Discovering Yanchep National Park

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

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DISCOVERING YANCHEP NATIONAL PARK

by past and present staff of Yanchep National Park

DEPARTMENT OF CONSERVATION AND LAND MANAGEMENT

INTRODUCTION

Just 50 kilometres from Perth's central business district is a bushland haven abundant with native plants and animals, waiting to be explored. The newly revamped Yanchep National Park offers visitors an array of recreational tourism and conservation experiences, right on the city's doorstep. The 2842 hectare park is one of the State's oldest national parks and is steeped in Aboriginal and European cultural heritage.

The vegetation of Yanchep National Park is typical of the northern Swan Coastal Plain. Tuart, jarrah and marri are the principal tree species. They are associated with a characteristic group of smaller trees and shrubs, which occupy most of the western section of the park. Much of the northern and eastern sections of the park are vegetated with heath. Here, the dominant trees are the smaller gnarled pricklybark and banksias. The lakes and swamps that stretch in a chain almost the whole length of the park support a characteristic suite of plant species, mostly paperbark communities. These wetlands are a window to a vast reserve of underground water, the Gnangara Mound. The coastal areas support a coastal heath vegetation which is different from that found in the eastern and northern sections of the park. Here and there, crags of eroded limestone rise above the soil, hinting at the vast network of caves, potholes and underground streams that flow beneath the surface.

The park also protects one of WA's largest koala colonies, a stunning array of wildflowers and the old world charm of Tudor-style buildings and gardens. The park is home to many different waterbirds and bush birds. Grebes, pelicans, cormorants, egrets, herons, ducks, hawks, galahs, waders, gulls, parrots, cuckoos, owls, kingfishers, swallows, warblers, wrens, robins, flower-peckers, honeyeaters, butcher birds and ravens are found in the

park. Birdwatchers can collect a bird checklist from the visitor centre.

Cultivated wildflower gardens offer visitors a chance to wander through a collection of the State's flora and to experience native plants such as banksias, featherflowers, kangaroo paws and hakeas.

Six walktrails, with accompanying mud maps, have been included in this book to help you to explore and learn about the natural environment, wildlife, history, caves and Aboriginal culture of Yanchep National Park.

ABORIGINAL HISTORY

Aboriginal occupation of south-western Australia dates back more than 40,000 years. Around Wanneroo and Yanchep, artefacts have been found that date from between 6500 and 1700 years ago. Although population sizes appear to have fluctuated, the coastal plain supported comparatively high numbers of people because of the abundance of food and water.

The coastal plain was occupied by different groups of Nyoongar people. One group centred on the Swan Estuary, and its northern limits extended to Lake Neerabup, while another group occupied the area from this point up to Moore River and extended across the scarp around Gingin. These groups were closely linked to each other, as well as with other groups further south.

The chain of lakes extending from the Swan River estuary north to Yanchep was well-used by Aboriginal people because it provided abundant food and water supplies. The use of areas varied with the seasons. During winter, the preferred hunting grounds were further east. In summer, as water sources dried up inland, the coastal plains were preferred. In times of plenty when there might be an abundance of fish, a whale stranding, or an exceptionally large harvest of plant food, invitations to neighbouring groups were carried by messengers with sticks bearing incised markings, which announced a festive gathering. The bulrush (*Typha domingensis*) rhizome harvest, in what is now Yanchep National Park, provided the opportunity for large neighbouring groups to meet. Bulrush roots were pounded into a paste and used as a type of flour. The Nyoongar people referred to this plant as yandjip or yanget, hence the name Yanchep.

Loch McNess, at Yanchep National Park, is extremely significant to the Aboriginal people of the area. According to

Loch McNess, a significant area for local Aboriginal people

Aboriginal tradition, the lake is inhabited by a Waugal (rainbow serpent) and the activities of the Waugal ensure that the springs that feed the lake continue to flow. Central to this area was Wagardi Springs, which supplied fresh water for the gatherings. Aboriginal oral history states that a violent encounter between an Aboriginal tribal meeting and a group of early European explorers in the park occurred here, and some Nyoongars were shot.

Yanchep National Park provides visitors with opportunities to participate in a diverse range of activities, and Aboriginal cultural programs are among those that are offered. These include bush tucker walks, Aboriginal history walks and storytelling from the Dreaming.

EUROPEAN HISTORY

Yanchep has had a lively history following European settlement of WA. In 1834, John Butler searched for stray cattle 53 kilometres north of Perth and recorded the lakes and the abundance of game. Four years later, Lieutenant George Grey explored the area and described some "remarkable" caves. From 1899 to 1902, settler Henry White occupied a cottage known as "Caves House" opposite Lake Yonderup, adjacent to the south end of Lake Yanchep. During 1902 and 1903, many of the major caves in the area were explored, named and recorded and Henry White was appointed as an honorary caretaker.

In August 1905, the Government reserved 5640 acres (2283 hectares) of the lake and flats for the "Protection and Preservation of Caves and Flora for a health and pleasure resort". It was vested in the Caves Board as an 'A' Class Reserve, but the Board's attempts to develop Yanchep were unsuccessful, owing to the distances and sandy track conditions. The Immigration and General Information Department took over management in 1910, until its tourist section was absorbed by the State Hotels Department in 1912. The State Hotels Department continued to manage Yanchep until 1931, when the State Gardens Board assumed control.

During the 1930s, philanthropist Sir Charles McNess donated £11,600 to the State to alleviate distress among the large numbers of unemployed. The donation was used by the State Gardens Board to employ sustenance workers on major developments within the park. They extended the sealed road from Wanneroo, connected a single-wire telephone, reclaimed and ramped the foreshore of the lake, supplied the park with power and water, built internal roads and paths, fitted Crystal Cave with electric lights and established a children's playground near Caves House. Further additions were also made to the Reserve. These works were celebrated at a Grand Opening on December 20, 1931.

Further grants from McNess enabled sustenance workers to be employed to build roads and accommodation and dredge Lake Yanchep. McNess Hostel, the swimming pool and a number of roads were completed in 1932. In 1933, Gloucester Lodge was built and eight converted tramway units were placed near Boomerang Gorge to provide further accommodation. In 1935, Lake Yanchep was renamed Loch McNess. A bus service to Yanchep from Perth was established in the same year. A year later, the Yanchep Inn was completed. In 1938 the koala colony was established, the reserve recorded its 100,000th visitor to the caves and excavation in Yonderup Cave unearthed a human skull and assorted animal bones.

During World War II (1939-45), the armed services occupied the Reserve. The RAAF used Yanchep Inn as a convalescent hospital for injured personnel, while Gloucester Lodge provided accommodation for personnel operating the nearby radar installation. During the war, Yanchep was run by a Superintendent,

a mechanic and a groundsman. After the withdrawal of servicemen, eight extra staff were employed. In 1949, the launch *Eleanor* arrived to provide scenic boat trips around Loch McNess.

On April 13, 1956, the State Gardens Board became the National Parks Board. The following year, six staff houses, a machinery shed, change rooms and a plant nursery were built. A nine hole golf course opened in 1961, and a new launch, the *Miss Yanchep*, was commissioned the following year. In 1969, Yanchep was finally proclaimed a national park.

A walk-through enclosure for people to see the koalas was built in 1976. Rewiring and lighting of Crystal and Yondurup Caves offset the closure of Gloucester Lodge for health and structural reasons. After extensive renovations, the Wanneroo Shire reopened the impressive building as a Museum in 1979. On December 20, 1981, Yanchep National Park celebrated its 50th year as one of the State's most popular environmental, historical and recreational establishments. To commemorate the event, "Boomerang Gorge Disabled Persons Nature Trail and Shelter" was opened by Premier Sir Charles Court. In 1984, Yonderup Cave was closed to the public.

In March 1985, a new era in the management of Yanchep National Park began, when the Department of Conservation and Land Management (CALM) took over management of WA's national parks. In 1991, major redevelopment works commenced, including works to upgrade existing roads and car parks. In 1994, the park was extended to include neighbouring Pipidinny Swamp. In the following year walktrails, landscaping and other recreational facilities were upgraded or constructed under the New Work Opportunities Government Employment Scheme. The Radar Bunkers were also restored and a walktrail constructed.

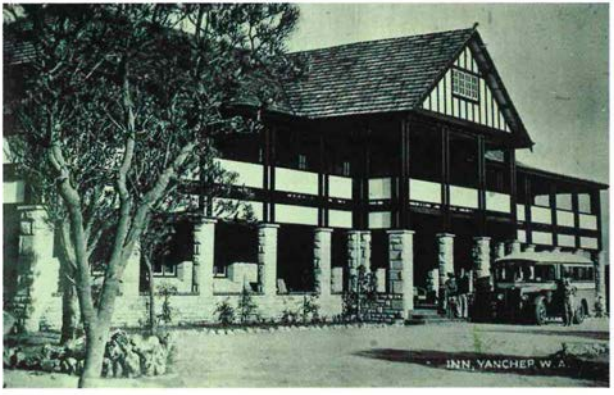
Yanchep National Park is one of WA's most visited national parks. Visitors come to see the koalas, the magnificent wildflowers and ancient limestone caves, and to appreciate the local heritage.

THE YANCHEP INN

Construction of the Yanchep Inn began in 1936, in response to the park's popularity as a holiday destination. The original plans called for a two storey structure with 16 bedrooms, two lounges, a dining room and a verandah around most of the building. Local limestone was used for the walls and pillars, and every attempt was made to reproduce the character of an English Tudor-style Inn.

After World War II, extensions to the first floors of the north and south wings began, but were not completed until 1953. Soon afterwards, the Island Bar facilities were upgraded, and a roofed dance floor was built in the rear courtyard in 1959-60. In 1976, four motel units were added south of the Inn. The adjacent staff quarters were demolished in the following years.

The Yanchep Inn is one of several buildings within the park that have been classified by the National Trust of WA. The Inn is recognised by the Heritage Council of WA and was accepted as an Australian Heritage Commission Nomination in 1988.



GLOUCESTER LODGE

Construction of the Lodge began in 1932, and was completed in 1933. The Lodge was built by sustenance workers as a pavilion for the Crystal Swimming Pool and to provide accommodation for tourists. When it first opened, the building was known as either "The Lodge" or "Yanchep Lodge". Its name was changed to Gloucester Lodge, to commemorate the visit by the Duke of Gloucester in October 1934. A dining room, lounge and nine more rooms were added in 1938.

