



Australian Government



Local Land  
Services  
Central Tablelands



# Rare plants of the Capertee Valley

## This booklet is dedicated to Ted Daniels (1929 - 2008)

A gentle bushman who loved the Capertee Valley  
and all of its flora and fauna.

This booklet has been produced to help both residents and visitors to the Capertee Valley recognise and identify the threatened plant species found in the valley.

The Capertee Valley has been recognised as a 'Biodiversity Hotspot', a location where there is an unusual number of endemic species, which occur nowhere else in the world. Most of the species in this booklet are only found in the Capertee Valley.

Many plants are threatened because their habitat has been cleared for a variety of reasons, but others can be threatened because their preferred habitat is in a very small, localised area and they only occur in limited numbers. This also, of course, makes them very vulnerable to any impacts such as clearing or frequent fire.

There are several categories of 'threatened species' listed under the *NSW Threatened Species Conservation Act 1995* and *Australian Environment Protection and Biodiversity Act 1999*, they are:

- **Presumed extinct** - the species has not been seen in the wild for more than 50 years.
- **Critically Endangered** - the species faces an extremely high risk of extinction in the immediate future.
- **Endangered** - the species is in danger of extinction if threats continue.
- **Vulnerable** - the species is likely to become endangered unless the threats to its survival are removed.

Habitat conservation is essential for the long-term protection of our threatened plant species.

## *Baeckea kandos*



Photos: Shane Ruming

**Family:** Myrtaceae

**Conservation Status:** **NSW:** Endangered, **Nationally:** Endangered

**Flowering time:** December – January

*Baeckea kandos* is a spreading shrub that grows to 1.5 – 2m in height. Leaves are narrow, 4 – 6mm long and 0.5 – 1mm wide. Single, white, circular flowers about 5mm wide occur in summer and produce seed capsules that are 1 – 1.5mm in diameter.

*Baeckea kandos* grows in heath communities on skeletal, sandstone soils and is associated with Small-leaved tea-tree (*Leptospermum parvifolium*), Spidery tea-tree (*Leptospermum arachnoides*) and Evans' Grevillea (*Grevillea evansiana*). Only one population has been recorded near Dunns Swamp in Wollemi National Park.

Major threats to this plant are track and weir maintenance activities, infection by Phytophthora (die back disease) and the limited genetic diversity within the species due to the small, single population.

## Deane's Boronia (*Boronia deanei*)



Photos: Greg Steenbeeke

**Family:** Rutaceae

**Conservation Status:** **NSW:** Vulnerable, **Nationally:** Vulnerable

**Flowering time:** November to December

A small shrub growing to 1.5 metres high. Its leaves are strongly perfumed and have wart-like bumps on the underside.

The flowers have four petals and are pink, growing in clusters towards the ends of the stems. Scattered populations of this Boronia occur between south-east NSW and the Blue Mountains.

The preferred habitat of *Boronia deanei* is wet heath. It often occurs where open forest joins swamps or creeks.

Threats to this species include damage by pigs, clearing of wet heath and swamps and frequent fire regimes.

## Capertee Stringybark (*Eucalyptus cannonii*)



Photos: Greg Steenbeeke; Gumnuts from *E. cannonii* (right) and closely related non-threatened species *E. macrorhyncha* (left).

**Family:** Myrtaceae

**Conservation Status:** NSW: Vulnerable, **Nationally:** Not listed

The Capertee Stringybark is a tree 10-15 metres high, with grey, stringy bark. Leaves are lance-shaped and the buds and gum nuts are quite distinctive with a prominent rim around the middle (see picture). It can be confused with the similar species red stringybark (*Eucalyptus macrorhyncha*).

The species has only been recorded from the Capertee Valley and nearby at altitudes of 460 to 1040 metres. It grows in grassy woodlands and steeper shrubby woodland slopes.

The main threats to this species include clearing, logging, firewood collection and frequent fire regimes.

