

Plants native to this semi-arid region are exposed to two dangers: death by overheating and death by dehydration. Plants have developed a number of mechanisms so as to survive.

Avoiding heat:

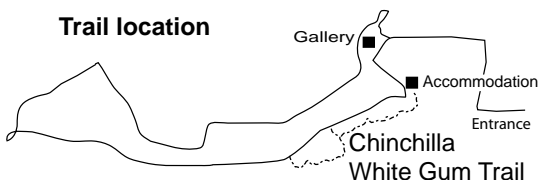
- * hairy or shiny leaves reflect more heat than smooth leaves
- * vertically hanging leaves present less surface area to the sun
- * reduction of leaf size and/or being long and narrow reduces heat absorption

Saving water:

- * the cuticle, waterproof material covering leaves, reduces water loss
- * seeds germinate only after good rains
- * shape of plant allows rain to run towards the base of trunk for maximum absorption by roots

Enjoy the plants, their shape and the feel of the bark. Join us in protecting the semi-arid plants native to this endangered bioregion.

Trail location



Myall Park Botanic Garden is owned and managed by a Board of honorary Directors.

Would you like to help us? Telephone 07 4665 6705
www.myallparkbotanicgarden.org.au



Bird list

As you walk, listen and look for birds. Depending upon the season you may see and hear any or all of the following:

Bar-shouldered Dove	Noisy Miner
Black-faced Cuckoo Shrike	Rufous Whistler
Blue-faced Honeyeater	Spiny-cheeked Honeyeater
Brown Honeyeater	Striated Pardalote
Crested Pigeon	Striped Honeyeater
Diamond Firetail	Stubble Quail
Eastern Yellow Robin	Willy Wagtail
Grey-crowned Babbler	Western Gerygone
Laughing Kookaburra	Yellow-rumped Thornbill

The Myall Park Botanic Garden Bird List is available from the Gallery.

Note your sightings here:

Do the Right Thing

Help us preserve the Garden please

- * All plant material belongs to the Garden - seeds, flowers, nuts, caps, cuttings. Unauthorised removal will result in prosecution.
- * Vehicles keep to the Loop Road and car-parks.
- * NO smoking, open fires or barbecues. Fire danger is HIGH.
- * Take out what you have brought in. There is no rubbish collection.

This trail is maintained by volunteers for your continued pleasure.

The trail was sponsored by the Youth Conservation Corps/Landcare Environmental Action Programme and the Department of the Environment in 1997, and was up-dated by Society for Growing Australian Plants Inc. members and Friends of the Garden in 2005.

Chinchilla White Gum Trail

This trail leads you to a grove of Chinchilla White Gums (*Eucalyptus argophloia*) planted by Dave Gordon in 1965. Since 1996, botanist David Allworth has been recording growth rates to assess the use of the species for plantation-based furniture timber.

To commemorate Dave Gordon's 100th birthday in 1999, 100 Chinchilla White Gums were planted in the avenue along the entrance road and on the western side of the hybrid grevillea gardens near the Gallery.

The Chinchilla White Gum Trail provides an opportunity to consider how Australian plants have adapted to dry conditions. Keep an eye out for features that help moisture retention and heat reduction.



2009

1. The **rocky, lateritic ridge** on which you are standing is one of the remaining formations after millions of years of landscape erosion. These ridges offer the only sites for remnant rainforest species which can be observed throughout this dry eucalypt forest community. Along the sides and at the bottom of the ridge where the soils are deeper and more moisture becomes available, you will observe a change in species.

2. Look ahead to the **caves**, created by wind and water erosion.

3. **Cypress community** surrounds you. Have a close look at the trunk, stem and leaf formations of the cypress pine (*Callitris glaucophylla*). What features has this plant developed to increase moisture retention and to reduce body temperature? This species is the bushman's indicator of poor soil.

4. **Compare the cypress pine with the mat-rush** (*Lomandra* sp.). Note the leaves and colour of this plant. Observe the mat-rushes growing where there is extra water run-off during rains. This species is very useful for holding soils in areas subject to erosion.



5. **Stop, rest and listen** to the sounds of this dry eucalypt forest. Look around you and note the smooth bark apple (*Angophora leiocarpa*). Note the opposite leaves, and flowers without caps. During November and December the bark is shed leaving bright orange, pink and cream trunks. A tree for all seasons.

Leave the trail here or continue further to the grove of Chinchilla white gums.

6. Another tree highly adapted to the dry environs of Australia – the **bull oak** (*Allocasuarina luehmannii*). Can you find the leaves on this plant? Pull one of the needles apart at a segment and observe the tiny leaf points. Is the bark similar to cypress pine? Why?



7. Consider how the fallen leaf, bark and limbs help the living plants. Imagine the numerous tiny animals living amongst this debris.

8. **Note the colour, size and quantity of leaves on the wilga** (*Geijera parviflora*). Remember the bull oak. But note how the leaves hang downwards, and the fine layer of wax of each leaf. How do these features assist in moisture retention and temperature reduction? Tiny white flowers (*'parviflora'* means tiny flowers) generally appear during November to February. If in flower, note the size of the flower and the waxy petals. Why?

9. **Narrow-leaved ironbark** (*Eucalyptus crebra*). Distinguishing feature of all ironbarks is the bark – furrowed and not shed annually. Why? How does this bark type assist with moisture retention and temperature reduction? Question to ponder: The slower *Eucalyptus crebra* grow, the harder they are and hence better for use as a building material. Why?

Turn right and head up the gentle slope.

10. Stop and listen to the insects and birds.

11. **Another ironbark** (*Eucalyptus nubilis forma rosa*). Compare the bark with *Eucalyptus crebra* you just passed.

Look around for the grove of Chinchilla white gums.

12. **Chinchilla white gums** (*Eucalyptus argophloia*) (*'argophloia'* means bright white bark). What bark do these trees have? Now you understand why this tree has been given its common name. Species naturally occurring in the Chinchilla district north of this Garden but due to increasing land clearing for agricultural purposes, this species has been classified as rare. Note the fine leaf structure and white flowers around May to August.

Turn right up the old track to the loop road.

