

# Restoration of native vegetation at Giant Rock in 1996

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## Background:

Giant Rock is described in the Land Conservation Council's (LCC) final recommendation for SW Area, District 2 (1982) as a 6 ha Scenic Reserve situated near Allotment 10A, Section 14 of parish of Brit Brit, County Dundas. The volcanic outcrop is a remnant of a Jurassic trachyte plug, similar to Hanging Rock.

An area of 15 acres was surveyed and temporally reserved from sale in 1872, for purposes of public recreation. The LCC recommended in 1982 that the area be permanently reserved to preserve scenic features. It also noted that it 'requires revegetation'.

The public land surrounding the rock was cleared and heavily grazed over a long period since settlement. A few trees and other plants still occur near and on the rock (recorded by RB in 1996):

- Monterey Pine (*Pinus radiata*) – a few trees on the south and east sides,
- Drooping Sheoak (*Allocasuarina verticillata*) – 2 old trees in wire guards were seen on the top of the west side of the mount
- Black Wattle (*Acacia mearnsii*) – a few trees
- Tagasaste (*Chamaecytisus palmensis*) – scattered over most of the rock.
- Wedge-leaved Hop-bush (*Dodonaea viscosa cuneata*) – fairly common on the top of the rock
- Sugar Gum (*Eucalyptus cladocalyx*) – one tree half way up the north side.
- River Red Gum (*Eucalyptus camaldulensis*) – one on the flat
- Necklass Fern (*Asplenium flabellifolium*) on the south side of the rock
- Austral Bracken (*Pteridium esculentum*) – present in cracks at the top and sides
- Common Tussock (*Poa labillardierei*)
- Magenta Stork's-bill (*Pelargonium rodneyanum*)
- Austral Stork's-bill (*Pelargonium australe*)
- Sundews (*Drosera* spp.)

The Wannon Conservation Society (WCS) obtained a conservation grant to re-survey the reserve in 1994, to define the boundary and to establish a fence around the reserve to exclude grazing livestock.

In 1995 Hilary Turner from the WCS asked RB to provide a revegetation strategy for the reserve. Some preliminary planting was done that spring by the WCS and Coleraine Brownies, under the guidance of their leader Coralie Coulson, but most of the planting was accomplished in September 1996 by these groups and a few members of the HFNC.

## The Revegetation Strategy

Choice of tree and shrubs – all plants should be indigenous to the area. Where possible the seeds/cuttings should be sourced from as near to the site as possible and should be from the laterised tableland (the Dundas Tableland land-system) and the Glenelg land-system (land dissected below the laterite). The aim is to re-create an authentic 'original' vegetation.

Some likely/possible original tree/shrub species for the area:

- *Acacia mearnsii* (Black Wattle)
- *Acacia melanoxylon* (Blackwood)
- *Acacia exudans* (Casterton Varnish Wattle)
- *Acacia verticillata* (Prickly Moses)
- *Acacia aculeatissima* (Thin-leaf Wattle)
- *Acacia pycnantha* (Golden Wattle)?
- *Allocasuarina verticillata* (Drooping Sheoak)
- *Banksia marginata* (Silver Banksia)
- *Bursaria spinosa* (Sweet Bursaria)
- *Dodonaea viscosa cuneata* (Wedge-leaved Hopbush)
- *Eucalyptus camaldulensis* (River Red Gum)
- *Eucalyptus pauciflora* (Snow Gum)

- *Eucalyptus viminalis* (Manna Gum)?
- *Eucalyptus ovata* (Swamp Gum)?
- *Exocarpos cupressiformis* (Cherry Ballart)
- *Goodia medicaginea* (Western Golden-tip)
- *Goodenia ovata* (Hop Goodenia)
- *Leptospermum continentale* (Prickly Tea-tree)
- *Leptospermum lanigerum* (Woolly Tea-tree)
- *Melicytus dentatus* (Tree Violet)
- *Ozothamnus ferrugineus* (Tree Everlasting)

A start could be made in spring 1995 by planting 2 or 3 species for which material was readily available. If insufficient time to grow the plants then a direct-seeding approach could be used, placing a few seeds in prepared dug spots.

