Bardens 'n Bush

A bushwalker's guide to the
Bardens Creek track at Lucas Heights, NSW

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Before you start the walk

These are bush tracks and so in places are rocky and uneven. Plank bridges have been made where the track crosses creeks. Rocks and bridges can be slippery after rain. The most severe step-up is only about 300mm.

Sturdy markers numbered from 1 to 15 identify the Blue track. There are additional blue pointers along the Blue track. The Yellow track is identified with yellow pointers.

Our group includes people in their late sixties and heart by-pass survivors who regularly walk this track. It is not a difficult walk and no part of the track is further than a kilometre from the road. The total length of the track is 2.6 kilometres. At our leisurely pace the long walk generally takes about two hours, the short walk about 90 minutes, and the walk to the engravings and back about 60 minutes. That said, it is important to take sensible precautions.

- Make sure someone knows where you are going
- Wear a hat and sensible boots or shoes
- Apply sun and insect protection
- Take a water bottle
- Take pressure bandages
- Carry a mobile phone

Contents

Preface

This booklet was compiled by Menai Wildflower Group. We wish to acknowledge the invaluable contributions made by:

ANSTO: For making and marking the trails and funding the printing costs.
Les Bursill: Tharawahl anthropologist for providing the article and the photos.
Harry Brian: For the use of his species lists.
Elva Bowmer: For the use of Len's sketches.
Pat Pillai: Cover design.

The aim of this guide is to help people to understand and appreciate our native bush. The walk and its environment are detailed as simply as possible with only a few plants from each area described. For those who wish to probe a little deeper, in the second half of the booklet there is additional information on the items that are underlined. More experienced walkers will find the species list in the back of value.

Introduction to first edition

The year 2002 was a tough one for the Bardens Creek flora and fauna. A prolonged drought, one of the worst on record, resulted in a poor Spring with little seed set and the loss of many mature plants. The drought was followed by a November bushfire that destroyed much immature seed, eliminated most of the understorey, and blackened the trees. We had almost completed the text of the guide when the fires struck and the valley no longer looked like the one we had described. We were faced with the question of whether or not to scrap what we had done. We decided to go ahead because experience has taught us that the Sydney bush regenerates quickly and will soon look much as it used to look.

In the short term, the main difference will be in the understorey. Fast growing ephemeral grasses as well as perennials like Beetlebush, Gymea Lilies, the trunkless grass trees and Bracken Fern that re-shoot from underground stems will revel in the lack of shade and the mineral rich ash for the next year or two. But - depending on rains - in a rhythmic recovery, shrubs that grow quickly from seed, such as acacias, pea flowers, hakeas, etc., will germinate by the thousand. The competition will become chaotic as too many plants vie for too few resources. A thinning out will ensue and continue, until in all probability, another fire levels the playing field and it all starts again.

Now is the time to have Bardens n' Bush available as the endemic flora responds to fire with spectacular displays of wild flowers. The next 2 to 3 years, particularly the spring and autumns of 2003 and 2004, should be rewarding years for the bushwalker.

Bardens Creek walking trail (The Blue Walk)

Bardens Creek flows northeast off the Woronora plateau before turning north to join Mill Creek. It lies between the old and the new tip sites; in fact there was a proposal, luckily abandoned, that the valley itself should be the new tip site. The headwaters arise near the reactor and beside the new tip site and the old Night Soil Depot, so it is a pleasant surprise to find how little affected the bush can be, amidst such disturbed surroundings.

The Blue Walk is really a collection of tracks. The main trail is approximately 2.6 kms but there are several alternative routes that can make the walk shorter or longer as you desire. There is much to see including Aboriginal engravings, and a waterfall - if it has been raining recently. The return trip to the Aboriginal engravings at Marker 6 is about two kilometres.

The track crosses a number of different plant communities containing several hundred different species; therefore there is always something in flower.

Spring when the Waratahs and the Gymea Lilies are in bloom is everybody's favourite, but autumn-winter when many Banksias, wattles and heath plants such as Red Five-corners (*Styphelia tubiflora*) hit their peak can be just as interesting. It is in the inherent nature of the Sydney bush that there is such variation from year to year - due to fire, drought and flood - that each walk reveals something new.

The starting point is on the western side of New Illawarra Road opposite Rutherford Avenue, the entrance road to ANSTO. The trail begins on the edge of an area that has been repeatedly disturbed by contractors putting in services.

Stage from Marker 1 to Marker 2

A gentle down hill walk of about 130metres to the creek.

The trail winds through open forest on a northwest-facing ridge very prone to bushfire so the plants on this slope are adapted to survive them. The trees are small, a mixture of Scribbly Gum and Bloodwood dominate. The Scribbly Gums (*Eucalyptus haemostoma/racemosa*) have white bark frequently marked with doctor-like scribbles caused by the larvae of a moth tunnelling beneath the previous years bark before it was shed. The very white bark is effective at reflecting radiant heat. The trees with the dark grey (possibly blackened by bushfire) flaky bark are Red Bloodwoods (*E. gummifera*). They received their common name because of the red resin (kino) they weep when damaged. The bark insulates the tree from fires and they readily re-shoot from a lignotuber when young or epicormic buds when they are older.

The understorey also contains many lignotuberous plants such as Drumsticks (*Isopogon anemonifolius*) that have yellow cylindrical flower heads. The common name is due to the appearance of the flower heads which are shaped like the sticks used to beat a base drum or the shape of the seed capsules which are similar to the wooden sticks used to beat snare drums. Other lignotuberous plants here include the red-flowered Mountain Devil (*Lambertia formosa*). The many pea flowered shrubs do not usually survive fires but have very large hard-coated seeds that can remain dormant in the soil for years until the heat from a bushfire fractures the coat. In spring this is a great place to see the blue flowers of the Dotted Sun Orchid *(Thelymitra ixioides).*

Marker 2

Bardens Creek at this point has a low gradient and is comprised of several streamlets flowing down a bed about 30 metres wide. This sedgeland/swamp environment functions as a natural fire break and results in a total change in the nature of the vegetation. Tree ferns (*Cyathea australis*), Sword Rush (*Gahnia sieberiana*), Bottlebrush (*Callistemon citrinus*), Sydney Golden Wattle (*Acacia longifolia*) and the yellow pea-flowered Native Broom (*Viminaria juncea*) with its weeping leafless stems are some of the taller plants. The groundcover was largely Coral Fern (*Gleichenia dicarpa*) and in time no doubt it will return.

Stage from Marker 2 to Marker 3

50 metres across plank bridges.

Marker 3

This is a signpost at a split in the trail. A track branches off to the left and climbs a hill towards the old nightsoil depot but the blue track continues descending to the right. Three different species of Banksias grow in the area around the sign. The Heath Banksia is a tall shrub. The tree-like Old-man Banksia has strange bubbly bark, saw-toothed leaves and persistent old cones. The Hairpin Banksia (*Banksia spinulosa*) is low, usually about a metre high, with narrow leaves and honey coloured flowers that have a red or black style hooked like a hairpin.

Stage from Marker 3 to Marker 4

About 150 metres and a steady descent.

Along the creek line to the right the bottlebrush dominates. The open forest through which the track passes is ever changing. At first Old-Man-Banksias are common over a Gymea Lily (*Doryanthes excelsa*) understorey. Then the Sydney Peppermint (*Eu. piperita*) with rough grey bark along its trunk and larger limbs and only the smaller branches smooth and white becomes more abundant. *Piperita's* crushed leaves have a distinct peppermint smell. As the ground gets rockier the Sydney Red Gum (*Angophora costata*) with its smooth bark varying with the time of the year from orange to pink to grey dominates. Red Gums are well adapted to this environment having a remarkable ability to seemingly flow around rocks and grow out of them. Waratahs when not in bloom are seldom noticed, but in spring they make their presence felt. Other shrubs in this area include Needlebush (*Hakea sericea*) with fine sharp pointed leaves and large fruit, and the Broad-leafed Geebung (*Persoonia levis*) with large, bright green leaves and black, soft paper-like bark.

