



Persoonia marginata

Cunn ex R. Br.

Common name: Clandulla Geebung

The following information is provided to assist authors of Species Impact Statements, development and activity proponents, and determining and consent authorities, who are required to prepare or review assessments of likely impacts on threatened species pursuant to the provisions of the *Environmental Planning and Assessment Act 1979*. These guidelines should be read in conjunction with the NPWS *Information Circular No. 2: Threatened Species Assessment under the EP&A Act: The '8 Part Test' of Significance* (November 1996) and with the accompanying "Threatened Species Information" sheet.

Survey

Survey for *Persoonia marginata* may take place at any time of the year. A combination of leaf characters and plant habit should enable the species to be identified in the absence of flowers. Surveys should concentrate on flat land supporting shrubby woodland in areas underlain by Shoalhaven group sediments. Suitable soils are shallow, sandy loams. Plants are typically more easily located along the sides of tracks and roads. Surveys for this species should not be limited to its known distribution. For any populations outside Clandulla State Forest surveys should assess the population structure, evidence of disturbance, evidence of flowering and fruit set and fire history.

A survey should be undertaken of private land beyond the State Forest to determine whether the species is present on areas of similar geology nearby.

Life cycle of the species

The biology and life cycle of *P. marginata* is hardly known. Its life cycle appears to be particularly susceptible to activities which interfere with maturing of fruit and the survival of seed stored in the soil. Frequent fire or track maintenance is likely to prevent seedbank

development and result in local extinctions in the long term.

The impact of introduced bees on the ability of the species to reproduce and set viable seed is unknown but, as with other *Persoonias*, they may prevent pollination. The presence of honey bee hives during the flowering season thus has the potential to impact on the life cycle of the species.

Threatening processes

"High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition" is listed in the NSW *Threatened Species Conservation Act 1995* as a key threatening process which may affect *P. marginata*.

Other threats loss and fragmentation of habitat, human impacts on forest resources, and introduced species and inappropriate fire regimes. Threats associated with introduced species may include weed invasion due to dumping of garden waste and introduced honeybees.

Viable local population of the species

The viable population size for *P. marginata* is unknown. The existing populations are not large (generally less than 50 plants). In the absence of detailed genetic information even small populations should be considered viable.

A significant area of habitat

The habitat for any population of *P. marginata* should be considered to constitute a significant area of known habitat due to the vulnerability of the species, the evidence of breeding difficulties and the lack of any reserved populations.

Isolation/fragmentation

Existing known populations of *P. marginata* occur in relatively close

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proximity to each other. Populations would face increased isolation should developments prevent them from interacting through cross-fertilisation (native bees) or seed dispersal (birds or mammals). Forestry activities are unlikely to result in increased isolation.

The record at Dark Corner is isolated from those in Clandulla State Forest but the discovery of further populations nearby may change this.

Regional distribution of the habitat

The known distribution of *P. marginata* covers a small part of the Sydney Basin, South Eastern Highlands and NSW South-western Slopes bioregions. It is within the Central Tablelands Botanical Division, close to the boundary with the Central Western Slopes Botanical Subdivision.

Limit of known distribution

The species is confined to a small area west of Kandos and Clandulla including

the eastern section of Clandulla State Forest. There is a record of an outlying population north of Dark Corner and almost 50km to the SSW of Clandulla State Forest.

Adequacy of representation in conservation reserves

The species is not represented in any conservation reserves established under the *National Parks and Wildlife Act* 1974. The majority of its populations occur in Clandulla State Forest with no special management prescription to confer protection on the species.

It is therefore considered that it is not adequately represented in reserves.

Critical habitat

Critical habitat cannot be declared for *P. marginata* as it is not listed on Schedule 1 of the *NSW Threatened Species Conservation Act* 1995.

For further information contact

Threatened Species Unit, Central Directorate, NSW NPWS, PO Box 1967, Hurstville NSW 2220. Phone (02) 9585 6678 or visit our website www.npws.nsw.gov.au.

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