vulnerable under the *Nature Conservation Act 1992* (Queensland).

Distribution and Habitat

Newcastelia velutina is restricted to a small area in the Mundubbera Shire in the Burnett district of south-eastern Queensland. The property on which this species occurs was formerly used for grazing. It was acquired in 2004 for conservation purposes. It is now Beeron National Park, managed by the Qld Department of Environment and Resource Management. There are estimated to be at least 10 populations containing around 10 000 individuals (Leverington et al., 2006).

The species is widespread in open woodland and shrubland over granite hillslopes and crests and is locally common with a patchy distribution within the area. It has a range of approximately 6 km² (Leverington et al., 2006) and an estimated area of occupancy of less than 1 km².

This species occurs within the Brigalow Belt Bioregion and the Fitzroy Natural Resource Management Region.

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

Threats

Newcastelia velutina occurs in a rugged, remote locality that is unsuitable for grazing and is protected from disturbance, weed invasion and soil degradation. A potential threat to *Newcastelia velutina* may be inappropriate fire regimes (Leverington et al., 2006). The species is short-lived (less than 6 years) with regeneration from soil seed banks following fire. Although individual plants are killed by even minor fires, populations will expand after fires. The fire regime in this area is somewhat self-regulating in that it takes up to five years for fuel loads to reach a sufficient level to carry a fire across the granite areas where the species occurs (Leverington et al., 2006).

Regional and Local Priority Actions

The following priority recovery and threat abatement actions can be done to support the recovery of *Newcastelia velutina*.

Habitat Loss, Disturbance and Modification

- Monitor known populations to identify key threats.

Fire

- Where appropriate provide maps of known occurrences to local and state Rural Fire Services and seek inclusion of mitigative measures in bush fire risk management plan(s), risk register and/or operation maps.
- Implement an appropriate fire management regime for local populations. The habitat should be burnt in a mosaic pattern every 5–8 years.

This list does not necessarily encompass all actions that may be of benefit to *Newcastelia velutina*, but highlights those that are considered to be of highest priority at the time of preparing the Conservation Advice.

Information Sources:

Leverington A, Edgar R and Gordon G (2006). Draft Multi-species recovery plan for *Acacia eremophiloides*, *Acacia grandifolia*, *Acacia porcata*, *Bertya granitica* and *Newcastelia velutina*. Report to the Department of Environment and Heritage, Canberra. Queensland Parks and Wildlife Service, Brisbane.