Marker 4

A fine example of a Scribbly Gum with seven separate trunks we affectionately call the Seven Sisters. Scribbly Gums are often single trunked in areas that do not burn but multi trunks in fire prone environments. The many trunks arise from a large lignotuber.

Stage from Marker 4 to Marker 5

250 metres of steady descent.

The track moves back towards the creek.

Marker 5

Here the track splits. The main (Blue) track goes to the right (to Marker 7) while the left branch descends on its way to the site of some Aboriginal engravings.

Stage from Marker 5 to Marker 6

A 300 metre section comprising a steady descent, a creek crossing, then a steeper climb up the ridge to a flat rocky section. From Marker 6 you will need to return to Marker 5.

Marker 6

In a shallow, often wet depression, an Aboriginal engraving of a kangaroo is still clear. The other engravings are eroding rapidly. It is doubtful there will be anything left for the next generation to see. Assistance will probably be required to make out the two human figures beneath the tyre marks of motorbikes. Axe grinding grooves can be seen in the area. See also *"The Aboriginal people of Menai/Lucas Heights and Bardens Creek"* by Les Bursill on page 14.

Return to the main track. At Marker 5 turn left to continue on Blue track.

Stage from Marker 5 to Marker 7

A 50 metre stage crossing a bridge. Immediately after the bridge an opening to the left leads to an open rocky area beside the creek.

Marker 7

This is a great spot for water dragons, dragonflies and tadpoles. In springtime the pink flowers of the River Dog Rose (*Bauera rubioides*) dangle over the water. The pink-white racemes of the Pink Swamp Heath (*Sprengelia incarnarta*) are also common. Water-loving shrubs growing among the rocks of the streambed include the Stiff-leafed Bottlebrush (*Callistemon rigidus*) with its narrow stiff leaves and Long Leaf Lomatia (*Lomatia myricoides*) with long-serrated (toothed) leaves and yellow grevillea-like buds. Along the edge of the low heath to the right the tiny red rosettes of the insectivorous Sundew (*Drosera spathulata*) can be seen. Sundews get their name from the dew like appearance of the droplets of sticky fluid that they use to trap and digest tiny insects. Insectivorous plants are a sign of low nitrogen levels in the soil.

Aboriginal axe-grinding grooves can be seen beside the stream.

Stage from Marker 7 to Marker 8

180 metres initially level then a short steady descent.

Mallee-Heath. Rough leaves of Beetlebush and Swamp Banksia (*Banksia paludosa*) crowd in on the path. Beetlebush (*Angophora hispida*) has grey leaves; its common name is due to the many brilliant insects attracted to the large clusters of white flowers in November-December. Its new growth is covered with red hairs giving it a velvety appearance. This Swamp Banksia has stiff, dark green spoon shaped leaves.

The track descends past Grey Gums (*Eucalyptus punctata*). The bark of this tree peels off to leave orange flashes on the trunk, freshly peeled it is easy to mistake this tree for an *Angophora costata* but the peeled bark is thick and corky compared to the thin, hard bark of the Sydney Red Gum. The Grey Gums foliage is a particular favourite of koalas. Christmas Bush (*Ceratopetalum gummiferum*) is also prevalent with it lightly serrated trifoliate (three-leaflet) leaves. The path rejoins the creek just before the waterfall.

Marker 8

Marker 8 is a great snack and drink spot. The lip of the waterfall looks down into a valley dominated by Sydney Red Gums. This area was christened the Valley of the Giants by one of our members as he walked under the numerous Gymea Lilies with flower stalks up to 6 metres high. To the left of the falls the creek is lined with the attractive Umbrella Fern (*Sticherus flabellatus*). This fern is also prevalent on the valley floor. There are several Waratahs in the area.

Stage from Marker 8 to Marker 9

150 metres. The track rises to cross a steep hillside before descending evenly.

In spring the glorious large pink flowers of the Wax Flower (*Eriostemon australasius*) are a noticeable feature. Shortly after crossing a small bridge between clumps of Waratahs, the track splits.

Marker 9

From here you can take a shorter way home. The "Yellow" track to the right is steep but is a shorter way home. The left track to Marker 10 is longer but the climb more gradual.

The short way home (Yellow track)

Stage from Marker 9 to Marker 13

This track climbs straight up the hill for 250 metres.

Grey Gums and Sydney Peppermints blended with the Sydney Red Gums gradually give way to Bloodwoods higher up the slope. Old-man Banksias are a major feature of the next level. In spring pink Boronias with their four petals are common amongst the broken rock at the foot of the escarpments, the white flowered Wedding Bush (*Ricinocarpus pinifolius*) also favours the same environment.

At the crest the short (Yellow) track rejoins the longer Blue track. Turn right. The rest of the route is described under Stage from Marker 12 to Marker15.

The longer way home (Blue track)
Stage from Marker 9 to Marker 10

400 metres flat easy walking.

The valley gradually opens out. The vegetation changes noticeably. Teatree (*Leptospermum*) and Sheoaks (*Casuarinas*) grow in the deeper, sandier soils of the valley floor. This vegetation is sensitive to fire and has been noticeably effected by the numerous bushfires of recent years.

Stage from Marker 10 to Marker 11

The right hand branch is the most direct way home and takes you to Marker 12. The left-hand track is 80 metres with an easy descent to the creek near a deep waterhole (Marker 11). There are two ways to return. Either return to Marker 10 or take the slightly different track to lead towards Marker 12.

Marker 11

Marker 11 is another great place for taking a break. This pool is at the junction of Bardens Creek and the creek that flows out of King Fern Gully. It never dries out and contains small fish (*Galaxias sp.*) and yabbies. Downstream from the pool Crofton weed and Mist plant are major problems, mingled with the native King fern *(Todea barbarus)*. There are numerous red-flowered bottlebrushes *(Callistemon citrinus)* in the area.

Stage from Marker 10 to Marker 12

400 metres. Initially climbing gradually, then a short steep section before the path levels out and follows the contour of the hill, giving you a chance to catch your breath. It then ascends steadily.

After leaving the pool the tracks rejoin before the short steep climb through open forest. There are several particularly large Bloodwoods in the area but the casuarinas and hakeas that were dominant have been severely reduced by the fires. No doubt they will return in time. The track follows the contour of the hill above King Fern Gully. After the track moves away from the gully, Sword Rush (*Gahnia sp*) can be seen on the swampy ground to the left.

Marker 12

The Blue track turns off to the right. The left-hand branch continues for 200 metres before emerging onto a cleared power line access road. ***Either route will do to walk home as they are of similar length****. The Blue track has more undulations and views of the valley you have just walked as it follows the escarpment and links up with the short track, but it is usually free of motorbikes that are occasionally a nuisance on the road. Probably more people use the access road.*

Stage from Marker 12 to Marker 15 via access road

800 metres, an easy ascent followed by a flat walk and a gradual descent.

The combined effects of recent fires and track clearing have devastated the flora along the access road. Still, particularly on the right hand side, pockets of heath can put on remarkable displays in Spring and Autumn. A wet season is required to bring out its best. Several species of Spider Flower (*Grevillea*) grow alongside the road. All are shrubs: the Silky Spider Flower (*G. sericea*) with its pink-purple flowers, Grey Spider Flower (*G. buxifolia*) with its large grey, woolly flowers and its smaller flowered cousin (*G. sphacelata*). *Woollsia pungens* is distinctive with erect, metre or more stems, crowded with leaves. A feature of this plant is the white flower petals that fold back over the pungent pointed tips of the leaves. Look out for the red tubular flowers of the low, scrambling Red Five-corners (*Styphelia tubiflora*) in autumn-winter.

Along the crest, the track passes through mallee-heath. There are two separate tracks that merge from the right before Illawarra Road is reached. Turn right at the gate and follow the track through the disturbed land beside the road back to Marker 1.