## Evans' Grevillea (*Grevillea evansiana*)



Photos: Barry Collier

**Family:** Proteaceae

**Conservation Status:** NSW: Vulnerable, **Nationally:** Vulnerable

**Flowering time:** August – December, peaks in September

Evans' Grevillea is a dense, spreading shrub with white, hairy stems that rarely exceeds 0.5m but can grow to 1.5m in height. Leaves are green and glossy on top with grey-green, hairy undersides and slightly pointed tips. The leaves are 2.5 – 6cm long and 0.3 – 1cm wide. The flowers are deep red or rarely creamy green, are approximately 1cm in length and occur in clusters at the end of branches. The fruit is smooth and releases seed that is stored in the soil until fire, physical disturbance or canopy gaps promote germination.

Evans' Grevillea grows in sandy soils within dry sclerophyll forest or woodland and occasionally in swampy heathland communities. Known populations occur within western areas of Wollemi National Park. It is likely that other populations occur on private land near Wollemi National Park and in Gardens of Stone National Park.

Threats to Evans' Grevillea are alterations to natural fire regimes and habitat degradation resulting from recreational activities such as off-road four wheel driving and intensive camping.

## *Grevillea obtusiflora* subsp. *fecunda*



Photos: Margaret Turton

**Family:** Proteaceae

**Conservation Status:** **NSW:** Endangered, **Nationally:** Endangered

**Flowering time:** Flowers sparsely in winter and spring - flowering peaks in October

*Grevillea obtusiflora* subsp. *fecunda* is a low growing, dense shrub to 1 metre tall. It is a very attractive plant with abundant pink to crimson flowers, although a few shrubs have been found that have pale yellow flowers.

This plant grows in shallow, sandy soils in open scrub and woodland and is mostly found growing alongside Black Cypress (*Callitris endlicheri*). This *Grevillea* is found on a few roadsides within the Capertee Valley and is vulnerable to impacts caused by roadside grading. It is also found on private property and at a few locations in Gardens of Stone and Capertee National Parks.

This *Grevillea* is thought to have an interesting relationship with ants. The seed has an edible waxy wing on the casing which the ants find very attractive. They collect the seed and carry it deep underground into their nests, where it stays until rain floods the nest and promotes germination.

The threats to this species include frequent roadside management activities and frequent fire.