The lodge was closed to the public after the outbreak of World War II and taken over by the RAAF, who used it to accommodate personnel operating the nearby radar installation. After the war the Lodge was once again used as a guest house, and run in conjunction with the swimming pool. In 1976, the building was closed and subsequently leased to the City of Wanneroo. Three years later, after undergoing alterations and restoration, the Lodge reopened as a museum. Despite regular maintenance, required to combat dampness, the building is a significant museum within the City of Wanneroo. It offers an insight into local history, including the Aboriginal culture and the nearby fishing industry.

McNESS HOUSE VISITOR CENTRE

McNess House was built around the remains of a two-roomed stone hut called the hunting lodge, which dates back as far as the 1880s. It was constructed in January 1932 to provide hostel style accommodation. The house also catered for visitors, with afternoon teas and meals being served in the dining room and the grassed area in front of the building. In 1959-60, the kiosk at the east end of the building was extended. In 1975, the hostel was closed and only the kiosk remained open. Restorations began in 1993 to turn McNess House into a Visitor Centre. These plans, however, were cut short in July 1995, when a fire swept through the building, within months of it opening. Despite major damage to interior fittings, structural damage was minimal. The building reopened as a Visitor Centre in early 1997.

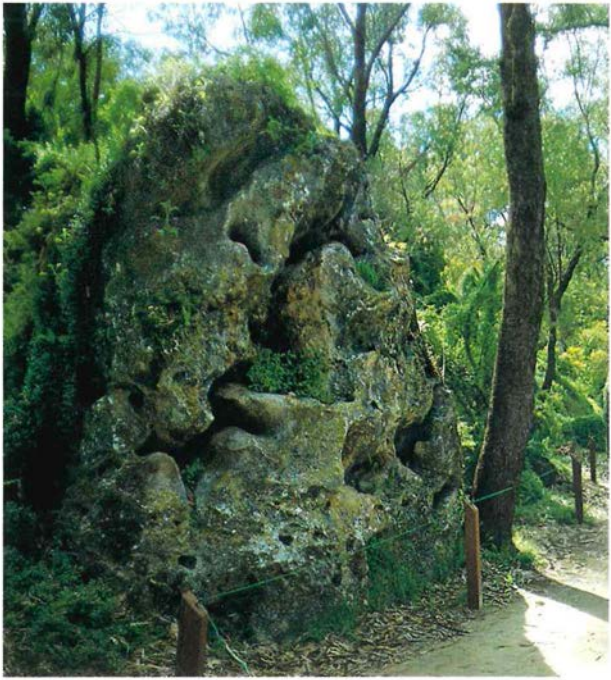
GEOLOGY AND SOILS

To the geologist, the Swan Coastal Plain on which Yanchep is situated, is a surface expression of a small part of the Perth Basin. It is a long and narrow trough of sediments, which extends for nearly 100 kilometres from the southern end of the Carnarvon Basin to the South Coast, east of Cape Leeuwin. The Perth Basin is a deep sedimentary trough, bounded on the east by a great rift in the Earth's surface, known as the Darling Fault. In the Basin, the oldest marine sediments are of Permian Age (280-225 million years before the present time) and they outcrop in the Irwin River District south of Geraldton. The uppermost (and youngest) of the sedimentary deposits in the Yanchep area are, from east to west, the Bassendean, Spearwood and Quindalup Dune Systems. All are believed to be less than a million years old.

The present day land surface, and the vegetation, reflects these three systems. The easternmost Bassendean System consists of white, sandy quartz soils leached of calcium carbonate (sometimes known as lime) and iron, and containing very few other nutrients.

West of the Bassendean Sands lies the Spearwood Dune System. This deposit consists of yellow sandy soils still rich in iron, but from which the lime has been leached and redeposited at depth, cementing the sand into limestone. The bedding of the original sand dunes is still visible in the limestone and is known as cross-bedding. The slow movement of water through the rock over thousands of years has caused the solution of calcium carbonate from the limestone, and has resulted in extensive cave formations.

The westernmost deposit, the Quindalup System, is rich in iron and lime and represents very recent (less than 600 years) windblown sands that are not yet fully leached. The Quindalup dunes occur near the coast and are often sparsely vegetated.



The limestone that underlies Yanchep National Park can clearly be seen at Boomerang Gorge. This gorge is believed to be a collapsed cave.

Yanchep National Park is located on the Spearwood Dune System and contains extensive outcrops of limestone with areas of yellow and white sandy soils. It has been suggested that Loch McNess is a water filled, collapsed, underground cavern or series of caverns. However, it is more likely that it is an area where the water table is exposed, expressing itself as a lake.

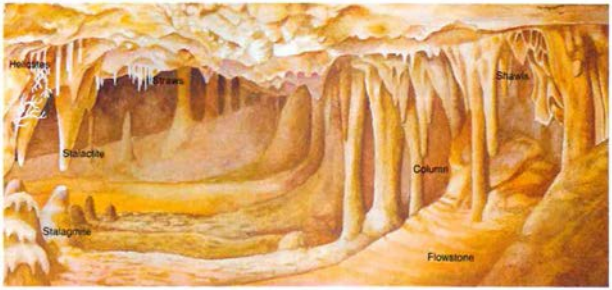
THE CAVES

The caves of Yanchep National Park range from narrow tunnels and vertical shafts to large caverns containing streams and pools. More than 400 caves have been recorded in the park and several have, at one time, been open to tourists (though at present, only Crystal and Yonderup Caves are open to the public). They are significant because of the relatively young age of the limestone in which they have been formed, the quality of their decoration and their significant cultural and fossil remains. The caves have developed in limestone rock laid down in the Pleistocene (more than 10,000 years old) that fringes the south-western coast.

The caves were formed when carbon dioxide from the atmosphere dissolved in rainwater, and then absorbed further acids as it seeped through decaying vegetation at the soil surface. The weak acid solution slowly dissolved the underlying limestone, especially along cracks and other lines of weakness such as old tree root tunnels. Some cave systems were formed when underground lakes gradually dissolved the rock to create passages and chambers. Others were carved by underground streams and rivers.

Speleothems (cave decorations) are formed when the dissolved calcium carbonate is redeposited from solution. Speleothems may range in size from minute helictites, only a few millimetres long, to large pillars and flowstones weighing several tonnes. There are also stalactites, stalagmites, shawls, columns and straws.

Dripstones form when water, saturated in carbon dioxide, drops from the roof and leaves behind a small amount of calcium carbonate. Gradually, each successive drop precipitates further layers of crystals, forming a stalactite. When drops of water fall on the same spot on the cave floor, the deposition grows up from the floor and is called a stalagmite. Each stalactite and stalagmite grows at a different rate, depending on the wetness, temperature, and carbon dioxide levels in the cave, and the thickness of the limestone



bed above it. Some stalactites grow two or three centimetres a year; others take 100 years or so to grow that much. Sometimes stalagmites growing upward meet stalactites growing downward and form columns.

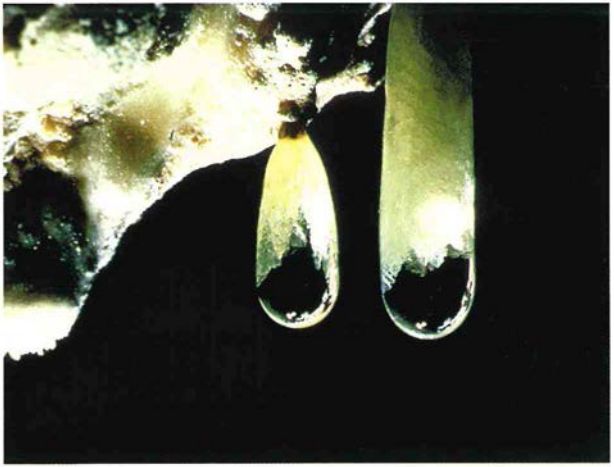
Pore deposits result when seepage through pores and cracks is too slow to form water droplets. Helictites, small irregularly-shaped tubes, are the most common. These formations seem to defy gravity and extend in strange and unpredictable directions. Their growth is controlled by water surface tension, resulting in random orientation or development along the major crystal axes of calcite already deposited. Flowstones, including overhanging shawls and canopies, frozen waterfalls and clusters of glistening nodules, are the bulkiest cave deposits. They are formed from films of calcite left by flowing water. Pool deposits are level terraces at pool edges and the crust of crystal on the walls and bottoms of underground water pools.

CRYSTAL AND YONDERUP CAVES

Crystal Cave, recorded by Yanchep's first settler, Henry White, has active stalactites, stalagmites, helictites, flowstone, shawls and other formations. There are beautiful reflections in the main pool when it is full. An underground stream occupies most of the floor in this section, but the level of water varies with climatic conditions. Crystal Cave is a "stream cave" and has a horizontal, tubular shape caused by flowing groundwater removing the calcium carbonate. The park also has some "solution tube" caves, which have resulted from erosion and solution downwards through cracks in the rock, or along tree roots. This type of cave development results in almost vertical pipes, some examples of which can be seen in the Crystal Cave entrance chamber.

Seven-legged crustaceans known as isopods, many smaller than white ants, may be seen in the Crystal Cave pools. Beside one of these pools, the root of a tuart can be seen about 15 metres below the surface. With the help of discreet lighting, "the jewelled city" sparkles as if in early morning daylight, again in the full sunlight of noon, and last of all under the blinking lights of night time.

Yonderup Cave presents a striking contrast to Crystal Cave. Because it is no longer subject to consistent water action, the formations lack the translucent lustre of "live" stone. There are recognisable shapes in the rocks. A formation resembling the leaning tower of Pisa can be seen. A "monkey" sits in contemplative silence, while a "pack animal", with a head that looks like that of a large goat, stands on several more than the standard four legs, supporting many tonnes of rock. Yonderup also appeals to visitors' senses of adventure. There is very little lighting, apart from the powerful torch handed to each visitor, and while there are passages and steps hewn out of the earth, there is also the opportunity to scramble between narrow crevices that open out into large caverns.