Stage from Marker 12 to Marker 15 via "Blue" track

800 metres in total with a sharp ascent then an undulating walk around the edge of the escarpment.

Stage from Marker 12 to Marker 13 via access road

300 metres.

Bloodwoods and Sydney Red Gums dominate. Old Man Banksias are common. An attractive feature of the understorey is some handsome multi-headed grass trees (*Xanthorrhoea arborea*). *Bossiaea hetrophylla* is a distinctive low shrub with flattened stems and the leaves arranged in opposing rows. Its pea flower is yellow with a reddish-brown keel.

Another track from the access road joins in from the left.

Marker 13

The short (Yellow) track climbs out of the valley from the right to join the long (Blue) track.

Stage from Marker 13 to Marker 14

250 metres, undulating.

The soil becomes increasingly sandy. Scribbly Gums, Mountain Devil, Conesticks and Drumsticks reappear.

Marker 14

The track splits again but either branch will get you home.

Stage from Marker 14 to Marker 15

The left-hand branch crosses Mallee Heath. Beetlebush and the occasional small Scribbly Gum characterise this heath. In spring the heath is enlivened by the purple flowers of the Native Iris (*Patersonia longifolia*) waving above grass-like leaves and the pink fluffy flowers of *Kunzea capitata*. This branch then joins the cleared power line access road. Turn right before the gate on to New Illawarra Road. To return to the starting point, (Marker 1) simply follow the track through the disturbed land beside the road.

The right hand branch is slightly shorter at about 250 metres. It passes through open Bloodwood/Red Gum forest before dipping to cross the heath lower down. This track emerges at Marker 15 only 60 metres from the starting point (Marker 1).

The Bardens Creek environment

Soils

The Hawkesbury sandstone through which Bardens Creek cuts its way is a major influence on the local flora. This source material is high in silica and low in minerals and organic matter. It therefore produces soils of low fertility, poor in water holding capacity. This low fertility/water-retention is exacerbated on the ridges where the soils are particularly thin and exposed to the wind and sun. The most infertile soils of all occur on slopes where the base rock is close to the surface. Rainwater moving down the slope leaches the skeletal soils of any soluble minerals. Here, there are no trees, only heath grows. There is little in the way of leaf litter and little shade so the soil's surface is constantly exposed to the sun and wind. In parts of the valley pockets of soil have accumulated and the flora gets more protection so the trees are often taller and the undergrowth denser. The creek lines carry their own vegetation and where inward sloping rocks or impervious soils cause sediment build up, swampy pockets occur.

Rainfall

A second major influence is the erratic rainfall pattern. Long dry periods and poor water-retaining soils have produced a suite of water efficient plants.

Fire

A third major influence is fire. It is an inevitable accompaniment to a hot, drought-prone environment and the local flora has been shaped by its influence over many million years. Fire is not the catastrophe to this environment that it is to the human one.

Vegetation communities

Open Forest

Open forest is defined as forest with trees 5 to 30 metres tall and a 30-70% canopy cover. The Bardens Creek open forest has a variable structure depending on aspect, soil type and moisture availability. On the thin exposed lateritic soils of the upper slopes and western facing ridges it is characterized by small trees <10m of *Eucalyptus haemostoma/ gummifera* (Scribbly Gum/Bloodwood). The shrub layer is also low and scattered. It contains many members of the *Proteaceae* family (including *Isopogon, Petrophile, Lambertia and Grevillea*); *Fabaceae* family (*pea flowers*), incl. *Bossiaea, Dillwynia* and *Pultenaea*, Grass trees (*Xanthorrhoea*) are also common. The spacing between these shrubs allows a ground layer of grasses, herbs and orchids.

Anywhere there is exposed sandstone the Sydney Red Gum is the dominant partner with either the Sydney Peppermint or the Grey Gum. Old Man Banksias are frequently scattered amongst them. Gymea Lilies are a common feature of the understorey. In the protection of the lower slopes Christmas Bush and Waratahs become more common.

Open Heath - Mallee Heath

There are only small patches of open heath characterized by *Epacridaceae* but Mallee-Heath occupies the slopes where the soil is a thin veneer over sloping base rock. Mallee, Beetlebush and *Banksia oblongifolia* are amongst the taller (1-2 metre) species. Understorey species include *Kunzea*, *Patersonia*.

Swamp/sedgeland

There are pockets of swamp/sedgeland, characterized by *Gahnia* and *Viminaria*, along the creek lines where the drainage has been inhibited and there has been a build up of silt. Grasses and Coral Fern often cover the ground.

Some adaptations to the environment

All plants are adapted to their environment. Some specific features of local plants are as follows.

Barks: Smooth, white barks as in the Scribbly Gums reflect the radiant heat of bushfires. The thick rough barks like that of Bloodwoods are effective insulators.

Contractile roots: Gymea Lilies and Grass trees among others produce a special kind of root. When it has dug deep in the ground, it contracts and pulls the essential growing point, underground where it is protected by the soil from catastrophes such as fire.

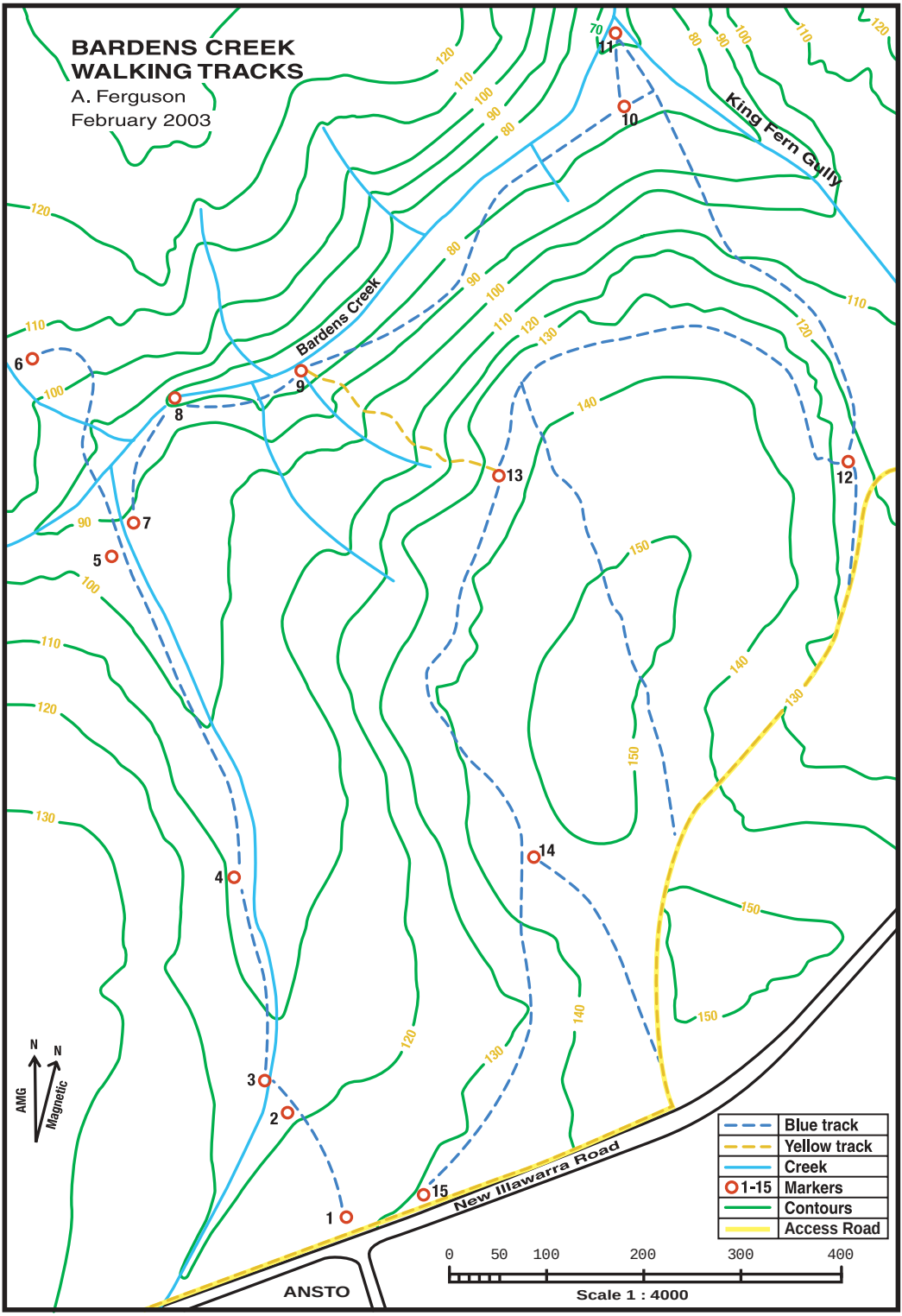
Epicormic Buds: Eucalypts have buds under their bark that remain dormant until the canopy is lost. This allows rapid re-growth after a fire.