## Rylstone Bell (*Leionema sympetalum*)



Photos: Steve Clarke

**Family:** Rutaceae

**Conservation Status:** **NSW:** Vulnerable, **Nationally:** Vulnerable

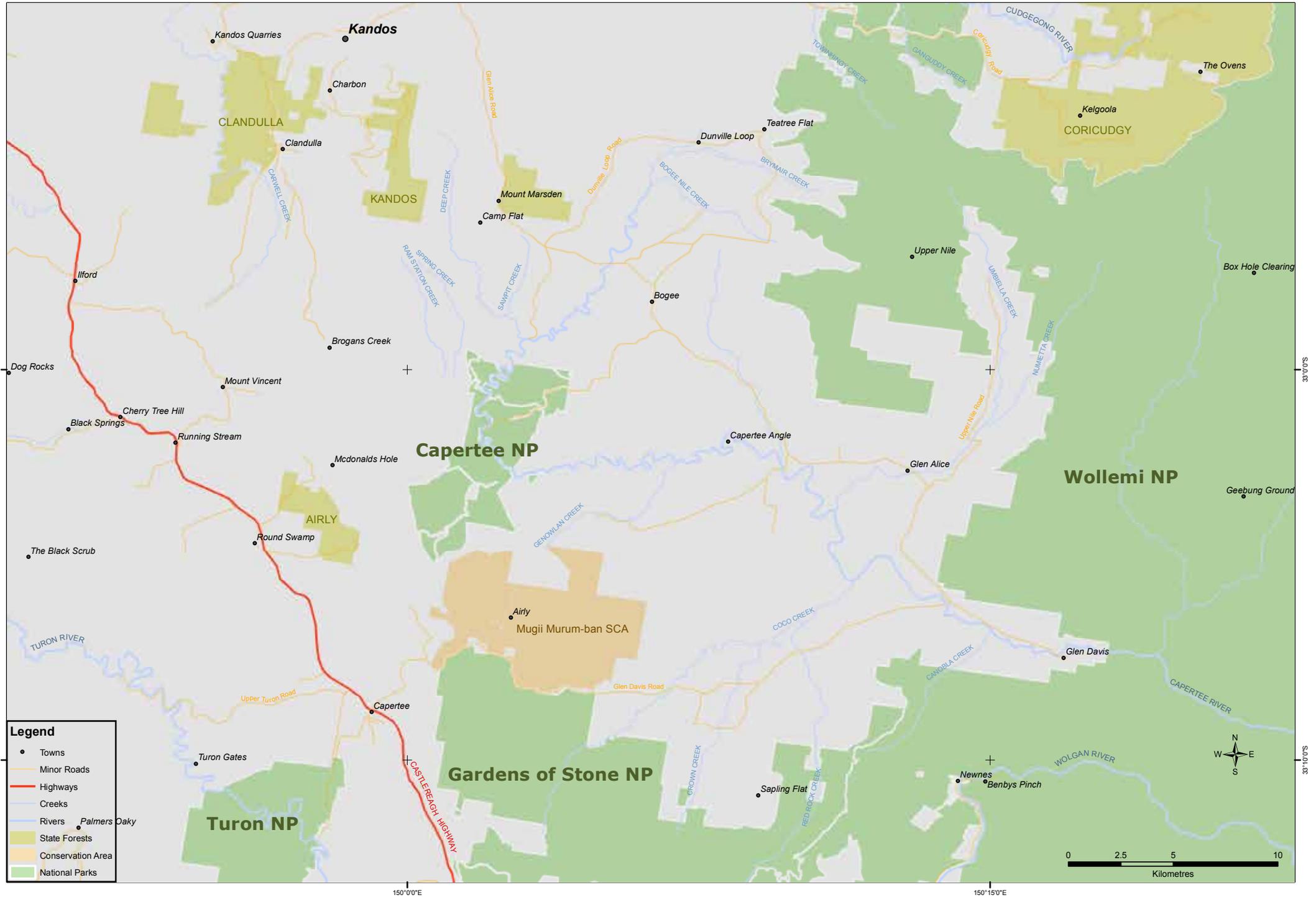
**Flowering time:** Autumn – Spring

The Rylstone Bell is a shrub with angled, hairy stems growing 2 – 3 metres tall. Leaves are smooth, 1.5 – 3.5cm long and 4 – 8mm wide. Tubular, greenish yellow flowers occur in groups of 1 – 3 at the ends of branches. The fruit is about 4mm long and has segments which shatter once dry, releasing seed which lies dormant in the soil until fire or a physical disturbance promotes germination.

This species grows in exposed rocky areas around sandstone outcrops, known as pagoda formations, in dry sclerophyll forest and possibly heathland in the ranges east of Rylstone. It has only been recorded at four sites within Wollemi National Park.

Threats to the Rylstone Bell include grazing by feral goats and alterations to natural fire regimes which has led to increased frequency and intensity of fire.

# The Capertee Valley



## *Phebalium bifidum*



Photo Left: Margaret Turton | Photo Right: Greg Steenbeeke

**Family:** Rutaceae

**Conservation Status:** **NSW:** Endangered, **Nationally:** Not listed

**Flowering time:** September to October

This species was only discovered in 1998. Recent surveys have extended its known distribution but it is still only found in a relatively small area of the valley.