CAVE FAUNA AND FOSSILS

Pale coloured gilgies (freshwater crustaceans) live in the underground waters of Yanchep's caves. The normally brown pigmented crustaceans live in the lake and surface swamps, but they gradually lose colour when they are isolated in the caves. Here, their diet consists almost entirely of the plant roots that grow down to the available water. With isolation, successive generations of gilgies gradually become bluish-purple, then pink and finally white. The pink and white forms have lost their ability to regain their brown colouring, even with a change in diet, and have also undergone other alterations, such as modification to the eyes and loss of hairs and bristles. They are living examples of evolution.

Several species of spider, pseudoscorpion, cockroach and springtail also live in the caves, and have become adapted to a cave existence. Bats roost in some of the caves that are rarely visited by people. Some caves also contain amphipods, which are very uncommon and significant, as their existence dates back to when Australia was part of Gondwanaland.

FOSSIL DEPOSITS: Many caves within Yanchep National Park have fossil deposits that contain the remains of grey kangaroos, brush kangaroos, wallabies and tammar wallabies. There are also bones of the bilby, boodie, quokka, chuditch and ghost bat. Even though they have been extinct in WA for thousands of years, bones of the Tasmanian devil, Tasmanian tiger (or thylacine) and koala have been found. There are also some remains of the now extinct Pleistocene mammals which roamed the south-west thousands of years ago, such as a two and a half metre high kangaroo (*Sthenurus*). The fossils of animals such as the Tasmanian devil indicate that the climate was once wetter and more lush.

Photo - Edyta Jasinska

One of Yanchep's subterranean crustaceans

WILDFLOWER GARDENS

Yanchep's wildflower gardens were created by sustenance workers in the 1930s. Koala cages and bird aviaries were built nearby, in the early 1940s, by the State Gardens Board. The koalas were moved to their present location in 1976, and the aviaries were removed in 1985. In the early 1970s, the National Parks Board further developed the wildflower garden, to enable Yanchep's visitors to experience the range and beauty of the wildflowers of the State's national parks. Rangers were sent out to every national park to collect representative soils and plants.

In 1988, the northern suburbs branch of the Wildflower Society of Western Australia adopted the gardens. The Society's objectives are to increase appreciation of wildflowers and to promote their conservation and cultivation. The group is also involved in planning and developing new parts of the garden, representing the botanical provinces of Irwin, Dale and Drummond, which surround the Swan Coastal Plain. Many of the plants growing here are available from wildflower nurseries. Take a walk through the gardens for inspiration to design your own Western Australian wildflower garden.

The gardens are at their best during spring, but some plants are in flower during every season of the year. Numerous species of banksia, featherflower, kangaroo paw and hakea can be seen, among other plants. Many of these plants grow only in south-western Australia and nowhere else in the world. Stunning featherflowers have a fluffy or feathery appearance, due to the outer parts of the flowers being elaborately divided, and come in an array of different colours and growth forms. The kangaroo paws and catspaws have strange, vividly coloured, paw-shaped flowers and include the red and green kangaroo paw, the State's floral emblem. You can also see the Yanchep rose (*Diplolaena angustifolia*), which grows in the park and north to Eneabba.

Photo - Babs & Bert Wells/CALM

The red and green kangaroo paw

TUART

(Eucalyptus gomphocephala)

The tuart woodland of Yanchep National Park grows towards the northernmost extent of its distribution. It is not as dense as the tuart forest growing near Busselton, and the tuart is not the main species. Its shrub layer is more dense than it is in the true forest areas to the south and contains a larger number of species. In a few isolated localities, particularly to the west of the chain of swamps, tuart occurs in an almost pure stand, with very little undergrowth.

DESCRIPTION: Tuart has dense foliage, dull grey bark and showy white to cream flowers. This medium sized to tall tree grows up to 40 metres high. Its rough, fibrous grey bark flakes into small pieces. The leaves are often curved, and are a shiny light green above and paler below. The almost stalkless buds cluster in groups of seven. Tuart buds are very distinctive; they have swollen bud caps and are shaped like small ice cream cones. The fruits are narrow, cup-shaped and have a fairly broad rim.

OTHER NAMES: White gum, duart.

HABITAT AND DISTRIBUTION: Tuart likes sandy soils in coastal limestone areas and grows from Jurien Bay to Busselton.

FLOWERING TIME: Summer and early autumn.

ASSOCIATED SHRUBS AT YANCHEP: Bull banksia (*Banksia grandis*) is common, particularly near the swamps, while firewood banksia (*Banksia menziesii*) and candle banksia (*Banksia attenuata*) occur widely.

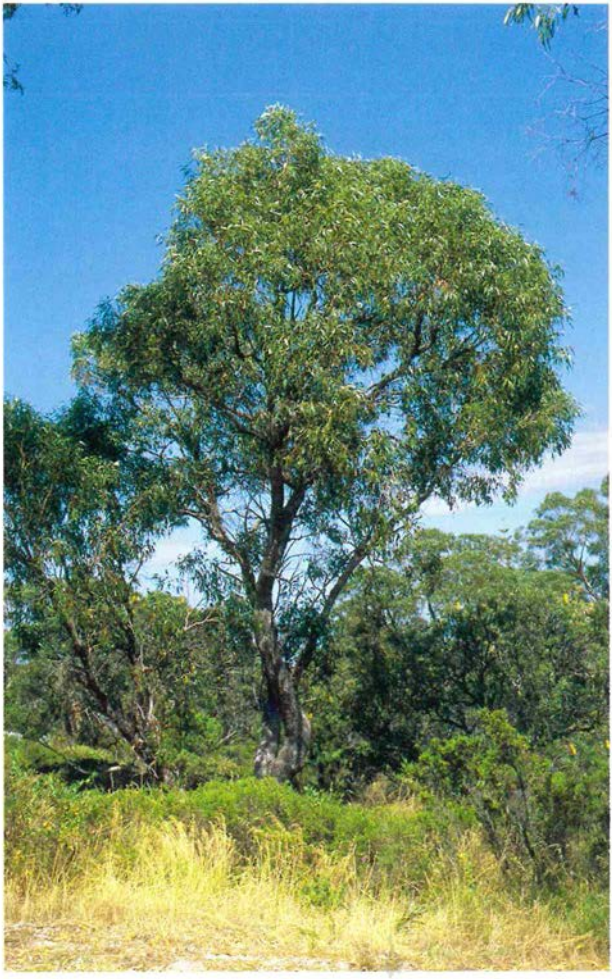


Photo - Andrew Brown

JARRAH

(Eucalyptus marginata)

Jarrah grows mainly in the western half of Yanchep National Park, and is scattered throughout the tuart woodland. It is usually associated with marri, and the two trees form the dominant tree layer. Jarrah is one of the commonest and well-known trees of the south-west, and has been extensively harvested for its richly-coloured and beautifully grained timber. The timber is sought after for cabinet making and flooring and is resistant to termites.

DESCRIPTION: This tree usually grows up to 40 metres high and has rough, greyish-brown fibrous bark. The bark has vertical grooves and is shed in long, flat strips. The leaves, which are often curved, are shiny dark green above and paler below. The stalked buds are in clusters of seven to 11. Each bud has a narrow, conical bud cap, five to nine millimetres long. The flowers are white. The fruits, from nine to 16 millimetres long, are spherical to barrel-shaped.

HABITAT AND DISTRIBUTION: Jarrah usually forms forest or woodland on gravelly soils but sometimes also on loam or sand (as at Yanchep). The species is widespread, growing from Perth to Albany, with outlying populations as far north as Mount Lesueur and as far inland as Jilakin Rock.

FLOWERING TIME: Spring and early summer.

ASSOCIATED SHRUBS AT YANCHEP: The understorey tree species found in the jarrah country consist mostly of bull banksia, firewood banksia and the candle banksia. A few sheoaks (*Allocasuarina* species) can be seen in isolated areas, while coojong (*Acacia saligna*) and stinkwood (*Jacksonia furcellata*) are locally abundant.

Above: *Jarrah woodland*

Below: *Flowers and fruit*

Photo - Babs & Bert Wells/CALM

PRICKLYBARK

(Eucalyptus todtiana)

Much of the northern and eastern sections of Yanchep National Park are vegetated with heath. Together with banksias, pricklybark is the dominant tree. Occasional specimens are also found in the banksia woodlands elsewhere in the park. Pricklybark is a gnarled straggling eucalypt with a short trunk and a dense, drooping crown. The seeds are eaten by white-tailed black-cockatoos. The scientific name honours Emily Todt, a botanical artist who drew eucalypts for Baron von Mueller, who collected the tree.

DESCRIPTION: This spreading tree grows to only nine metres tall at Yanchep. Its rough, grey to brown bark (yellowish-orange after fire) is made up of fine fibres that, if rubbed hard, will stick into your hand, thus the tree's name. The slender leaves are a pale green to bluish-green. The buds are covered with a hemispherical cap. Pricklybark produces abundant flowers and large clusters of cup-shaped or globular fruits, up to 25 millimetres wide.

OTHER NAMES: Coastal blackbutt.

HABITAT AND DISTRIBUTION: Pricklybark typically grows in infertile, sandy soils on the coastal plain. Near Perth it chiefly inhabits the infertile Bassendean sands. It extends from the Murray River, east of Mandurah, to the Arrowsmith River, near Dongara.

FLOWERING TIME: Late summer.

CANDLE BANKSIA

(Banksia attenuata)

Candle banksia produces numerous, slender cones of bright sulphur-yellow flowers in spring and summer. These candle-like flower-spikes are a magnet for honey-eating birds, honey possums, insects and other nectar-eating animals. Candle banksia is very widespread and common throughout the south-west of the State. Aboriginal people used to soak the flower-spikes of this species in a water-filled hole lined with paperbark to make a sweet drink.

DESCRIPTION: This small tree, growing up to 10 metres high, has a rough crumbly bark. The leathery, strap-like leaves are 40 to 270 millimetres long and have finely serrated edges. The yellow, cylindrical flower-spikes are up to 250 millimetres long and 50 millimetres wide. Despite the perception that they are single flowers, the cones are actually made up of numerous individual flowers, each splitting into four narrow segments. The cylindrical fruiting cones remain on the trees for several years and are clothed with the remains of dead flowers. Several small, densely hairy fruits are embedded in the woody axis. Each fruit opens by two valves to release two winged seeds. Candle banksia has narrower flower- spikes than swamp banksia and river banksia, and flowers from spring to summer. Unlike swamp and river banksias, its fruiting cones retain the persistent remains of flowers. These look like old netting between the exposed fruits.