Leaves: Leaves are the major users of water in plants. The hard-leafed (sclerophyllus) nature of the Australian bush is thought to be a result of infertile soils, but the thickened cuticle reduces moisture loss from the cells and resists cell collapse during times of water stress. Other leaf adaptations to prevent water loss of plants include reducing the surface area of the leaf. Some are needle-like (*Hakea teretifolia*), narrow (*Dillwynia retorta*) with margins rolled under (*Banksia spinulosa*) or even entirely absent (*Casuarinas, Viminaria juncea*).

Lignotubers: This is a catastrophe resistant feature of many *Eucalypts* and *Proteaceae* (Grevilleas, Banksias, Waratahs etc). It is a swelling at the base of a plant, usually just below ground level, containing stored starch and capped by dormant buds. If the main stem is lost for any reason (fire, drought, and insect attack) the buds erupt and use the food stores to regenerate the canopy. Soil protects the lignotuber from heat.

Seeds: Many plants, such as Acacias have seeds with tough, waxy coats that resist dehydration and predation and lay dormant in the soil until the heat from a bushfire cracks the coat. Other plants from such groups as Banksias and *Hakeas* hold their seed in tough predator- and heat-resistant structures until fire, or the demise of the branch, releases them. More recent work has shown some seed needs smoke from a bushfire to break their dormancy. Some plants (*Casuarinas, Acacias*) work on the law of averages by producing vast quantities of seed. Seeds that only germinate after a fire can take advantage of the fact that ash improves the fertility of the soil and the fire has removed much of the competition for light and nutrients.

Underground storage organs: Many local plants have fleshy underground storage organs of various types (bulbs, corms, rhizomes, etc) that can re-shoot after drought or fire. These plants include Mat Rush (*Lomandra*), Native Iris (*Patersonia*), Bracken (*Pteridium esculentum*) and all ground orchids. Such plants become a major feature of the ground cover after it has been cleared by bushfire.


BARDENS CREEK
WALKING TRACKS
A. Ferguson
February 2003
King Fern Gully
Bardens Creek
New Illawarra Road
ANSTO
AMG
Magnetic
Blue track
Yellow track
Creek
1-15 Markers
Contours
Access Road
0 50 100 200 300 400
Scale 1 : 4000

The Aboriginal people of Menai/Lucas Heights and Bardens Creek

Les Bursill - Tharawal Anthropologist

There are several differing claims as to who were the Aboriginal Communities that periodically inhabited the areas of Menai, Lucas Heights, Bardens Creek, Mill Creek, the Woronora River Valley and Sandy Point. Some claim that the Gandangara, who are probably just a sub group of the larger language group of Tharawal Speakers, were the traditional owners. Others simply say that the Tharawal People extended their boundaries to the southern shoreline of the Georges River at present day Liverpool (see F.D. McCarthy and Nicholas Petersen).

McCarthy states that the language of all the Aboriginal people from Port Jackson to Wollongong and as far inland as Appin was Tharawal. Indeed my examination of Cave Art and Rock Engravings in that area from Sydney to Wollongong and Appin shows that the art styles all appear to be the same. Art styles are usually a good indicator of the local culture and as Kelvin Officer states, Aboriginal Art is often found as "Style Islands" and changes in "style" very clearly delineate different cultural groups.

Menai, Lucas Heights and Bardens Creek are rugged and difficult areas to traverse. The areas whilst having extensive tableland like ridge tops are mostly comprised of rugged creeks and ravines. Evidence for Families and family camping sites in these areas are generally constricted to the areas around Mill Creek to the south west of Bardens Creek, Sandy Point and Deadmans Creek.

Archaeological evidence indicates that Aboriginal people came into the Menai (and other) areas during the first part of Spring and traversed those areas on their way to their coastal hunting and gathering grounds.

Betty Meehan (another Archaeologist) found that men usually hunted and carried out religious and ceremonial obligations in the higher parts of the country they were in, whilst the women and children usually occupied the valley and ravine sides and bottoms. Evidence for camping (midden deposits, etc) usually follow this pattern, probably indicating that the flatter and more pleasant areas of the valleys are where rock shelters more commonly occur.

So simply put it was probably the Tharawal who occupied the areas under discussion and that families lived and camped in the valleys whilst men used the ridge tops and plateaus for hunting and ceremonial activities. On the plateau tops you do find Bora Grounds and places of ceremonial importance and the vast majority of rock engravings. Some engravings do occur along the banks of the upper reaches of local creeks and rivers but decrease as you approach the family areas.

On the valley sides you do find rock shelters, caves and camp sites/middens with charcoal art and bi- and multi-chrome art. These include hand stencils and stencils of weapons and tools. It is here on the campsites that you will also see stone tools and other discarded day-to-day objects.

Certainly the evidence shows that the vast majority of food bulk (90-95%) was vegetables and roots/berries. Fish, shellfish and crustaceans would occupy another 5-10% with red meat only supplying about 5% of the total food intake. These figures would of course change with the availability of red meat, and that would fluctuate with the season and weather.

Large Kangaroo (Macropus Rufus) being recorded for National Parks by the Sydney Prehistory Group 1972

Early European settlement and land use

The earliest interest in this area occurred in 1825 when John Lucas was granted 150 acres at "the Needles", downstream from a small natural ford on the Woronora River. A watermill was built to mill grain carted overland from the Liverpool region. This grain was loaded on to small vessels for transfer to Sydney. The mill was burnt down in the 1830s (Midgley, 1964).

Major Thomas Mitchell, Surveyor-General in colonial times, surveyed and constructed a road in this region between 1843 and 1845. He was instrumental in getting the first punt on the Georges River at Lugarno, as this was needed to transport labour and supplies for building the road known as Old Illawarra Road through Lugarno, Menai, the Woronora ford, Heathcote and south to the Illawarra district. Mitchell's correspondence reveals that he advised the need for a bridge at Alfords Point, 130 years before it became a reality.

However, Mitchell's Illawarra Road was isolated and had steep grades. Farms established earlier on the Wianamatta shales at Bottle Forest (Heathcote) benefited from the road constructed in 1866 from Sylvania to Engadine, with a punt at Tom Ugly's Point, and the Old Illawarra Road through Menai fell into relative disuse. (Kennedy, 1999).

Nevertheless, the Lugarno punt, first hand-operated, then replaced eventually by a motorised ferry, became a well-known feature of the region for more than a century. It was toll-free after 1907 and was an important link for farmers and the city markets, and for residents and holiday-makers until the 1970s.

