

108.5



On the viewing platform of the bridge, spot the fine specimen of a Cabbage Tree Palm (*Livistona australis*). Palms like this are one of the distinctive features of rainforests in warmer areas.

How could you make the roof for a cubby house using the leaves from this plant?



116

The Bracket Fungus (*Trametes versicolor*) can be observed on the dead tree stump, part way down the gully. These and many other fungi help decompose dead plants and animals.

What would the earth be like without them?

112.8



At the 'Commemoration Seat' think about this:

Rainforests possibly contain the earth's richest gene pool for future medicinal plants. They are a huge source of biodiversity, containing an estimated four million species of plants, animals and micro-organisms. Who knows the value of these plants! Yet we are still clearing rainforests in South America — and even Australia.

117.3

The Brush Cypress Pine (*Callitris macleayana*) contains substances that resist termite attack.

Suggest what early settlers might have used this timber for.

123.5



The bright red berries of the Brush Cherry or lilly pilly (*Syzygium australe*) are edible and relished by many birds and people.

Lilly pillies made great snack food for Indigenous Australians.

Have you tried lilly pilly jelly?



Australian Government

Australian National Botanic Gardens



EDITION NO. 2

HEAD ED (that's you!)

AUSSIE PLANTS AND PEOPLE

NOT ONLY



FOOD

&



TIMBER

CANBERRA Today — You are going to see lots of different ways different Australian plants have been used by different people.

What did Indigenous Australians use plants for?
What about the early settlers?

HOW DO WE USE PLANTS TODAY?

How do *we* help *plants*?

**BREAK OUT OF THE SQUARE!
THINK BEYOND FOOD AND TIMBER!**

**HOW ARE PLANTS IMPORTANT TO PEOPLE
— AND PEOPLE TO PLANTS?**

**Welcome to the Australian National Botanic Gardens
in the national capital.**

1. DON'T PICK
FLOWERS, LEAVES,
SEEDS OR
FRUIT



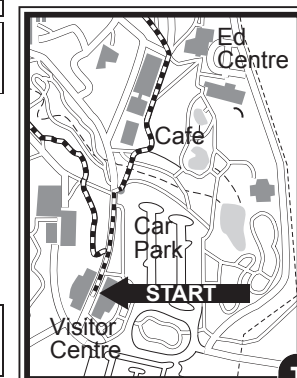
3. DON'T LITTER
OR BIRDS
WILL
THROW
UP



2. STAY
ON THE PATH



4. LOOK FOR
PATH MARKERS



FROM the Visitor Centre, go down the steps on the southern side to find *Acacia pycnantha*, the Golden Wattle. In 1988 the Golden Wattle was proclaimed as Australia's national floral emblem. This specimen was planted by Hazel Hawke, the wife of Prime Minister Bob Hawke. Our national colours are based on the green and gold of this wattle.

Can you think of other plants that have been used as signs, symbols or emblems?



Busted!

Go back up the steps to the Visitor Centre then along the Main Path towards the Rainforest Gully. You'll see a 'bust' (a sculpture of someone's head and shoulders) of one of the earliest known botanists of Australian plants, Joseph Banks.

What group of plants now commemorates his work?



Further along the Main Path a variety of decorative Australian plants is displayed. They are often used in home gardens around Canberra and elsewhere.

WHICH ONES WOULD YOU CHOOSE TO GROW IN YOUR OWN GARDEN?



1 **4**

2.2

(What does .2 mean?)

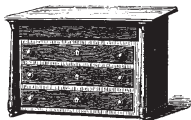
At the bridge over the Rainforest Gully, spot the Blackwood (*Acacia melanoxylon*). This tree provides shade for the understory of the Tree Ferns (*Dicksonia antarctica*).

Blackwood timber was used by Indigenous Australians to make tools but is now prized for making quality furniture.

While on the bridge, look on the down-side for the small Huon Pine (*Lagarostrobos franklinii*). It is the small tree with the big label. This tree may live for thousands of years but grows very slowly. This one is less than 30 years old. Huon Pines are found only in Tasmania and were harvested by convicts in the early days of settlement for their timber.

The timber is soft, durable and resistant to rot and marine organisms.

