



Diploglottis campbellii

Common name Small-leaved Tamarind

Conservation status

Diploglottis campbellii Cheel is listed as an **Endangered Species** on Schedule 1 of the New South Wales *Threatened Species Conservation Act, 1995* and is also listed as an **Endangered Species** on Schedule 1 of the Commonwealth *Endangered Species Protection Act, 1992*.

General description

D. campbellii is a rainforest tree that grows to a height of 20m. The leaves have a glossy upper surface and are mostly 5-10cm long although they may reach a length of up to 35cm. Small (2-4mm), creamy brown flowers are apparent from November to March. Fruit are contained in a capsule that is 3.5-5cm in diameter. Photographs of *D. campbellii* and its habitat can be found in Hunter *et al.* (1992) and an illustration of the species can be found in Harden (1991).

Scientific description

D. campbellii (Sapindaceae) is a compact rainforest canopy tree to 20m high. New growth is at first softly hairy and becomes hairless with age. The trunk is grey-brown with brown vertical cracks. The outer surface of the live bark is green with orange-brown blotches. Leaves are 10-35cm long and comprise 4-8 leaflets. The leaflets are elliptic-oblong to \pm ovate, mostly 5-10cm long, 2-4cm wide, apex acute or shortly acuminate, base asymmetric, both surfaces \pm hairless, upper surface glossy, lower surface paler and \pm dull. Leaf stalk 3-6cm long. Leaflet stalk 2-5mm long. Inflorescence is a panicle, 10-15cm long. Flowers 2-4 mm long, creamy-brown. Fruit is a hairless \pm depressed-globose capsule, 3.5-5cm diam., usually with two lobes (occasionally with 1 or 3 lobes); Each lobe holds a single seed with a deep pink-red, or rarely yellow, shiny aril (Harden 1991; Hunter *et al.* 1992).

D. campbellii is one of only two species of *Diploglottis* found in NSW, with the other being *D. australis* (Native Tamarind). *D. campbellii* can be distinguished from *D. australis* by its hairless leaves which are usually <30cm long, and its hairless capsules which are >3cm in diameter.

Distribution

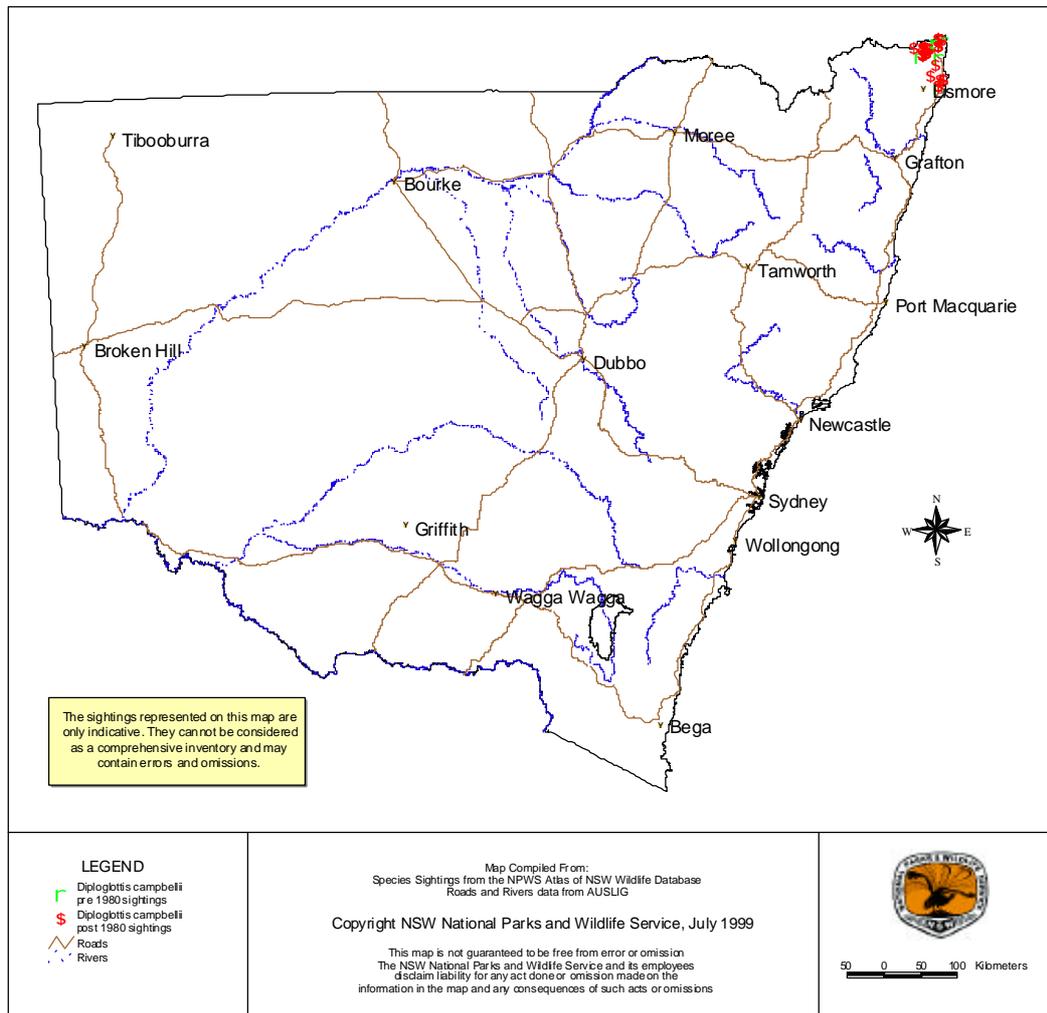
D. campbellii is currently known from 14 locations within an area from the coastal lowlands of the Richmond River on the far north coast of NSW to the Nerand River on the Gold Coast of Queensland. *D. campbellii* survives at nearly all locations as only one, two or three mature individuals. It is considered likely that undiscovered populations exist (Hunter *et al.* 1992).