Some land grants were made in the nineteenth century, but no settlement by white people was recorded. Cattle were run on the Duncombe grant at Little Forest (site of the current "tip") and felling of turpentine timber (*Syncarpia glomulifera*) occurred (Bannister, 1993). Farms had been established in Bottle Forest (Heathcote East) and one of these farmers, Alfred Barden (from Arncliffe originally) took up a grant in the Holdsworthy area on what had been the Duncombe grant. Barden and his brothers squatted on these acres and eventually purchased 711 acres in 1889 for grazing (Sheldon, 1991). Owen Jones and his family settled in 1895 at Bangor. Other settlers came when free selection was allowed. A Sunday school was established in 1901, then Menai School in 1902 and the Menai Congregational Church in 1906 were built (Midgley, 1964). When confusion occurred over names, "Bangor" was officially renamed "Menai" in 1910.

Extensive fruit orchards were established in Menai and poultry farming became popular. There were three dairies operating at one stage. Richard Midgley carried the first mail from Sutherland on 1 June 1905. Robert Cook built the Woronora boatshed and house in 1907. The Illawarra railway had been constructed across the Georges River by 1885, with the Como hotel being built in 1887.

The popularity of the National Park brought people to the Sutherland region. The first Sutherland Shire Council was convened 7 March 1906 at Miranda, and in 1912, the first Woronora Bridge was built, thus opening up the Menai region to the rest of Sutherland Shire. At this stage, Hurstville Council was responsible for Menai and the ferry operating from Lugarno, and there was some argument about responsibility for maintenance of roads and ferries.

The World War (1914-1918) provided an urgent reason for road building in the Menai region. Menai Road was formed by Sutherland Shire Council (1917) and work commenced on a road to link Liverpool (army base) with Heathcote. Germans interned at the beginning of the war laboured on this road, with their internment camp being located north-west of Little Forest, and a supplies depot being set up opposite the current Lucas Heights reactor site (Bannister, 1993). The first motor vehicle was seen in Menai in 1922, the same year that the School of Arts was opened. The first street light in the region was erected at the junction of Menai and Old Illawarra Roads in 1926.

Fruit fly infestation destroyed the Menai orchards, but poultry farming became more prevalent. Menai Progress Association was formed in 1921 and a Farmers and Settlers' Association was formed in 1929, with tufts of Kikuyu grass distributed for planting (Midgley, 1964).

Large areas of unsettled land at Lucas Heights were scraped for laterite gravel used in road-making. This exposure caused sediments to move into Mill Creek, and made open areas, which became attractive to off-road vehicles.

Electricity was connected to the first home in the region in July 1949, and in 1950 Menai Road and Old Illawarra Road were tar-sealed.

Residents of Lucas Heights were successful in 1954 in opposing the establishment of two knackeries in Menai Road and Old Illawarra Road (Midgley, 1964).

Problems of urban development were increasing. Menai had no permanent water supply, and this was a big problem to poultry farmers. Waste disposal was a problem to Sutherland Shire Council so a night soil deposit area was established on land released by the Army (Kirby, 1970).

However, the isolation from housing and ready access to roads, electricity and water which made this area suitable for night soil deposit also attracted the Atomic Energy Commission who wanted the site reserved for the establishment of Australia's first atomic reactor. This was allowed in 1957, with local residents seeing this as a positive force in getting piped water to the district. Piped water was only made available to Menai region in 1960. In this year, Crown land was zoned as residential and the population began to grow.

Development of the region speeded up in the 1970s after the release of Crown land, which began selling in 1979 (*The Leader*, October 1979). East Menai became officially known as Bangor once again.

Bush fires of some severity were recorded in the 1901-1902 season and again in 1975-76,1976-77, 1977-78, 1981-82, 1990, 1994, 1997-98 and 2002. Bush fires have a high spotting potential, although development has created potential barriers to natural fire paths.

Schools were established to cater for the urban development. Menai Public School was once the only school in the region, but the Sutherland Shire Christian School moved to Lucas Heights in 1981, the first section of Inaburra School opened in 1982 and Bangor Public School (build to use solar energy) opened in 1984. Menai Public School was upgraded in 1987, with Menai High School opening in 1988. In 1992 that school also housed the first Year 7 students for Lucas Heights Community School, and these students transferred to the new site in Australia Road, Lucas Heights, in 1993 when K-6 students also enrolled.

The Atomic Energy Commission was replaced by ANSTO in 1987. A buffer zone of 1.6Km was established around the ANSTO site, with no residential development permitted in this area. However, two recreational organisations (United Pistol Club and Sutherland Shire Police Boys' Minibike Club) were allowed to use small portions of the buffer zone.

In 1990, ANSTO began construction of a Business and Technology Park on land adjacent to its reactor, to attract companies associated with research and development. Professional offices and facilities support science, computing, biomedicine and health activities.

In 1992, residents of Lucas Heights voted overwhelmingly to have the area known as Barden Ridge (Daily Telegraph Mirror, 5 August 1992). "Lucas Heights" currently denotes the areas occupied by ANSTO and Waste Management Services.

However labelled, the region has contained a surprising range of activities for such an isolated, rugged terrain. As far back as 1961, the NSW Department of Mines carried out chemical analyses on shale at the Barden Road quarries (Mumme, 1973). Brick making and charcoal making took place. Liquid waste was deposited in a former shale quarry between 1969 and 1976 (Coffey, 1991). AAEC's low-level radioactive waste was buried near Little Forest until 1965. There was talk of siting an oil refinery in the region in 1975, but Kurnell was further developed instead. Hawker de Havilland leased a small portion of land for an aircraft engine test bed site until 1976. Sutherland Shire Council deposited night soil near Little Forest; MWDA used the Mill Creek area (not the Bardens Creek option) and former quarries have now been filled with industrial waste.

Apart from the huge growth of housing in nearby areas, the Bardens Creek area has seen relatively few changes. Apiarists and wildflower collectors held leases until recently, and off-road vehicles, runners and bushwalkers still use tracks in the buffer zone. Bushfires are a natural hazard in this terrain, but Australian wildflowers can still be seen in their natural cycle along the Bardens Creek track.

Fauna of the region

The following lists show the variety of animals, reptiles and birds in the Bardens Creek region.

Animals

Tachyglossidae	Echidna	*Tachyglossus aculeatus*
Macropodiae	Eastern Grey kangaroo	*Macropus giganteus*
	Red-necked Wallaby	*M. ruffogriseus*
	Swamp Wallaby	*Wallabia bicolor*
Phallangeridae	Brush-tailed Possum	*Trichorsurus vulpecula*
	Common Ringtail	*Psudocheirus peregrinus*
	Greater Glider	*Schoinobatus volans*
Burramyidae	Feathertail Glider	*Acrobatus pygmaeus*
	Eastern Pygmy Possum	*Cercartetus nanus*
Dasyruidae	Brown Antechinus	*Antechinus stuartii*
	Dusky Antechinus	*Antechinus swainsonii*
	Common Dunnart	*Sminthopsis murina*
Peramelidae	Long-nose Bandicoot	*Perameles nasuta*
Muridae	Bush Rat	*Rattus fuscipes*
	Black Rat	*Rattus rattus*
	New Holland Mouse	*Pseudomys novaehollandiae*
	Water Rat	*Hydromys chrysogaster*
	House Mouse	*Mus musculus*
Pteropodidae	Grey-headed Fruit Bat	*Pteropus poliocephalus*
Rhinolophidae	Eastern Horseshoe Bat	*Rhinolophus megaphyllus*
Molossidae	White-striped Mastiff Bat	*Tadarida australis*
Vespertilionidae	Greater Long-eared Bat	*Nyctophilus timoriensis*
	Common Bent-winged Bat	*Miiopterus schreibersi*
	Little Brown Bat	*Eptesicus sp*
	Large-footed Bat	*Myotis adversus*
	Eastern Broad-nosed Bat	*Nycticeius orion*
Canidae	Fox	*Vulpes vulpes*
Felidae	Cat	*Felix catus*
Leporidae	Brown Hare	*Lepus capensis*

Reptiles

The following list was provided by the Australian Herpetolopical Society and verified by the Australian Museum.