Suggest what the early convicts might have made from Huon Pine timber.



100.8

Casuarina cunninghamiana is named after Alan Cunningham, an early botanist who explored much of northern Australia.

How do you think you could get a plant named after you?

102.3

WHERE'S 'WOLLI'?

FANCY HAVING A LIVING FOSSIL NAMED AFTER YOU! DID HE OR DIDN'T HE?

David Noble is a modern-day explorer who came across this rare species in the Blue Mountains just west of Sydney. Scientists knew from the fossil records that a close relative of the Wollemi Pine (*Wollemia nobilis*) had existed two million years ago.

Write a limerick about how Noble felt about his discovery.

THERE WAS A YOUNG MAN WITH A FOSSIL...

107.5

The Australian Red Cedar (*Toona ciliata*) is now totally protected. This is a very young specimen, but in another 200 years might be big enough to use for the wonderful timber for which it is famous. Your great-grandchildren would have to move the path though, because it will grow so big.

Would you rather your great-grandchildren built furniture or stood and admired the tree?

How far back can you trace your relatives? Two million years?

108 A BURNING ISSUE!

Hedycarya angustifolia grows branches that are straight and of an even thickness. Indigenous Australians prized them for trade as fire-sticks.

Suggest why they would be ideal for starting fires.

Suggest other tools or weapons that could be made from this wood.

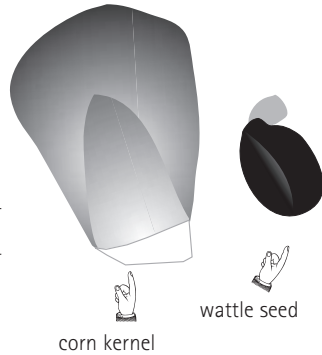
79

86

Wattles, with their distinctive fluffy yellow flowers and pea-like seed pods, belong to the largest and most widely distributed Australian genus *Acacia*. Indigenous Australians used the seeds of some wattles to make a form of flour.

Suggest what they would have used to grind the seeds.

How long do you think it would have taken to collect and prepare enough of these seeds to make a damper for one person?



(size comparison)

87

The strong, hard wood from many inland plants (including some hakeas) was used by Indigenous Australians to make tools and weapons.

Can you suggest some tools and weapons that could be made?

92

TIME OUT!

How long have you spent on this walk so far? Check out the time on the sundial up the hill.

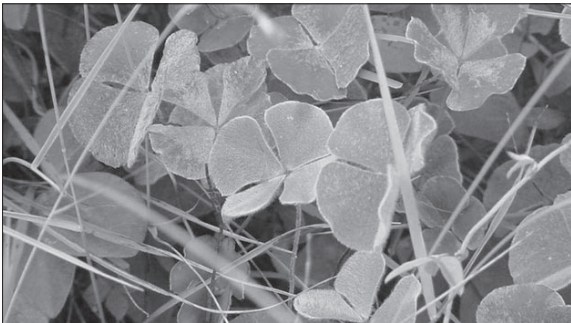
What happens to a sundial when daylight saving is introduced and can you suggest how you could modify a sundial for it?

97.7

At the Rock Garden Pool, look for the Nardoo (*Marsilea drummondii*).

Nardoo is a low-growing aquatic plant with a leaf that looks like a large four-leafed clover. Nardoo was used by some Indigenous Australians as a food — but requires the correct preparation or you might suffer the same consequences as the Burke and Wills expedition!

What happened to them?



Nardoo (*Marsilea drummondii*)

9.6



HOW LONG IS A PIECE OF STRING?

Indigenous Australians used the fibre from the leaves of *Dianella revoluta* to make string.

Suggest what they could have made with the string.

11.5



But Indigenous Australians used plants for many other purposes. For example, they gathered nectar from flowers, particularly from *Banksia* and *Callistemon* (bottlebrush).

Suggest how and why they did this.

13 21

Nature's Pharmacy

The path now enters an area displaying a group of plants of the family Myrtaceae. This family includes gum trees (*Eucalyptus* species), bottlebrushes (*Callistemon* species), tea trees (*Leptospermum* species) and paperbarks (*Melaleuca* species). Myrtaceae dominate Australian vegetation.