OTHER NAMES: Slender banksia, coast banksia, piara.

HABITAT AND DISTRIBUTION: Candle banksia usually grows on sandy soils in woodlands, shrublands and heath. The species is less common in forest communities. It is found between Kalbarri and Bremer Bay.

FLOWERING TIME: Spring and summer.

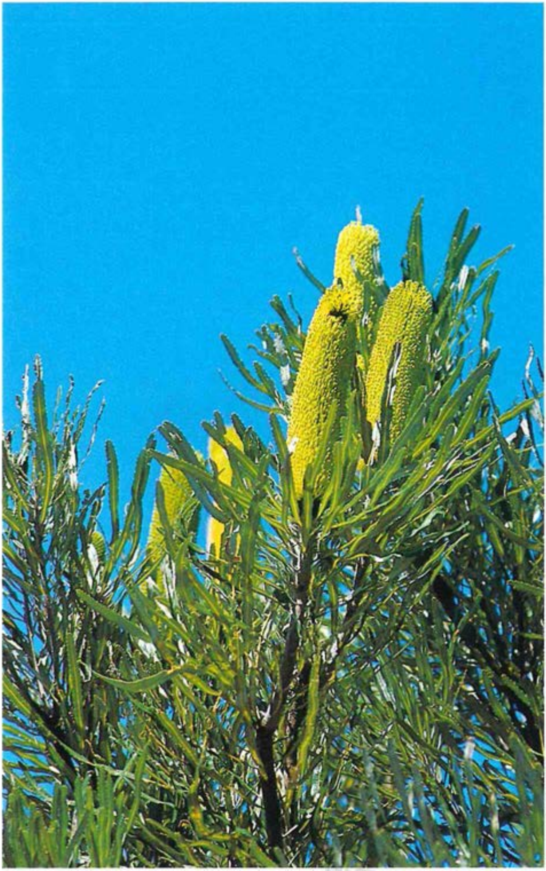


Photo - Cliff Winfield

BULL BANKSIA

(Banksia grandis)

Bull banksia is a common tree characteristic of the jarrah forest understorey. It has handsome dark green, shiny foliage radiating around its huge golden yellow flower cones. The enormous leathery leaves are quite distinctive. They are deeply divided into numerous large triangular lobes.

DESCRIPTION: Bull banksia is easily recognised by its deeply divided leaves, large pale yellow flower-spikes and fruiting cones. This small tree grows up to 10 metres high and has thick, rough and crumbly bark. In coastal areas it may only be a shrub up to three metres high. The saw-toothed leaves are 100 to 450 millimetres long. It has cylindrical flower cones up to 400 millimetres long. The very large fruiting cones remain on the trees for several years, but, unlike slender banksia, the remains of dead flowers are shed early. There are many small fruits, mostly restricted to the lower half of the cone.

OTHER NAMES: Giant banksia, mangite, pulgarla.

HABITAT AND DISTRIBUTION: Bull banksia is found mostly in jarrah forest, mixed woodlands or coastal heath, but also in karri forest. It grows on a wide variety of soils and is common through much of the south-west. It extends from Jurien Bay to the South Coast, east to Bremer Bay and inland to Katanning.

FLOWERING TIME: Spring and summer.

Photo - Cliff Winfield

FIREWOOD BANKSIA

(Banksia menziesii)

When it is in flower you cannot miss the firewood banksia. Its handsome flower-spikes gradually change from silvery grey through rich pink to orange and pink as they develop. Banksia flowers are generally arranged in crowded, spiralling rows around a thick, woody axis, readily separating them from other members of the family. The flower-spikes produce copious nectar that attracts birds such as honeyeaters, wattlebirds and western spinebills, and animals such as the honey possum. These tiny marsupials inhabit the heathlands and banksia woodlands of Yanchep National Park and have a long snout and brush-tipped tongue, perfectly suited for probing flowers.

OTHER NAMES: Menzies banksia.

DESCRIPTION: Firewood banksia is a tree up to 10 metres high, with a rather straggly habit. It has crumbly bark, thickly woolly branchlets and saw-toothed leaves that reach 25 centimetres long. Its attractive flowers, arranged in cones up to 12 centimetres high, are usually reddish-pink, but yellow-flowered forms are not uncommon and coppery red ones are occasionally found. The large cones have up to 25 follicles. Blistering caused by a rust fungus can sometimes be seen on the leaves.

HABITAT AND DISTRIBUTION: Common near Perth, firewood banksia is widespread on the sandplains between the Hill River and Pinjarra, with small, scattered populations found north of the Kalbarri area.

FLOWERING TIME: March to August.

Photo - Babs & Bert Wells/CALM

YANCHEP ROSE

(Diplolaena angustifolia)

One of the best places in Yanchep National Park to see Yanchep rose is the Wildflower Garden. A clump of them can also be seen growing on the northern side of the car park near Crystal Cave. However, they are difficult to see when not in flower, so it is best to search for them between July and September, when this plant produces drooping flower heads between two and five centimetres across.

DESCRIPTION: Yanchep rose is a spreading shrub that reaches about a metre high. Its leaves are very narrow, ranging from two to seven centimetres long. They are smooth on top, but close inspection will reveal that they are covered with short and somewhat curled, star-shaped hairs beneath. What appears to be a single flower is in fact a head of numerous flowers surrounded by overlapping bracts (the outer flower parts). The petals tend to be hidden, but numerous red stamens emerge from the bracts to form the most prominent and attractive part of the flower.

HABITAT AND DISTRIBUTION: The Yanchep rose grows on the coastal plain between Perth and Guilderton. It extends north to Eneabba.

FLOWERING TIME: July to September.

Photo - Babs & Bert Wells/CALM

KOALA

(Phascolarctos cinereus)

Koalas have been a feature of Yanchep National Park since 1938. The park has one of WA's largest colonies of koalas. They can be viewed from a walk-through enclosure, where a tree top habitat has been provided for them.

HISTORY AT YANCHEP: A colony of koalas (originally from Victoria) was relocated to Yanchep in 1938 from Perth Zoo, which could not maintain the animals due to insufficient food supplies. They quickly became a major attraction but died of natural causes before 1940. A new colony was established at Yanchep in 1944. Thousands of eucalypt trees, representing 10 species, have been planted in the park to provide suitable food. By the late 1980s, the koala colony had become infected with *Chlamydia* and was therefore infertile. In 1992 a number of koalas were airlifted from Kangaroo Island, in South Australia, to establish a disease-free colony at Yanchep. They began to breed in 1994.

STATUS AND DISTRIBUTION: There are a number of koala colonies in WA, though the animals are not now native to the State (although fossil remains have been found in the south-west of WA). Their natural habitat is the eucalypt forest of eastern Queensland, New South Wales, South Australia and Victoria, where numbers are declining due to urbanisation and clearing.

LIFE HISTORY: Because they survive on a poor-quality diet of eucalypt leaves, these marsupials are quite inactive for most of the time. However, they are superb climbers and occasional swimmers. Koalas usually give birth to a single baby (though rare twins were born at Yanchep in 1996). The young are carried on the mother's back when they grow too large for the pouch, at about seven months. Joeys are weaned and become independent at about a year. They have a life expectancy of 12-15 years, however in captivity this increases to 18 years.

Photo - Ernie McClintock

Above: *The rare Yanchep twins, born in 1996*

Photo - Babs & Bert Wells/CALM

QUENDA

(Isoodon obesulus)

In WA, where clearing for farming and for urban expansion has considerably reduced its range, this bandicoot is a threatened species. It is, however, still found in Yanchep National Park.

DESCRIPTION: Quendas are a similar size to rabbits, although larger males may reach two and a half kilograms. They have large hindquarters but their bodies narrow to a long, pointed snout. The ears are small and rounded. The fur has a coarse feel and is usually dark greyish-brown with yellowish flecks. The tail is short and lightly furred. Quendas often move with a distinctive bounding gait.

OTHER NAMES: Southern brown bandicoot.

STATUS AND DISTRIBUTION: Many populations on the Swan Coastal Plain are under threat from new developments. Predation by foxes and cats also has a major impact on this species. The quenda is found in wetter parts of south-western WA and in all eastern States.

PREFERRED HABITAT: These mammals are found in a variety of habitats such as forest, heath and scrubland. They favour areas where the understorey is quite dense, particularly near watercourses and wetlands.

LIFE HISTORY: Quendas obtain much of their food by digging with their strong claws. Bulbs and invertebrates, such as insect larvae and worms, form the bulk of their diet and in outlying suburbs they often dig in lawns to obtain black beetles. They construct well-concealed nests, using leaves, grass, earth and other material, in shallow depressions, often amongst fallen debris or low shrubs. Quendas occupy distinct home ranges, but in very productive areas these overlap. Several females may occupy territories within the larger range of a male. Breeding can occur throughout the year, although most young are born from winter

Photo - Babs & Bert Wells/CALM

through to summer. Two or three of the five or six young may survive to weaning.

WESTERN GREY KANGAROO

(Macropus fuliginosus)

Western grey kangaroos are quite common at Yanchep and may be seen feeding on grassed areas in the early morning or late evening. The golf course is a particularly good place to see them. Away from the grassed areas they mostly inhabit the surrounding woodlands. There is an enclosure within the park where you can see kangaroos being cared for, after injury, for rehabilitation back into the park. Western brush wallabies can also be found in Yanchep National Park but are shy and rarely seen. They usually move singly or in pairs.

DESCRIPTION: These large, fairly muscular animals are greyish-brown to reddish-brown in colour. The males can grow to more than two metres from head to tail. The females are smaller. Their muzzles have finer hairs than most other kangaroo species.

STATUS AND DISTRIBUTION: Western grey kangaroos are widespread and abundant across southern Australia. They are now probably found in greater numbers than before European settlement because of the provision of pasture and additional water points, such as dams.

PREFERRED HABITAT: These 'roos prefer open heathlands, near water and with nearby forest or woodland.

LIFE HISTORY: Western greys are mainly grass eaters. The males may fight for the attention of a fertile female. They breed throughout the year, although most young are born in summer. They usually produce one joey. Newborns resemble a jelly bean and take only a few minutes to climb to the pouch and attach themselves to a teat. They leave the pouch at around nine months but continue to suckle for a further nine months, often while another young is occupying the pouch. The mothers and their young use a series of clucking sounds to communicate.