Scincidae	
Grass Skink	*Lampropholis delicata*
Garden Skink	*L. guichenoti*
Red-Throated Skink	*Bassiana platynota*
Copper-tailed Skink	*Ctenotus taeniolatus*
Striped Skink	*C. robustus*
Wall Lizard	*Cryptoblepharus virgatus*
White's Skink	*Egernia whitii*
Eastern Water Skink	*Eulamprus quoyii*
	Lygisaurus foliorium
Geckonidae	
Thick-Tailed Gecko	*Underwoodisaurus milii*
Lesueur's Velvet Gecko	*Oedua lesueurii*
Stone Gecko	*Diplodactylus vittatus*
Agamidae	
Jacky Lizard	*Amphibolurus muricatus*
Eastern Water Dragon	*Physignathus lesueurii*
Varanidae	
Lace Monitor	*Varanus varius*
Heath Monitor	*V. rosenbergii*
Pygopoididae	
Common Scaly-Foot	*Pygopus lepidopodus*
Elapidae	
Yellow-Faced Whip Snake	*Demansia psammophis*
Red-Bellied Black Snake	*Pseudechis porphyricus*
Eastern Brown Snake	*Pseudonaja textilis*
Boidae	
Diamond Python	*Morelia spilota*

Birds

Any list of birds that you may see in the valley would take up many pages, so this is restricted to species we see regularly.

First: the larger birds. The occasional Wedgetailed Eagle drifts in from the Army land but the more common if incongruous sight is of large flocks of Pelicans and Straw-necked Ibis wheeling overhead on their trips to and from the adjacent tip site. The tip also attracts a large population of Crows (Australian Raven).

Along with the crows the larger meat-eating birds include the Australian Magpie, Pied Currawong and Grey Butcherbird. Kookaburras may be seen anywhere on the walk, and their cousin, the Sacred Kingfisher frequents the waterholes which are also visited by White-faced Herons. In times when the undergrowth is dense the crack of Whipbirds can be heard but they move on when fire opens up the vegetation.

Dollar birds chase insects above the treetops during summer months while Black-faced Cuckoo Shrike pursue them through the branches. Grey shrike thrushes, Leaden Flycatchers, Eastern Yellow, Scarlet and Rose Robins, Golden and Rufous Whistlers, Grey and Rufous Fantails along with families of Superb and Variegated Wrens, Thornbills and Weebills pursue insects through shrubbery, the latter group sometimes combining efforts. Tree creepers have a vertical lifestyle, picking their way up the bark of one tree then flying down to the bottom of another. Spotted Pardalotes are another for the vertical life, feeding on scale in the treetops but nesting in holes in the ground. Unfortunately, probably due to the attention of cats this delightful little bird is not as common as it was. In open areas, Willie Wagtails pursue insects along with pairs of Magpie Larks (Pee Wees), with their antiphonal duets that can be heard for hundreds of metres. Yellow-tailed Black Cockatoos move in and out of the area and are prevalent when the casuarina nuts are ripening, particularly in the cooler months. Unfortunately the ubiquitous Sulphur-crested Cockatoo can often be seen wreaking havoc on the Gymea Lilies and out-competing Crimson and Eastern Rosellas for nest holes in trees. Another beneficiary of urban spread, the Rainbow Lorikeets are often heard, if not seen, when the gums are in flower. Similarly a Banksia's flowering attracts crowds of honeyeaters. Small groups of Little and Red Wattlebirds compete with one another and Noisy Friarbirds for the choicest pickings. Despite their small size, New Holland Honeyeaters try and control prize locations by weight of numbers and bicker among themselves if there is no one else to argue with.

The more solitary Leuwin's Honeyeater spends its time in the valleys while Yellow-faced and White-plumed Honeyeaters put in occasional appearances, At the bottom of the honeyeater pecking order, the elegantly handsome Eastern Spinebill lives a nervous life trying to sneak a feed when no one else is looking. Flocks of tiny Red-browed Firetails search for grass seed wherever they find it.

Plants of the region

The following list shows the wide variety of plants that exist in the Bardens Creek region.

Genus	Species	Common Name
Acacia	*brownii*	Prickly Moses
Acacia	*decurrens*	Green Wattle
Acacia	*echinula*	Prickly Moses
Acacia	*elongata*	Swamp Wattle
Acacia	*falcata*	Sickle Wattle
Acacia	*hispidula*	
Acacia	*irrorata ssp irrorata*	Blueskin
Acacia	*linifolia*	Flax Wattle
Acacia	*longifolia*	Sydney Wattle
Acacia	*myrtifolia*	Myrtle Wattle
Acacia	*obtusifolia*	
Acacia	*parramattensis*	Sydney Green Wattle
Acacia	*parvipinnula*	Silver-stemmed Wattle
Acacia	*rubida*	Red-stemmed Wattle
Acacia	*suaveolens*	Sweet Wattle
Acacia	*terminalis*	Sunshine Wattle
Acacia	*ulicifolia*	Prickly Moses
Acianthus	*exsertus*	Gnat Orchid
Acianthus	*fornicatus*	Pixie Orchid
Actinotus	*helianthi*	Flannel Flower
Actinotus	*minor*	Lesser Flannel Flower
Adiantum	*aethiopicum*	Maiden Hair Fern
Allocasuarina	*diminuta ssp mimica*	
Allocasuarina	*distyla*	Scrub Sheoak
Allocasuarina	*littoralis*	Black Sheoak
Allocasuarina	*nana*	
Allocasuarina	*paludosa*	
Allocasuarina	*torulosa*	Forest oak
Amylotheca	*dictyophleba*	Mistletoe
Angophora	*costata*	Sydney Red Gum
Angophora	*hispida*	Dwarf Apple
Aristida	*ramosa*	Wire Grass
Aristida	*vagans*	Three-awned Spear Grass
Arthropodium	*milleflorum*	Pale Vanilla Lily
Baeckea	*imbricata*	
Baeckea	*linifolia*	Swamp Baeckia

Genus	Species	Common Name
Baeckea	*ramosissima*	Rose Heath Myrtle
Banksia	*ericifolia*	Heath Banksia
Banksia	*marginata*	Silver Banksia
Banksia	*oblongifolia*	
Banksia	*paludosa*	
Banksia	*robur*	Swamp Banksia
Banksia	*serrata*	Old Man Banksia
Banksia	*spinulosa var spinulosa*	Hairpin Banksia
Bauera	*rubioides*	River Dog Rose
Bertya	*pomaderroides*	
Billardiera	*scandens*	Climbing Apple Berry
Blandfordia	*noblis*	Christmas Bells
Blechnum	*ambiguum*	
Blechnum	*cartilagineum*	Gristle Fern
Blechnum	*nudum*	Fishbone Fern
Blechnum	*wattsii*	Hard Water fern
Boronia	*anemonifolia*	Sticky Boronia
Boronia	*ledifolia*	Sydney Boronia
Boronia	*serrulata*	Native Rose
Bossiaea	*buxifolia*	
Bossiaea	*ensata*	Small Leafless Bossiaea
Bossiaea	*heterophylla*	Variable Bossia
Bossiaea	*prostrata*	
Bossiaea	*stephensonii*	
Brachyloma	*daphnoides*	Daphne Heath
Breynia	*oblongifolia*	Dwarf's Apple
Burchardia	*umbellata*	Milkmaids
Bursaria	*spinosa*	Blackthorn
Caesia	*parviflora*	Pale Grass Lily
Caladenia	*caerulea*	Blue Finger Orchid
Caladenia	*carnea*	Pink Finger Orchid
Caladenia	*catenata*	White Five Finger
Caleana	*major*	Flying Duck Orchid
Callicoma	*serratifolia*	Black Wattle
Callistemon	*citrinus*	Red Bottlebrush
Callistemon	*linearis*	Narrow Leafed Bottlebrush