Letters to the editor

Dear Head Ed,

When I tread on gum leaves, why do they smell of cough mixture?

Signed,
Con Fused

18.5

THE BUSH HARDWARE SHOP!

The layers of soft, papery bark on the Melaleucas give them their common name, paperbark. Nowadays we use steam cookers, wrapping paper, mattresses, toilet paper and roof tiles but Indigenous Australians had the paperbark to do the same things!

24

But, wait! There's more!
(Versatility, that is...)

Another multi-purpose plant is the grass tree (*Xanthorrhoea* species) which provided Indigenous Australians with edible starch in the base of the young leaves. Also, the long flower stalk made a lightweight spear shaft when dried. The trunk produces a resin which when melted made a very strong glue used to attach stone heads to axes and points to spears.

ON THE BUS...



Write your reply to Con.

Dear Con,

Signed,
Head Ed

25

The Gynea Lily (*Doryanthes excelsa*) can have flower spikes up to 5 m high, topped by clusters of large crimson flowers during summer. You can buy these from the florist for up to \$300 each.

Suggest why they are so expensive.



The family Proteaceae is found only in the southern hemisphere and is prominent in the Australian bush. It includes such well known groups as *Grevillea*, *Banksia*, *Hakea* and *Telopea*.

Proteaceae are named after the Greek god Proteus, who could change his shape and form at will. As you walk along, note the *different* leaf shapes, sizes and textures as well as a *similarity* of flower forms.

Mallee eucalypts generally live in areas of irregular and low rainfall. Check out the swollen stem base ('lignotuber') of *Eucalyptus approximans*. Early settlers used these lignotubers for fuel as they burn slowly and with great heat.

The Tumut Grevillea (*Grevillea wilkinsonii*) is a rare plant.

It is named after a local naturalist, Tom Wilkinson, who discovered it in the early 1980s. It occurs along the Goobarragandra River, near Tumut. Lots of different groups are working together to make sure this plant survives, including government agencies and local communities. We are propagating this plant here at the Gardens.

Why do we bother?



BACK AT SCHOOL...

It seems that the people who named all these plants were preoccupied with the ancient European world.



Why do all these plants have Latin or Greek names?

Investigate this naming system further.



A 'cultivar' is a cultivated variety of plant. It may be a 'hybrid' (a mix of two plants) or may be a selected form of a naturally occurring species.

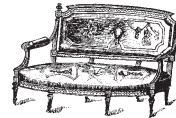
Can you find Jack McGuire's Red and Marian's Marvel? near 50.9



The botany of Botany Bay

The wide variety of decorative, low garden shrubs of this area reflect the diversity of soil and climatic conditions in the Sydney region. Joseph Banks was amazed at the diversity of plants on the shores of Botany Bay, which is why it got its name!

Hey, Con! Did you get that? Check them out.



PLANTS FOR PEOPLE? NO! PEOPLE FOR PLANTS!

Sit for a moment and reflect. This seating was placed by the Friends of the Australian National Botanical Gardens so that you are able to do this.

'GIVE ME A HOME AMONG THE GUM TREES...'

Gum trees have provided people with lots of commodities over thousands of years.

What do you have in your home that might have come from gum trees?

CLUE:
We use more than just the timber!

NATURE'S GRAFFITI!



The Scribbly Gum (*Eucalyptus rossii*) displays the feeding paths of small insect larvae but the decorative effect has provided inspiration for writers.

Can you think of some Australian stories that are based on plants?

WARNING! Don't try this on your goldfish!

The deep purple flowers of Australian Indigo (*Indigofera australis*) were used by some early settlers as a fabric dye. Some Indigenous Australians also used the leaves of *Indigofera* as an aid to catch fish.

Suggest how they did this.

At the Eucalypt Lawn you can observe some fine examples of Australia's most widely distributed large tree species. Notice the variety of leaf colours and shapes and the distinctive barks.

Eucalypts have inspired countless Australian artists, such as Albert Namatjira, Arthur Streeton and Hans Heysen.

Which tree inspires you the most? Why? Why not sketch it here?