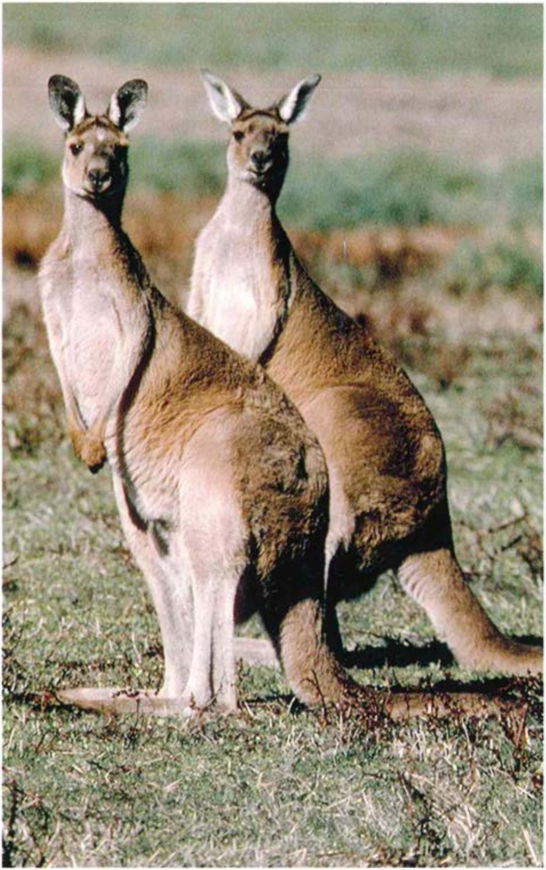


Photo - Babs & Bert Wells/CALM

WATTLED BATS

(Chalinolobus species*)*

At least two species of bat live at Yanchep National Park, where they roost in tree hollows and many caves. They are the Gould's wattled bat (*Chalinolobus gouldii*) and the chocolate wattled bat (*Chalinolobus morio*).

DESCRIPTION: Gould's wattled bat has a dark mantle across its head and shoulders, a brownish posterior, and a prominent lobe of skin, or wattle, joining its ear to the edge of its lip. The chocolate wattled bat is a chocolate brown. Just 47 millimetres long (on average), it has a small inconspicuous lobe at the corner of its lip, and may have a ridge of fur across the snout. Its ears are too short to meet above its head when pressed together.

STATUS AND DISTRIBUTION: Gould's wattled bat is found on the coastal plain and throughout most of Australia. The chocolate wattled bat extends across southern Australia and up the eastern seaboard and is also found in some parts of the Pilbara, central Australia and central Queensland. Both species are common.

LIFE HISTORY: Wattled bats are insect eaters. These amazing animals emit sound pulses well beyond the range that we can hear, and listen for echoes to locate obstacles and capture food. They roost in small colonies of between 20 to several hundred. Like most bats they hibernate during winter. Gould's wattled bats commonly give birth to twins but chocolate wattled bats usually have a single young around November.

Photos - Babs & Bert Wells/CALM

Left: *Gould's wattled bat* Above: *Chocolate wattled bat*

EMU

(Dromaius novaehollandiae)

Wild emus still roam and breed within Yanchep National Park. They can be easily seen in an enclosure at the start of the Caves Walk (see pages 62-63). The emu is Australia's largest native bird, and the second largest flightless bird in the world. The birds were once a favoured food of Aboriginal people, who would sometimes place poison plants in waterholes to drug their prey, or attract the birds by imitating their calls. In agricultural areas they are often regarded as a pest, as they can damage fences and watering points and compete with stock for food and water. They have been farmed for their valuable meat, skins and feathers for some years.

DESCRIPTION: This large bird grows up to two metres high. Its back is decorated with soft, brownish-grey feathers and it has long, powerful legs. Each large foot has three toes.

STATUS AND DISTRIBUTION: Emus are common and found throughout the Australian mainland. They are now absent from built-up areas, such as Perth and its suburbs.

PREFERRED HABITAT: They live in a wide range of habitats including deserts, coastal shrublands, woodlands and forests.

LIFE HISTORY: Emus dine on native fruits, vegetation and ground-dwelling insects. Adult birds are usually found in pairs or small parties. They are highly nomadic, and in the breeding season they move into areas of recent good rains. Breeding is usually from March to November, when a sparse nest of grass, bark and sticks is built on the ground. The father does all of the parenting. He broods between five and 11 dark green eggs. The male also escorts the chicks, which have attractive black and yellow stripes. At about 18 months the large juveniles disperse.

CALL: The females make an unusual drumming sound, but both sexes make deep grunts.

Below: *Emu footprints*

Photos - Babs & Bert Wells/CALM

WHITE-TAILED BLACK-COCKATOO

(Calyptorhynchus latirostris)

The noisiest birds at Yanchep are the white-tailed black-cockatoos which are sometimes present in large flocks. Describing these birds in 1903, the late A W Milligan wrote, "One flock of the latter I estimated at 2,000 birds. Their querulous voices became, after time, most irritating". Other common parrots at Yanchep include the ringneck parrot and the red-capped parrot. Flocks of purple-crowned lorikeets screech in the tree tops when the eucalypts are in flower but do not live in the park permanently.

DESCRIPTION: The white-tailed black-cockatoo is a large bird sporting a long tail with a broad white band. The dusky black feathers have an off-white edge, creating a pattern of thin crescents. The bill is short and rounded, and there is a white cheek patch. The closely related Baudin's or long-billed black-cockatoo is also occasionally seen at Yanchep, but it is difficult to tell the two species apart.

OTHER NAMES: Short-billed or Carnaby's black-cockatoo.

STATUS AND DISTRIBUTION: They inhabit the south-west of WA, including the Wheatbelt, and east to Albany and Hopetoun.

PREFERRED HABITAT: Woodlands, forests and mallee areas.

LIFE HISTORY: These seed-eating birds are expert at biting and tearing open thick, woody seed capsules and cones. They pair for life and nest mainly in tree hollows in wandoo woodland of the Darling Range or Wheatbelt. Two eggs are laid and, although both usually hatch, the second nestling usually dies within 48 hours. The chick fledges at around 10 or 11 weeks, but remains dependent until the next breeding season begins. After the chick fledges, the family group then joins other cockatoos and migrates to coastal areas, such as Yanchep, in search of food.

CALL: The flight call is a high-pitched "whee-la".

Photo - Babs & Bert Wells/CALM

WATTLEBIRDS

(Anthochaera species*)*

The largest and noisiest honeyeaters in Yanchep National Park are the wattlebirds. The red wattlebird (*Anthochaera carunculata*), so called because of the red fleshy wattle on the side of the head, is about the size of a small dove. In company with the little wattlebird (*A. chrysoptera*) it is a frequent visitor to flowering plants, particularly banksias.

DESCRIPTION: Red wattlebirds are WA's largest honeyeaters. The top of the head is quite dark, the bill black and the cheeks greyish-white. The wings and tail are greyish-brown with white tips along the feather edges. The underside is a pale brownish-grey, heavily streaked with white, apart from the yellow belly. Little wattlebirds are slightly smaller, and have no red wattle or yellow patch on the abdomen. They are slightly darker and more heavily streaked. The chestnut patch on the wings is conspicuous in flight.

STATUS AND DISTRIBUTION: Wattlebirds are common in most parts of southern Australia.

PREFERRED HABITAT: Red wattlebirds inhabit eucalypt forests and woodlands. Little wattlebirds live in woodlands, shrublands, forests and gardens.

LIFE HISTORY: Like all honeyeaters, wattlebirds have brush-tipped tongues, well-suited to probing the flowers of eucalypts, grevilleas, banksias and hakeas. Their movements are dictated by the availability of nectar and pollen, and groups of them are attracted to areas with concentrations of flowering plants. The flowers also attract many tasty insects, with which they feed their nestlings. They breed between July and December.

CALL: Red wattlebirds make a hacking cough that sounds like "chock-a-chock". Little wattlebirds make a more melodious yodelling sound, "cook-cackle, cook-cackle".

Above: *Red wattlebird*

Below: *Little wattlebird*

Photos - Babs & Bert Wells/CALM

PURPLE SWAMPHEN

(Porphyrio porphyrio)

Swamphens are full of character and have an interesting lifestyle. Groups undertake egg incubation and chick rearing in a collective manner, with all laying in the same nest. Courting males present the females with plants, while bowing and chuckling.

DESCRIPTION: These birds have a large bright red beak that extends to the top of the head, an attractive "apron" of dark blue feathers on the breast and a white undertail. The remainder of the feathers are a dusky black. The tail is quite stubby. Swamphens have large pinkish-red feet. The eye is small and red. Adults are between 44 and 48 centimetres long and the males tend to be larger than the females.

STATUS AND DISTRIBUTION: Swamphens are widespread throughout Australia, but absent from a large area of the central inland and across to the Mid-West coast. They are common in most permanent swamps and freshwater lakes across the south-west.

LIFE HISTORY: Swamphens mostly eat the stems of young reeds. Fruits, seeds, eggs, invertebrates and other small animals form a lesser part of the diet. Most breeding occurs between August and February. The birds form groups of between two and 10, and the dominant males are responsible for defending their collective territory. Three to eight eggs are laid on a large platform of reeds which is trampled into a dish shape by group members. Several females may lay in the same nest and share the incubation duties. A separate nest is constructed as a "nursery" in which the chicks are raised. Various adults (mostly those lower down in the pecking order) supervise the foraging activities of the chicks and brood them at night.

CALL: At night, swamphens often make a loud, screeching "kee-oww". While feeding they "chuck-chuck" softly at one another.