Landscaping – the planting design/process should consider several factors:

1. Views of the mount from the road – these should not be obscured by placing tall trees in front, at the base of the rock
2. Species should be planted in positions consistent with their natural setting
3. Species such as Drooping Sheoak and Black Wattle, if planted densely, will suppress introduced grasses and other weeds and can be used to control areas presently infested by those weeds.
4. Provision should be made for groundcover species (including native grasses) – that will probably not be obvious for a year or more after grazing is excluded. Any shrubs that germinate from soil-stored seed could be protected from rabbits.

Site preparation – herbicide application prior to planting and around the plant in the first year will greatly improve survival, as a result of removing competition for water. Sprayed spots of about 1 m diameter will be best, rather than broadscale or strip-spraying. Minimal watering of seedlings can be done at planting but should not be required later if good weed control is imposed. Tree guards may be required if rabbits or wallabies are present.

Pest species – non-indigenous trees/shrubs should be removed before or soon after planting is started

### **Species planted on 6 October 1996**

- Silver Banksia (about 20 planted below the row of pine, E base)
- Casterton Varnish Wattle (about 20 planted below the row of pine, E base)
- Drooping Sheoak (about 20 planted below the row of pine, E base)
- Blackwood (about 12 planted below the row of pine, E base); (also in the gully on the S<sup>th</sup> side)
- Black Wattle (about 8 planted on rock flank of S<sup>th</sup> side and 4 planted with sheoaks on E base); (some also in the gully on the S<sup>th</sup> side)
- Woolly Tea-tree and River Tea-tree (*L. obovatum*)(a few were planted at the seepage area on the E fence)
- Prickly Tea-tree (a few were planted at the seepage area on the E fence)
- River Red Gum and Swamp Gum (planted in the gully on the S<sup>th</sup> side)
- Manna Gum and some Scentbarks (*E. aromaphloia*) (planted on the top SW corner around the rock to the top fence). Most of the trees planted there in 1995 had failed.

In all, about 380 trees were planted in Oct. 1996. The trees were protected by mesh guards, pinned down with wire pegs.

The only weed control provided was to chip away the grass at each planting spot, some of us providing a 60 cm x 60cm patch while others had only 30 cm x 30 cm bare patches. This was far from ideal.

### **Postscript**

HFNC visited Giant Rock on 9 Dec. 2000 at 4 pm, on the way to Hilary Turner's property, where we had a BBQ picnic dinner to celebrate the end of the year. Some notes on the visit to Giant Rock (gps 37-30-05/141-43-18) were made by RB and photographs taken:

- Rufous Songlarks were vocal around the mount
- There was a mass of Tall Speargrass (*Austrostipa* sp.) and Wallaby-grass (*Rhytidosperra* spp.).

The Wallaby-grasses were prominent on the rocky platforms. Wedge-leaved Hopbush was also doing well on the mount.

- There were a few patches of Phalaris and a lot of Fog Grass, Sweet Vernal and Perennial Ryegrass. Tree Lucerne (Tagasaste) needs to be removed from the mount.
- There was no detailed assessment of trees planted in 1996 but the photos taken in 2000 show considerable success.
- The mature pines that are prominent in the 1996 photos had been cut down in 1999 and are absent from the Year 2000 photos.



Giant Rock in September 1996 – note the mature pines and gums



Giant Rock in December 2000 – note that the mature pines have been removed

The photos on the following page show a little more of the developments on the reserve. The presence of new trees (planted in 1996) across the reserve is notable.



Giant Rock in December 2000 – note that the mature pines have been removed



Giant Rock in December 2000 – a successful treeplanting result has been achieved



Tasks for the future at this reserve include a thorough plant survey and the control of the bad weeds – including the Tree Lucerne that has established a firm hold on the mount and new pines that may have germinated around the base.