*Phebalium bifidum* can grow into a bush 1.5 metres high, however it is often seen as a small erect plant around 30-60 cm tall. The most notable feature of this plant is its bi-lobed 'y'-shaped leaves. A fairly inconspicuous plant most of the year, it becomes more noticeable when in flower, when it becomes covered in creamy yellow flowers with 5 petals.

This plant is sometimes found growing in the same areas as *Grevillea obtusiflora* subsp. *fecunda*.

Only a few hundred of these plants are known to exist, mostly on road reserve and private property. The Capertee Valley is the only place in the world that this plant is found.

The threats to this species include roadside management activities and clearing.

## Wollemi Mint-bush *Prostanthera cryptandroides* subsp. *cryptandroides*



Photos: Wyn Jones

**Family:** Lamiaceae

**Conservation Status:** **NSW:** Vulnerable, **Nationally:** Vulnerable

**Flowering time:** September to May

As with other mint bushes, the Wollemi Mint-bush has a distinctive, pleasant aroma when the leaves are crushed. It is a low, dense, spreading shrub up to 1 metre high by 1 metre wide. The branches are often blackened by a sooty mould. Leaves are light green and the flowers range in colour from lilac to mauve.

The Wollemi Mint-bush, as the name suggests, is found within Wollemi National Park and is also found on private lands in the Capertee Valley. It has been found growing in a variety of habitats from open eucalypt forest, to woodland and heath communities. This plant is thought to be sensitive to frequent fire regimes as it is dependent on seed stored in the soil for regeneration. Plants are thought to have a lifespan of more than 15 years.

The threats to this species include habitat loss, trampling and grazing, frequent fire regimes, weed invasion, reduced water quality and erosion.

## Mount Vincent Mint-bush (*Prostanthera stricta*)



Photos: Ian Brown

**Family:** Lamiaceae:

**Conservation Status:** **NSW:** Vulnerable, **Nationally:** Vulnerable

**Flowering time:** Most of the year, flush of flowers in spring

Mount Vincent Mint-bush is an erect, bushy shrub growing to 1-2 metres. Its branches are covered in tiny hairs and the leaves and branches are quite aromatic when crushed (as with the other plants in the 'mint-bush' family). The leaves are dark on the upper surface, are lighter below and are strongly veined. Flowers vary from pale mauve to deep purple, and very rarely white, and are found in clusters on the end of the branches.

In the Capertee Valley, this species has only been found on Genowlan Mountain and Mount Vincent. It is only found in one other location in NSW, in the Widden Valley.

This species is often found in skeletal soils and in rocky locations, such as cliff edges and steep slopes. It has also been recorded along streams.

The main threats to this species include clearing for mining, agriculture and roads along with frequent fire regimes.

## Genowlan Pea (*Pultenaea* sp. Genowlan Point)



Photo Left: Ian Brown  
Photo Right: Margaret Turton; Habitat of the Genowlan Pea.

**Family:** Fabaceae

**Conservation Status:** **NSW:** Critically Endangered, **Nationally:** Critically Endangered

**Flowering time:** Flowering peaks in October - November

The Genowlan Pea is a small shrub to 0.5 metres with yellow or yellow and red pea flowers. The species has not yet been formally described by plant taxonomists.

To date, there are only approximately 19 individual plants known. It has only been recorded in one location on Genowlan Mountain where it is struggling to maintain its foothold under many pressures such as drought and grazing by feral goats.

Very little is known about the ecology of this species. Current conservation actions involve protecting the plants from grazing.

## *Pultenaea* sp. Olinda



Photos: Steve Clarke

**Family:** Fabaceae

**Conservation Status:** NSW: Endangered, Nationally: Not listed

**Flowering time:** Spring

*Pultenaea* sp. Olinda is an erect shrub with spreading stems that grows 0.5 – 1 m in height. Its leaves are needle like, alternate and are approximately 1cm by 1mm in size. Dense, yellow pea-like flowers occur towards or at the end of branches. Seed pods are 5 – 6mm in length and it is thought that seed germinates after fire.