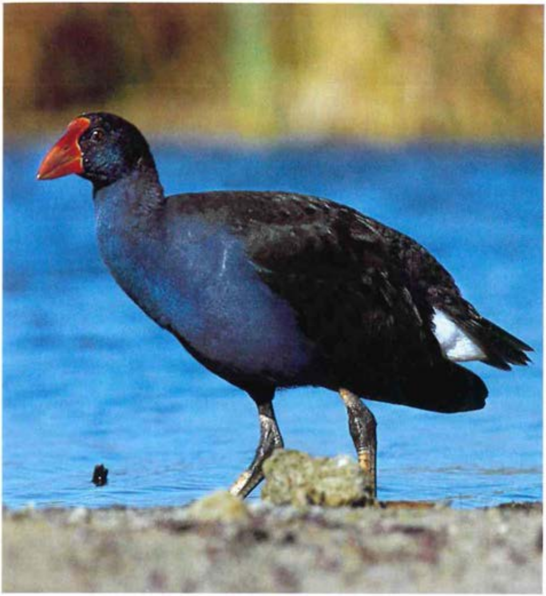


Photo - Babs & Bert Wells/CALM

MUSK DUCK

(Biziura lobata)

The musk duck is found on most of the waterways of south-western Australia and is usually seen floating motionless or kicking up great jets of water far from shore. During the breeding season, male musk ducks have an intense odour emanating from their oil or preen gland, which is situated on the bird's rump. When one was brought on board the *HMS Discovery* in 1791 Captain George Vancouver complained "A very peculiar one was shot, of a darkish grey plumage, with a bag like that of a lizard under its throat, which smelt so untolerably [sic] of musk that it scented nearly the whole ship".

DESCRIPTION: This bird is perhaps the most prehistoric, unduck-like looking creature found in our parklands. It has a blackish-brown plumage with numerous fine lines of light brown and floats very low in the water. Under the chin of the mature male is an unusual leathery bag.

HABITAT AND DISTRIBUTION: Musk ducks tend to live in large, permanent swamps in higher rainfall areas of southern Australia.

LIFE HISTORY: During courtship, the birds stage a remarkable display by blowing out cheeks and neck, inflating their chin bag, spreading their spiny tail feathers over their back, throwing water and giving a piercing, most unduck-like whistle with each kick. Water levels determine breeding, so from the first rains in March through to September you are likely to see these individuals perform. Musk ducks feed entirely by diving and can remain submerged for up to a minute as they search deep for aquatic insects, mussels, snails, crustaceans and frogs. The birds are entirely aquatic and are almost helpless on land. To escape detection they sink into the water, leaving only their eyes and nostrils exposed.

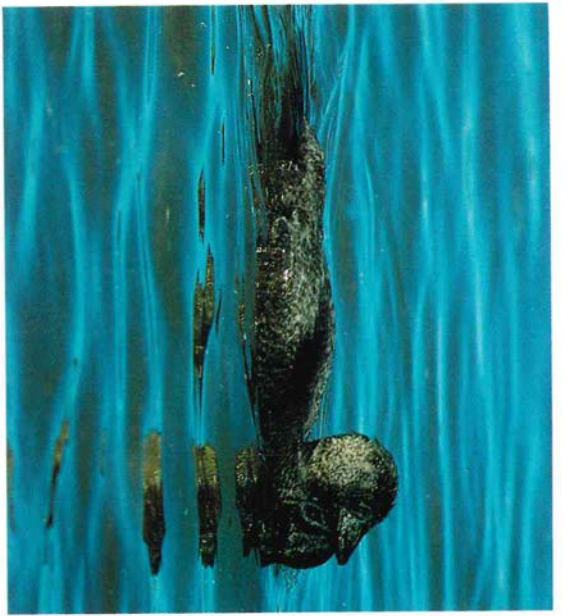


Photo - Babs & Bert Wells/CALM

YANJIDI TRAIL

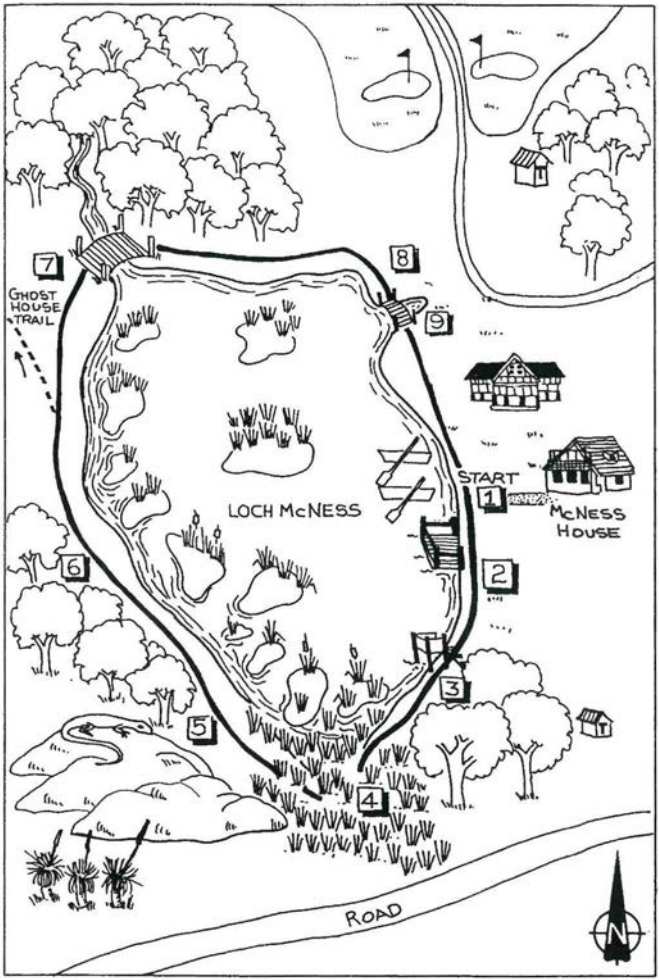
This two kilometre trail takes you through the heart of a coastal wetland, circumnavigating Loch McNess. It takes about 30-40 minutes to complete. Yanjidi is a variation of the word yanget, the Nyoongar Aboriginal word for the native bulrush that is a prominent feature of the walk.

1. Start from the McNess House Visitor Centre. Walk the promenade to the lake front and proceed south along the lake's edge. Here you can see the occasional long-necked tortoise (*Chelodina oblonga*) coming up for air. This species has a shell up to 40 centimetres long and is common in permanent fresh water and seasonal swamps. It is very common in Loch McNess. The eucalypts growing near the lake edge are flooded gum (*Eucalyptus rudis*), and they were the main reason that Yanchep was given the koalas in the 1930s. They had previously been housed at the Perth Zoo, which found it difficult to ensure a steady supply of leaves.

2. A wooden lookout has been built out over the water. From here you can enjoy lovely views of the lake and its many waterbirds. Ducks that visit the loch include the blue-billed duck, black duck, the grey teal, the blue-winged shoveller, the white-eyed duck and the musk duck. This bird is an adept diver and is distinguished by its low profile in the water and sac under its chin.

3. The trail passes through thickets of wattle, which grew prolifically following a hot wildfire that roared through the park in the summer of 1991. By the time it was extinguished, five days later, nearly 1000 hectares of the park, and 2000 hectares of surrounding land, had been burnt, though the park's recreation areas had been saved.

4. On the southern edge of the lake, the trail meanders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through head-high sedges and rushes. At the water's edge, and sometimes extending across the swamp, are the pale rush (*Juncus pallidus*) and its many related species with round pithy stems and leaves, together with the coastal sword sedge (*Lepidosperma gladiatum)* and bulrush (*Typha* species). These plants are all in the family Cyperaceae which has 19 species in Yanchep National Park, more than any other plant family.

5. Heading up the western side of the lake, you pass beneath overhanging paperbarks and you may see lizards, such as the south-western cool skink (*Bassiana trilineatum*), sunning themselves on limestone rocks. This skink, up to six centimetres long, is greyish-brown, olive or brown with cream and brown striping and has a liking for damp sites around swamps. Seven species of snake (including one python), nine of skinks, four legless lizards, four gecko species and five frog species are known to inhabit the park.

6. Here, remnants of the most northerly tuart forest can be seen along the limestone outcrop. Night herons, ibis and cormorants drying their wings in the morning sunlight, are often seen at the lake edge. It is believed that Aboriginal groups congregated in this area, which is rich in natural food resources. The bulrush, after which the park was named, was a staple food. The starchy tubers were dug out of swamps in summer, when the lake dried up and the plants were more accessible. The root had to be treated before it was eaten. Aboriginal people would pound the white horizontal rhizomes to remove the fibrous parts, mould them into a flattened shape and then roast them to produce cakes tasting similar to asparagus. Coastal sword sedge, known to the Aboriginal people as kerbein, was another useful species whose fibrous stems were used to manufacture rope and string.

7. During the park's development in the 1930s, sustenance workers employed with a grant from Sir Charles McNess dredged the lake of excess sedges and rushes. The remains of the dredger now form part of the bridge that crosses the lake at this narrow point.

Photo - Babs & Bert Wells/CALM

Oblong tortoise

8. The vegetation at this point includes the peppermint (*Agonis flexuosa*) and the thick-leaved fanflower (*Scaevola crassifolia*), recognised by its pale blue fan-shaped flowers and thick leaves. The fringe lily (*Thysanotis patersonii*), known to Aboriginal people as tjunguri, clambers over other plants, displaying its attractive fringed purple flowers. The tubers were dug up by Aboriginal people and then roasted. These look like tiny potatoes and are usually found in a cluster circling the base of the plant at varying depths. The blue flowers of native lobelia can be seen for most of the year.

9. A boardwalk has been built across the water. A close look may reveal a freshwater crayfish lurking in the murky water below. Its dark shell provides excellent camouflage. Known as the marron, its delicate flesh was another popular Aboriginal food. Cross the boardwalk and follow the lake edge behind Yanchep Inn back to the starting point.

GHOST HOUSE WALK

This trail offers some of the best "wilderness" walking in Yanchep National Park. It starts and finishes at the McNess House Visitor Centre and, for its first part, runs along the Yanjidi Trail before turning off to the left and continuing along the western side of the Loch McNess lake system. It is a challenging 11 kilometre circular route that takes about four hours to complete. It is important to register at the McNess House Visitor Centre before commencing this walk and check back in on your return. It is a good walk all year except on hot summer days.

The trail passes through tuart forest, banksia woodland and coastal heathland. Limestone outcrops are visible flanking the beautiful lake on the north-western section of the trail, and walkers can search for the ruins of the "Ghost House" and the chauffeur's cottage on the northern side of the lake.

1. The majesty of the tuart forest can be appreciated at this point. The trees are very old and many forms of invertebrate life inhabit the loose, craggy bark.