Genus	Species	Common Name
Calochlaena	*dubia*	Common Ground Fern
Calytrix	*tetragona*	Fringe Myrtle
Carex	*appressa*	Tall Sedge
Cassinia	*aureonitens*	Yellow Cassinia
Cassytha	*glabella*	Dodder, Devils Twine
Cassytha	*pubescens*	Dodder, Devils Twine
Caustis	*flexuosa*	Curly Grass Old Mans Whiskers
Caustis	*pentandra*	Curly Grass Old Mans Whiskers
Centella	*asiatica*	Swamp Pennywort
Ceratopetalum	*apetalum*	Coachwood
Ceratopetalum	*gummiferum*	Christmas Bush
Cheilanthes	*sieberi*	Mulga Fern, Poison Rock Fern
Comesperma	*ericinum*	Pink Matchheads
Comesperma	*volubile*	Love creeper
Conospermum	*longifolia*	Long-leaf Coneseeds
Correa	*reflxa*	Common Correa
Corybas	*propinqua*	Small Helmet Orchid
Corymbia	*gummifera*	Red Bloodwood
Crassula	*sieberiana*	Austral Stonecrop
Cryptandra	*amara*	
Cryptandra	*propinqua*	Silky Cryptandra
Cuscata	*australis*	Australian Dodder
Cyathea	*australis*	Rough Tree Fern
Cyathochaeta	*diandra*	
Cymbidium	*suave*	Snake Flower
Cyperus	*polystachyos*	Mullimbimbi Couch, Rush
Dampiera	*purpurea*	Purple Dampiera
Dampiera	*stricta*	Blue Dampiera
Danthonia	*tenuior*	Wallaby Grass
Darwinia	*diminuta*	
Darwinia	*fascicularis*	
Davallia	*solida var.pyxidata*	Hare's Foot Fern
Daviesia	*alata*	
Daviesia	*corymbosa*	
Daviesia	*ulicifolia*	Gorse Bitter Pea
Dendrobium	*linguiforme*	Tongue Orchid

Genus	Species	Common Name
Dendrobium	*speciosum*	Rock Lily
Dianella	*caerulea*	Flax Lily
Dianella	*pruinosa*	
Dianella	*revoluta*	
Dichelachne	*micrantha*	Plume Grass
Dichondra	*repens*	Kidney Weed
Digitara	*aequiglumis*	Finger Grass
Dillwynia	*elegans*	Flowery Parrot Pea
Dillwynia	*juniperina*	Prickly Parrot Pea
Dillwynia	*parvifolia*	
Dillwynia	*retorta*	Egg and Bacon
Dipodium	*punctatum*	Hyacinth Orchid
Diuris	*aurea*	Double Tail, Donkey Orchid
Diuris	*maculata*	Leopard Orchid
Diuris	*sulphurea*	Tiger Orchid
Dodonaea	*triquetra*	Hop Bush
Doryanthes	*excelsa*	Gymea Lily
Drosera	*auriculata*	Sundew
Drosera	*binata*	Forked Sundew
Drosera	*peltata*	Pale Sundew
Drosera	*pygmaea*	Tiny Sundew
Drosera	*spathulata*	Common Sundew
Echinopogon	*caespitosus*	Tufted Hedgehog Grass
Elaeocarpus	*reticulatus*	Blueberry Ash
Eleocharis	*sphacelata*	Spike Bush
Empodisma	*minus*	Spreading Rope Grass
Entolasia	*stricta*	Wiry Panic Grass
Epacris	*longiflora*	Fuschia Heath
Epacris	*microphylla*	Coral Heath
Epacris	*obtusifolia*	Blunt Leaf Heath
Epacris	*pulchella*	NSW Coral Heath
Eragrostis	*brownii*	Brown's Love Grass
Eragrostis	*phillipica*	Love Grass
Eriochilus	*cucullatus*	Parsons Band
Eriostemon	*australasius*	Pink Wax Flower
Erythrorchis	*cassythoides*	Climbing Orchid
Eucalyptus	*capitellata*	Brown Stringybark
Eucalyptus	*fibrosa*	Brood Leaf Ironbark
Eucalyptus	*haemostoma*	Scribbly Gum
Eucalyptus	*multicaulis*	Whipstick Mallee

Genus	Species	Common Name
Eucalyptus	*oblonga*	Sandstone Stringybark
Eucalyptus	*paniculata*	Grey Ironbark
Eucalyptus	*pilularis*	Blackbutt
Eucalyptus	*piperita*	Sydney Peppermint
Eucalyptus	*punctata*	Grey Gum
Eucalyptus	*racemosa*	Snappy Gum
Eucalyptus	*resinifera*	Red Mahogony
Eucalyptus	*sieberi*	Silvertop Ash, Black Ash
Eucalyptus	*squamosa*	Scaly Bark
Exocarpus	*cupressiformis*	Native Cherry
Exocarpus	*strictus*	Pale Ballart
Gahnia	*erythrocarpa*	
Gahnia	*sieberiana*	Red-fruited Saw-sedge
Gastrodia	*sesamoides*	Potato Orchid
Gleichenia	*dicarpa*	Pouched Coral Fern
Gleichenia	*microphylla*	Coral Fern
Gleichenia	*rupestris*	
Glossodia	*major*	Large Wax Lipped Orchid
Glossodia	*minor*	Small Wax Lipped orchid
Glycine	*clandestina*	Twining Glycine
Gompholobium	*glabratum*	Glory Pea
Gompholobium	*grandiflorum*	Large Wedge Pea
Gompholobium	*latifolium*	Broad Wedge Pea
Gompholobium	*minus*	Dwarf Wedge Pea
Gonocarpus	*micranthus*	Creeping Raspwort
Gonocarpus	*teucrioides*	
Germander	*Raspwort*	
Goodenia	*hederacea*	Ivy Goodenia
Grevillea	*buxifolia*	Grey Spider Flower
Grevillea	*diffusa*	
Grevillea	*longifolia*	
Grevillea	*mucronulata*	Green Spider Flower
Grevillea	*oleoides*	Red Spider Flower
Grevillea	*sericea*	Silky Spider Flower
Grevillea	*sphacelata*	
Haemodorum	*planifolium*	Strap Leaf Blood Lily

Genus	Species	Common Name
Hakea	*dactyloides*	Broad Leaf Hakea
Hakea	*gibbosa*	
Hakea	*salicifolia*	Willow Hakea
Hakea	*sericia*	Needle Bush
Hakea	*teretifolia*	Dagger Hakea
Hardenbergia	*violacea*	False Sarsparilla
Helichrysum	*scorpioides*	Button Everlasting
Hemigenia	*purpurea*	Narrow Leaf Hemigenia
Hibbertia	*aspera*	Rough Guinea Flower
Hibbertia	*empetrifolia*	Trailing Guinea Flower
Hibbertia	*nitida*	Shining Guinea Flower
Hibbetia	*riparia*	Erect Guinea Flower
Hibbetia	*scandens*	Climbing Guinea Flower
Hibbetia	*serpyllifolia*	Prostrate Guinea Flower
Histiopteris	*incisa*	Bat's Wing Fern
Hovea	*linearis*	Narrow Leaf Hovea
Hovea	*purpurea*	Velvet Hovea
Hybanthus	*monopetalus*	Ladies Slipper
Hypolaena	*fastigiata*	Tassel Rope Bush
Hypoxis	*hygrometrica*	Golden Weathre Grass
Imperata	*cylindrica*	Blady Grass
Indigofera	*australis*	Native Indigo
Isolepis	*inundata*	Swamp Sword Rush
Isopogon	*anemonifolius*	Drumsticks
Juncus	*continus*	
Juncus	*planifolius*	Broad Rush
Juncus	*prismatocarpus*	Branching Rush
Juncus	*usitatus*	Common Rush
Kennedia	*rubicunda*	Dusky Coral Pea
Kunzea	*ambigua*	Tick Bush
Kunzea	*capitata*	Pink Kunzea
Lambertia	*formosa*	Mountain Devil
Lasiopetalum	*ferrugineum*	Rusty Velvet Bush
Lasiopetalum	*rufum*	Red Rusty Petals
Laxmannia	*gracilis*	Slender Wire Lily
Lepidorperma	*concavum*	Sticky Sword-sedge