Recorded occurrences in conservation reserves

All known localities of *D. campbellii* are on private land or road reserves and no populations are known to occur in any conservation reserves (NPWS 1999).

Habitat

The habitat of *D. campbellii* has been largely modified through land clearing. The majority of individuals exist within small rainforest remnants, along road verges, or as remnant trees upon cleared land. The habitat of this species is not narrowly defined as it ranges from low altitude alluvial riverbanks to elevated rocky slopes. Soils are derived from volcanic material, and range from mixed alluvium to skeletal soils on steep slopes. The forest types in which the species occurs similarly vary from luxuriant lowland subtropical rainforest to drier subtropical rainforest with a *Lophostemon confertus* open overstorey (Hunter *et al.* 1992).



NPWS records of *Diploglottis campbellii* in NSW

Ecology

The following limited information on the ecology of *D. campbellii* is from Hunter *et al.* (1992). The species flowers from November until March and the fruit ripens from February to April. Fruit is not produced each year by all trees. The dispersal mechanism of the succulent fruit is unknown. The seeds do not possess a dormancy mechanism and germinate readily. *D. campbellii* would therefore not maintain a persistent soil seedbank and the total population would be entirely represented by above ground individuals.

Threats

The threats to *D. campbellii* vary among sites. However, the major threats are considered to be; habitat destruction through clearing for agriculture, weed invasion (particularly *Lantana camara*) root compaction and physical damage from roadways and road maintenance, riverbank erosion, cattle grazing, and seed collection by the horticultural and rainforest regeneration industry (Hunter *et al.* 1992).

Management

The removal of immediate threats should be the current management priority for *D. campbellii*. This could be achieved through weed removal, erection of fences to exclude stock and by ensuring that road maintenance impacts upon individuals is minimised. Negotiation with land owners is also being undertaken in an attempt to purchase the land upon which some *D. campbellii* individuals occur (Hunter *et al.* 1992).

Recovery plans

A recovery plan has been written for *D. campbellii* (Hunter *et al.* 1992). This recovery plan is currently being updated and reviewed by the NSW NPWS to ensure the requirements of the *Threatened Species Conservation Act, 1995* are met.

References

- Harden G. 1991. Sapindaceae. in G. J. Harden (Ed.) Flora of New South Wales Vol. 2: 285-300. New South Wales University Press, Kensington.
- Hunter J., Jay N., Nicholson N., Nicholson H. and Horton S. 1992. Species recovery plan for *Diploglottis campbellii* (Cheel). Australian National Parks and Wildlife Service Endangered Species Program Project No. 155.
- NPWS 1999. Atals of NSW Wildlife. NPWS, Hurstville.

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