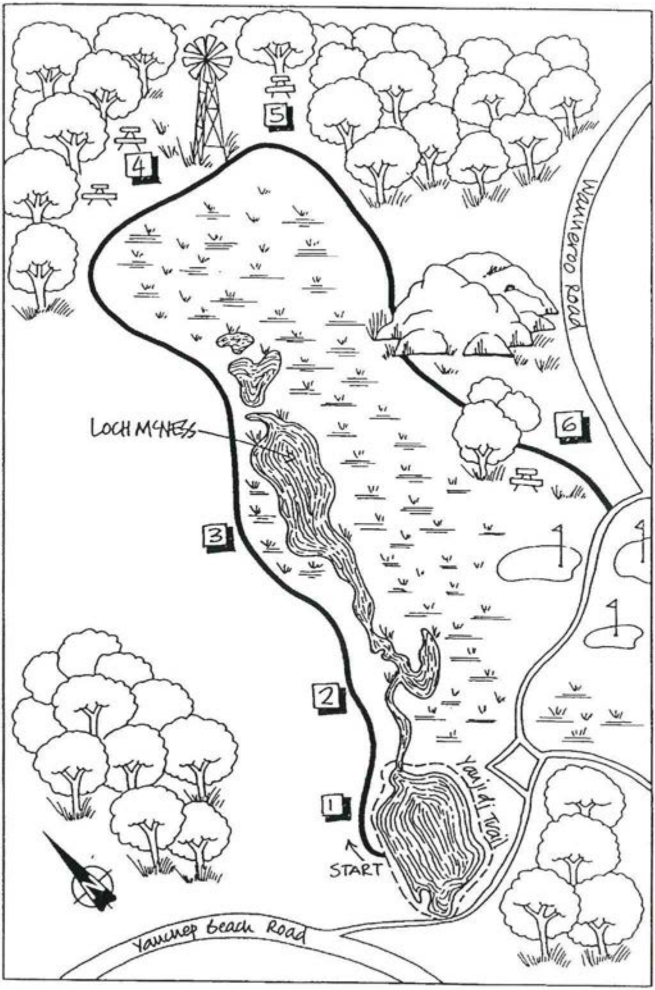
2. Next you pass through good examples of coastal heath. Wildflowers abound here in the spring.

3. Limestone outcrops on the eastern side of the lake are visible, flanking the bulrushes of the north lake wilderness area.

4. The "Ghost House" ruins can be explored, but please do not disturb or remove anything found there.

5. Many invertebrates and reptiles live among the rocks of this rough, rocky limestone ridge.

6. You will pass through another stand of tuart forest, before returning via the golf course and the road that was once the only one heading north from Perth.



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Wanneroo Road
LOCH McNESS
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START
Yaberoo Budjara Trail
Yanchep Beach Road

BOOMERANG GORGE TRAIL

This short, easy walk follows an ancient stream bed through a collapsed cave system. The walls of the gorge are the original cave walls. The walk is 500 metres return and takes about 30 minutes. It is accessible to wheelchairs.

1. The trail begins near the eastern side of Gloucester Lodge Museum. Boomerang Gorge was first discovered by Europeans in 1841 when a party, led by explorer John Septimus Roe and Governor Hutt, was taken there by a Nyoongar man named Wowin. Roe's Aboriginal guides were terrified of the caves in the gorge, which they believed were inhabited by evil spirits.

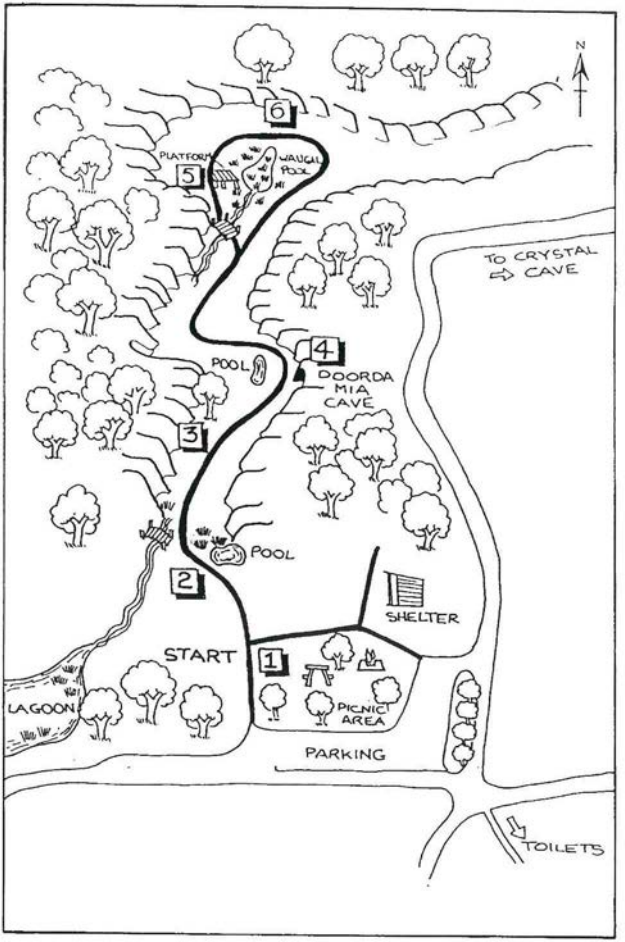
2. At this point, swampy ground surrounds the creek, which flows through a series of pools dotted along the gorge.

3. Tuart trees (*Eucalyptus gomphocephala*) grow throughout the gorge and surrounding area. These trees have been greatly reduced in number on the Swan Coastal Plain, largely because of land clearing for farming or residential areas.

4. There are several small caves in the walls of the gorge. The largest cave has been found to contain Aboriginal artefacts and was probably once used as a shelter. The Aboriginal name for the caves was "doorda mia", which can be translated to "dog's house". It is thought that the name was given because dingoes dwelt in the caves.

5. A platform in the middle of the loop is barely visible. This was once a stage, part of an outdoor amphitheatre in the 1930s. The audience used to be seated on the tiered slopes.

6. Waugal Pool is located at the eastern end of the trail. The pool is almost hidden by large sedge and bracken fern communities. The Yanchep Volunteers Association has removed much of the introduced bridal creeper that once ran rampant here.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PLATFORM
5
WAUGH FOX
TO CRYSTAL CAVE
4
POOL
DOORDA MIA CAVE
3
POOL
2
SHELTER
START
1
LAGOON
PICNIC AREA
PARKING
TOILETS

CAVES WALK

This walk is 3 kilometres long and takes about 3 hours, including a guided tour of Crystal Cave. Tuart limestone areas have a lot of caves and crevices, which may be hidden by the undergrowth. Please take care and stick to the trail.

1. Head north-east from the McNess Visitor Centre.

2. To your right, after crossing the road, you will see an enclosure where kangaroos and emus are cared for after injury. Continue through the mixed woodland of tuart, jarrah and banksia.

3. After crossing another road, head up the ridge and through the tuart woodland. In the park, the presence of tuart is an indication of limestone caves. They tend to grow in areas where there is underground water, and the action of the water dissolves the limestone rock to produce caves and other formations.

4. Turn north and along the eastern side of the grassed area, crossing another road. Pass the Boomerang Gorge walk and continue north to Cabaret Cave.

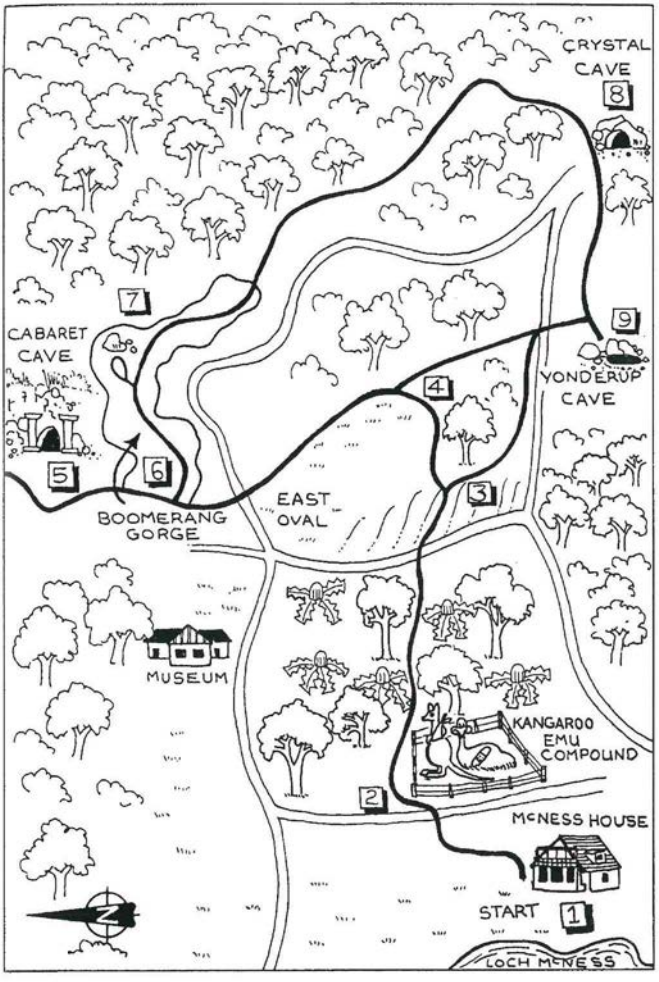
5. Cabaret Cave was significantly modified in the 1940s, but has since fallen into disrepair. It is dangerous and is rarely open to the public, but its external appearance is interesting and unusual. Take great care as the rock here is highly unstable.

6. Retrace your steps and turn left into Boomerang Gorge.

7. Climb over the wire at the end of Boomerang Gorge and walk in a south-easterly direction. Examine the large piece of limestone that has tumbled into the gorge. It contains solution pipes, and is evidence that the gorge was once a cave.

8. Continue along the trail to Crystal Cave (see page 16).

9. Continue to Yonderup Cave, open only for groups that wish to undertake adventure caving. Cross the road and head back to the starting point.


CRYSTAL CAVE
8
9
YONDERUP CAVE
7
CABARET CAVE
4
5
6
BOOMERANG GORGE
EAST OVAL
3
MUSEUM
KANGAROO EMU COMPOUND
2
McNESS HOUSE
START
1
LOCH McNESS

HISTORIC TRAIL

This walk explores the European history of Yanchep National Park. It is 4 kilometres long and takes about 2 hours to complete.

