

Approved Conservation Advice for *Kardomia granitica*

(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 and draft plans, records or management prescriptions for this species.

Description

Kardomia granitica, family Myrtaceae, is a shrub that grows up to 2 m high. It has small paired leaves up to 3.3 mm long with distinct oil dots on the lower surface. Single white flowers about 6 mm across are borne in the upper foliage between November and January (OEH, 2013).

Conservation Status

Kardomia granitica is listed as vulnerable under the name *Kardomia granitica*. 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).

The species is also listed as endangered under the *Nature Conservation Act 1992* (Queensland).

Distribution and Habitat

Kardomia granitica is endemic to Queensland where it is known from three populations south of Stanthorpe (Bean, 1997; OEH, 2013). It occurs in the crevices of granite outcrops dominated by heath (Bean, 1997). There are no data on the extent of occurrence of *K. granitica* or whether its population is estimated at 31 (Donatiu, 2006). It occurs in Girraween National Park (Bean, 1997) and its habitat occurs throughout the Stanthorpe Plateau (Donatiu, 2006). The species may occur in Bald Rock National Park in New South Wales (Galbraith et al., 2008), but there are no herbarium records in that state (NSW Scientific Committee, 2013) and the species has been delisted from the *Threatened Species Conservation Act 1995* (New South Wales).

This species occurs within the New England Tablelands IBRA Bioregion and the Border Rivers Maranoa-Balonne 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 *Kardomia granitica* are its small population size and disjunct distribution (Donatiu, 2006).

The main potential threats to *Kardomia granitica* include feral herbivores, its possible lack of genetic diversity and inappropriate fire regimes (Donatiu, 2006).

Research Priorities

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

- More precisely assess population size, distribution, ecological requirements (dispersal, regeneration mechanisms and interaction with fire) and the relative impacts of threatening processes (Donatiu, 2006)

- Undertake survey work in suitable habitat and potential habitat to locate any additional populations/occurrences/remnants, including at Murphy's Creek Road and granite outcrops on Council reserves and private property (Donatiu, 2006)

Local Priority Actions

The following local priority recovery and threat abatement actions can be done to support the recovery of *Kardomia granitica*.

Habitat Loss, Disturbance and Modification

- 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 there is no disturbance in areas where *Kardomia granitica* occurs, excluding necessary actions to manage the conservation of the species
- Minimise adverse impacts from land use at known sites
- Protect populations of the listed species through the development of conservation agreements and/or covenants

Fire

- Implement a suitable fire management strategy for the habitat of *Kardomia granitica*. Fire interval guidelines have been developed by the Queensland Government for the New England Tableland bioregion and they recommend limiting fire encroachment into rock pavement communities (DNPRSR, 2012)
- 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

Trampling, Browsing or Grazing

- If livestock grazing occurs in the area, ensure land owners/managers use an appropriate management regime and density that does not detrimentally affect this species

Conservation Information

- Raise awareness of *Kardomia granitica* within the local community
- Report occurrences to relevant State government agencies (OEH, 2013)
- Engage with private landholders and land managers responsible for the land on which populations occur and encourage these key stakeholders to contribute to the implementation of conservation management actions
- 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) for establishing additional populations

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

References

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