Genus	Species	Common Name
Lepidosperma	*forsythii*	Stout Rapier Sedge
Lepidosperma	*laterale*	Variable Sword Rush
Leptocarpus	*tenax*	Slender Twine Rush
Leptomeria	*acida*	Native Currant
Leptospermum	*arachnoides*	Spider Tea Tree
Leptospermum	*parvifolium*	Small-leafed Tea Tree
Leptospermum	*polygalifolium*	Tantoon
Leptospermum	*squarrosum*	Peach Teatree
Leptospermum	*trinervium*	Flaky Barked Tea Tree
Leptospermun	*juniperinum*	Prickly Tea tree
Lepyrodia	*scariosa*	Scale Rush
Leucopogon	*amplexicaulis*	Fringed Beard Heath
Leucopogon	*ericoides*	Pink Beard Heath
Leucopogon	*esquamatus*	Oblique Beard Heath
Leucopogon	*juniperinus*	Prickly Beard Heath
Leucopogon	*lanceolatus*	Lance Leaved Heath
Leucopogon	*microphyllus*	Small Leaved White Beard
Lindsaea	*linearis*	Screw Fern
Lindsaea	*microphylla*	Lace Wedge Fern
Liparis	*reflexa*	Yellow Rock Orchid
Lissanthe	*strigosa*	Peach Heath
Lobelia	*dentata*	Trailing Lobelia
Lobelia	*gracilis*	
Logania	*albiflora*	
Lomandra	*brevis*	Tufted Mat Rush
Lomandra	*fluviatilis*	
Lomandra	*glauca*	Pale Mat Rush
Lomandra	*gracilis*	
Lomandra	*longifolia*	Spiny-headed Mat Rush
Lomandra	*obliqua*	Twisted Mat Rush
Lomatia	myricoides	
Lomatia	silaifolia	Crinkle Bush
Lycopodium	*laterale*	Clubmoss
Macrozamia	*communis*	Burrawang
Macrozamia	*spiralis*	
Marsdenia	*suaveolens*	Sweet Scented Doubah

Genus	Species	Common Name
Melaleuca	*thymifolia*	Thyme Honey Myrtle
Melichrus	*procumbens*	Jam Tarts
Micrantheum	*ericoides*	Heath Micrantheum
Micromyrtus	*ciliata*	Fringed Heath myrtle
Microtis	*unifolia*	Onion Orchid
Mirbelia	*rubiifolia*	
Mitrasacme	*polymorpha*	
Monotoca	*scoparia*	Prickly Broom Heath
Notelaea	*longifolia*	Large Mock Olive
Ozothamnus	*diosmifolius*	Ball Everlasting Flower
Pandorea	*pandorana*	Wonga Vine
Panicum	*simile*	Two Colour Panic
Patersonia	*glabrata*	Purple Flag, Wild Iris
Patersonia	*longifolia*	Dwarf Purple Flag
Patersonia	*sericea*	Silky Purple Flag
Persoonia	*lanceolata*	Lance Leafed Geebung
Persoonia	*laurina*	Laurel Geebung
Persoonia	*levis*	Broad Leafed Geebung
Persoonia	*linearis*	Narrow Leafed Geebung
Persoonia	*pinifolia*	Pine Leaf Geebung
Petrophile	*pulchella*	Conesticks
Petrophile	*sessilis*	Prickly Cone Sticks
Phebalium	*dentatum*	
Philotheca	*salsolifolia*	
Philotheca	*scaber*	
Phyllanthus	*hirtellus*	Thyme Spurge
Phyllota	*phyllicoides*	Phyllota
Pimelea	*linifolia*	Rice Flower
Platysace	*ericoides*	Heath Platysace
Platysace	*lanceolata*	Shrubby Platysace
Platysace	*linearifolia*	Narrow Leaf Platysace
Podocarpus	*spinulosus*	Scrambling Pine
Pomaderris	*lanigera*	
Pomaderris	*ligustrina*	Privet Pomaderris
Poranthera	*ericifolia*	Heath Poranthera

Genus	Species	Common Name
Prasophyllum	*elatum*	Tall Leek Orchid
Pratia	*purpurascens*	White Root
Prostanthera	*linearis*	Mint Bush
Prostanthera	*saxicola*	Slender Mint Bush
Pteridium	*esculentum*	Bracken Fern
Pterostylis	*nutans*	Nodding Green Hood
Ptilothrix	*deustra*	
Pultenaea	*daphnoides*	Large-leafed Bush Pea
Pultenaea	*elliptica*	Wreath Bush Pea
Pultenaea	*flexilis*	Graceful Bush Pea
Pultenaea	*hispidula*	
Pultenaea	*linophylla*	Halo Bush Pea
Pultenaea	*stipularis*	
Pultenaea	*villosa*	Bronze Bush Pea
Restio	*dimorphus*	
Ricinocarpus	*pinifolius*	Wedding Bush
Scaevola	*ramosissima*	Purple Fan Flower
Schizaea	*bifida*	Forked Comb Fern
Schoenus	*brevifolius*	Zig-zag Bog Rush
Schoenus	*ericetorum*	Heath Bog Rush
Schoenus	*imberbis*	Beardless Bog Rush
Schoenus	*melanostachys*	Black Bog Rush
Selaginella	*uliginosa*	Swamp Selaginella
Senecio	*lautus*	Coast Groundsel
Senecio	*linearifolius*	Fireweed Groundsel
Smilax	*glyciphylla*	Sarsparilla
Sphaerolobium	*vimineum*	
Sprengelia	*incarnata*	Pink Swamp Heath
Stackhousia	*viminea*	Slender Stackhousia
Stenocarpus	*salignus*	Scrub Beefwood
Sticherus	*flabellatus*	Umbrella fern
Stipa	*pubescens*	Spear Grass
Stylidium	*graminifolium*	Grass Leaf Trigger Plant
Stylidium	*laricifolium*	Larch Trigger Plant
Stylidium	*lineare*	Narrow Leaf Trigger Plant
Stypandra	*glauca*	Nodding Blue Lily
Styphelia	*tubiflora*	Red Five-corners
Symphionema	*paludosum*	Swamp Symphionema

Genus	Species	Common Name
Syncarpia	*glomulifera*	Turpentine
Telopea	*speciosissima*	Waratah
Tetratheca	*ericifolia*	Black-eyed Susan
Tetratheca	*neglecta*	
Thelymitra	*ixioides*	Spotted Sun Orchid
Thelymitra	*nuda*	Sun Orchid
Themeda	*australis*	Kangaroo Grass
Thysanotus	*tuberosus*	Common Fringe Lily
Todea	*barbara*	King Fern
Utricularia	*dichotoma*	Fairies Aprons
Viminaria	*juncea*	Native Broom
Viola	*hederacea*	Native Violet
Wahlenbergia	*gracilis*	Blue Bells
Wahlenbergia	*stricta*	
Woollsia	*pungens*	Woollsia
Xanthorrhoea	*arborea*	Broad Leaf Grass Tree
Xanthorrhoea	*media*	Forest Grasstree
Xanthorrhoea	*resinosa*	Grass Tree
Xanthosia	*pilosa*	Wooly Xanthosia
Xanthosia	*tridentata*	
Xylomelum	*pyriforme*	Woody Pear
Xyris	*gracilis*	
Zieria	*pilosa*	Hairy Zieria

AUSTRALIAN PLANTS SOCIETY

INFORMATION

If you would like more information or if you would like to comment on any part of this bush walk, please contact:

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Menai Wildflower Group
PO Box 3104
BANGOR NSW 2234

Pupil acivity sheets to accompany this booklet are available for schools.