*Pultenaea* sp. Olinda grows in crevices amongst sandstone pagoda formations east of Rylstone. The majority of known plants are located within a small area of Currant Mountain Gap in Wollemi National Park.

This species is threatened by its extremely small population size and restricted distribution.

## *Veronica* *blakelyi*



Photo: Greg Steenbeeke

**Family:** Plantaginaceae

**Conservation Status:** NSW: Vulnerable, Nationally: Not listed

**Flowering time:** November to February

*Veronica blakelyi* (formerly *Parahebe blakelyi* and *Derwentia blakelyi*) is a small hairless shrub to 0.5 metres high, with one to several erect, soft woody stems arising from a narrow rootstock. Stems are mostly unbranched below the flower sprays and die back after fruiting. The roundish leaves are usually V-shaped in cross section, are mostly 2.5 - 5.5 cm long and 1-2 cm wide, with a point at the tip. Sprays of the small bright blue - violet flowers are 8 - 40 cm long and are produced in summer. The deep, channelled form of the leaf and heart-shaped fruit are key identifying features.

*Veronica blakelyi* favours damp sites, often along streams and among sedges and teatree, although it also occurs on rocky slopes. Leaves are opposite and are often blue or grey in colour, although green is also common. There are less than 20 known locations of this plant, and none of them occur in conservation reserves.

The main threats to this species are loss of habitat through clearing and inappropriate fire regimes. This species is at risk of extinction due to the small number of sites and very restricted distribution.

If you find any of the plants listed in this brochure, you can help add to our knowledge of their distribution and preferred habitats by informing the NSW Office of Environment and Heritage.

**For further information on threatened species in your area contact:**

**National Parks and Wildlife Service (NPWS)**

**Mudgee**

27 Inglis Street  
Mudgee NSW 2850  
Phone: (02) 6373 9000

**Upper Blue Mountains**

Blue Mountains Heritage Centre  
Govetts Leap Road  
Blackheath NSW 2785  
Phone: (02) 4787 8877

**NSW Office of Environment and Heritage (OEH)**

**Dubbo Office**

48-52 Wingewarra Street  
Dubbo NSW 2830  
Phone: (02) 6883 5330

**Useful websites for information on threatened species include:**

- [www.environment.nsw.gov.au](http://www.environment.nsw.gov.au)
- [www.environment.nsw.gov.au/threatenedspecies/](http://www.environment.nsw.gov.au/threatenedspecies/)
- [www.environment.gov.au](http://www.environment.gov.au)
- <http://plantnet.rbgsyd.nsw.gov.au/>

## How you can help look after our threatened species

- Protect remnant vegetation by excluding stock and allowing these areas to regenerate naturally.
- Protect remnant vegetation near creeks and water courses.
- Revegetate only with locally occurring plant species.
- Retain dead standing trees, these provide excellent habitat for native fauna.
- Become involved in your local Landcare group.

**Capertee contacts:**

- BirdLife Southern NSW  
Capertee Valley Regent Honeyeater Recovery Group  
Email: [southernnsw@birdlife.org.au](mailto:southernnsw@birdlife.org.au)  
Phone: (02) 9647 1033
- Central Tablelands Local Land Services  
Email: [admin.ct@lls.nsw.gov.au](mailto:admin.ct@lls.nsw.gov.au)  
Lithgow: (02) 6350 3110  
Mudgee: (02) 6378 1700

If you find one of the threatened plants in this brochure, please let us know. The more we know about these species and where they grow helps to give botanists a better idea of their distribution throughout the area. If you are interested, a survey may be arranged on your property to look for more of the species.

If you do have threatened plants on your land, you may be able to apply for funding to assist in looking after the vegetation on your property through actions such as fencing and replanting.



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For more information contact  
Central Tablelands Local Land Services  
on 1300 795 299  
[www.centraltablelands.lls.nsw.gov.au](http://www.centraltablelands.lls.nsw.gov.au)