1. Begin at the McNess Visitor Centre and head north.

2. The wildflower gardens offer visitors a chance to wander through a collection of the State's flora.

3. Enter the koala enclosures and take some time to view one of WA's largest koala colonies (see page 36).

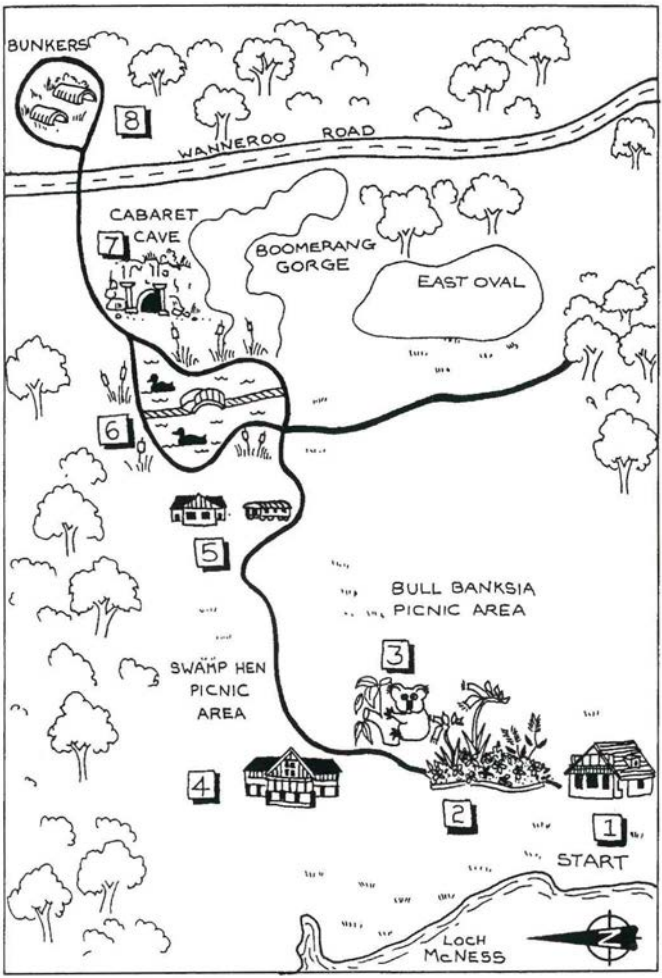
4. The Yanchep Inn (see page 9) was built from the same ground plans as Caves House near Yallingup.

5. Continue through the recreation area to the Gloucester Lodge Museum, a great place to explore the park's history. The tram carriage was one of eight placed near Boomerang Gorge in 1933, to provide accommodation (the rest are now at Whiteman Park). The Lodge was built by sustenance workers in 1933 as a pavilion for the Crystal Swimming Pool and to provide accommodation for tourists.

6. On your right is an ornamental lake that was part of the "garden style" of the 1930s and 1940s. You may be able to spot mountain ducks, black ducks and other waterbirds.

7. Cabaret Cave was modified to create a grand and unique ballroom for the Duke of Gloucester's visit in October 1934. It was used until the 1950s as a function room, and it was here that many Perth girls made their "debut" into society.

8. Make your way to the bunkers, one of two such establishments within the park (the other is at the golf course) used for radio communications during World War II. Retrace your steps to Cabaret Cave. You can either return to McNess House via the same route, or join up with the Caves Walk or the Boomerang Gorge Walk.


BUNKERS
8
WANNEROO ROAD
CABARET
CAVE
7
BOOMERANG
GORGE
EAST OVAL
6
5
BULL BANKSIA
PICNIC AREA
3
SWAMP HEN
PICNIC
AREA
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2
1
START
LOCH
McNESS
N

YABEROO BUDJARA HERITAGE TRAIL

Stage 5 - Pipidinny Swamp to Loch McNess

This 5.2 kilometre walk begins at the southern end of Yanchep National Park and takes about two and a half hours to complete. The trail traverses a part of the park seldom explored by visitors. It features excellent views over the dune system and is particularly attractive in spring. This walk is best done in the morning and walkers should arrange to be dropped at the start and met, ideally with a barbecue lunch, at the lake side.

1. The walk begins at the junction of Lacey Road and Wanneroo Road, 47 kilometres north of Perth. The trailhead sign is in a hollow on the northern side of the road. From here you wind between banksias until you reach a management track. Turn left and proceed to the fence.

2. Follow the fence line north. On the right of the track is banksia and marri woodland, while on the left is the swamp. Aboriginal legend has it that the swamp was created out of the blood and meat from the tail of a crocodile that settled here.

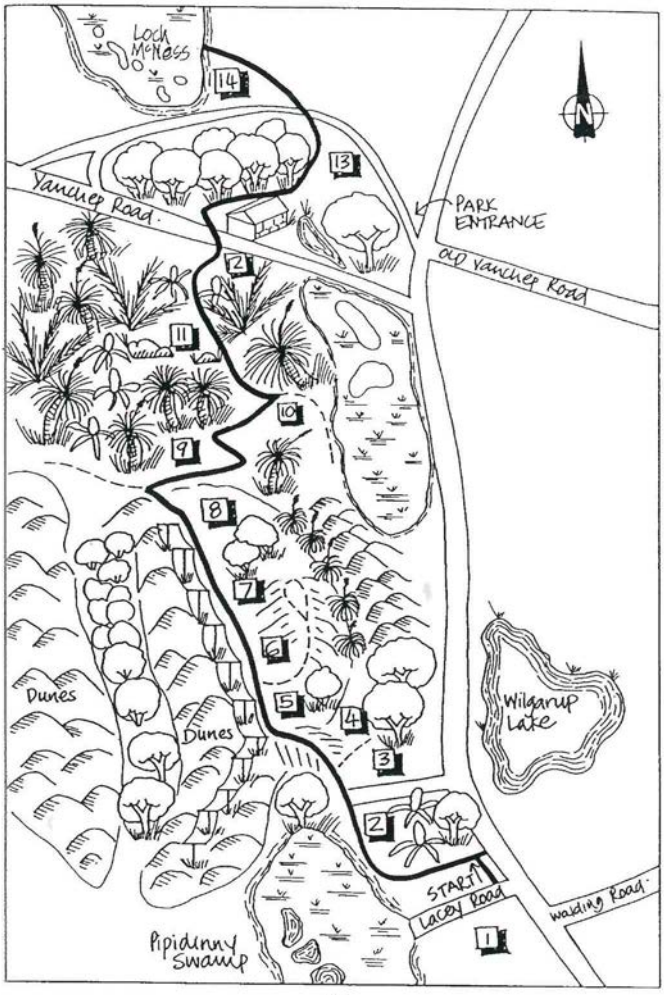
3. After passing a track to the right, the trail narrows slightly and winds into the woodland. On the left is a large grove of tuarts in a low-lying area adjacent to limestone ridges.

4. Continue along the trail until you meet another track. Take the left fork and climb a sandy slope towards the electricity pylons at the top of the dune.

5. At the top of the dune there are excellent views to the east. Follow the track north.

6. A short track, opposite one of the pylons, leads 50 metres to a high point with spectacular 360° views.

7. This section along the dune is typical coastal heath. There are a few blackboys between the dunes, but it is mainly low scrub of wattle and other heath vegetation.


Loch McNess
14
13
Yanchep Road
PARK ENTRANCE
Old Yanchep Road
12
11
10
9
8
7
6
5
4
3
2
1
Dunes
Dunes
Wilgarup Lake
START
Lacey Road
wading Road
Pipidinny Swamp

8. This vantage point is the northern edge of the dune system. To the east is the depression that is part of the chain of wetlands running south from Loch McNess to Lake Joondalup and beyond. Walk down from the top of the dune.

9. Turn right at the junction by the base of the dune. This section runs along the edge of two vegetation systems - banksia woodland on deeper sands to the north and heath on the younger sands on the south.

10. Leaving the edge of the dunes, the track winds through very pleasant banksia woodland that features several banksia species, blackboys and zamias. At the "T" junction, marked by a large curved blackboy, take the left track and continue north.

11. This section, which also features parrotbush (*Dryandra sessilis*), rises out of the woodland to more open heath vegetation, with limestone rock pushing through the soil surface. You then drop down again to see more banksias.

12. As you cross Yanchep Road, you will see the Beach House. The track passes to the left of the house and winds around it to the right and through tuart trees towards the park road.

13. Off the track to the north is White's Grotto - a natural amphitheatre with a small cave off to one side. Permission must be obtained from the park office before entering caves.

14. Cross the park road and head towards Loch McNess. This lake is extremely significant to the Aboriginal people of the area. The lake itself is a Dreaming site, and the level ground on its south-eastern corner (now the main picnic area) was a traditional meeting, corroboree and ritual area.

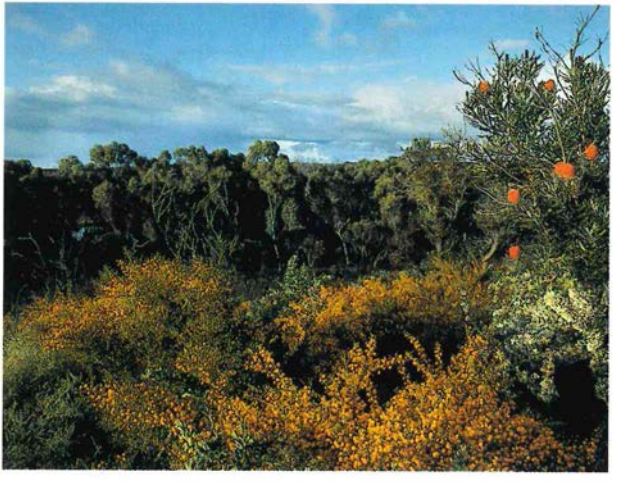
Above: *Parrotbush*

Below: *Black swan*

SIGHTING RECORD			
	DATE	TIME	LOCALITY
tuart			
jarrah			
pricklybark			
candle banksia			
bull banksia			
firewood banksia			
Yanchep rose			
koala			
quenda			
western grey kangaroo			
wattled bats			
emu			
white-tailed black-cockatoo			
red wattlebird			
little wattlebird			
purple swamphen			
musk duck			

Above: *Ghost House*

Below: *Colourful wildflowers*



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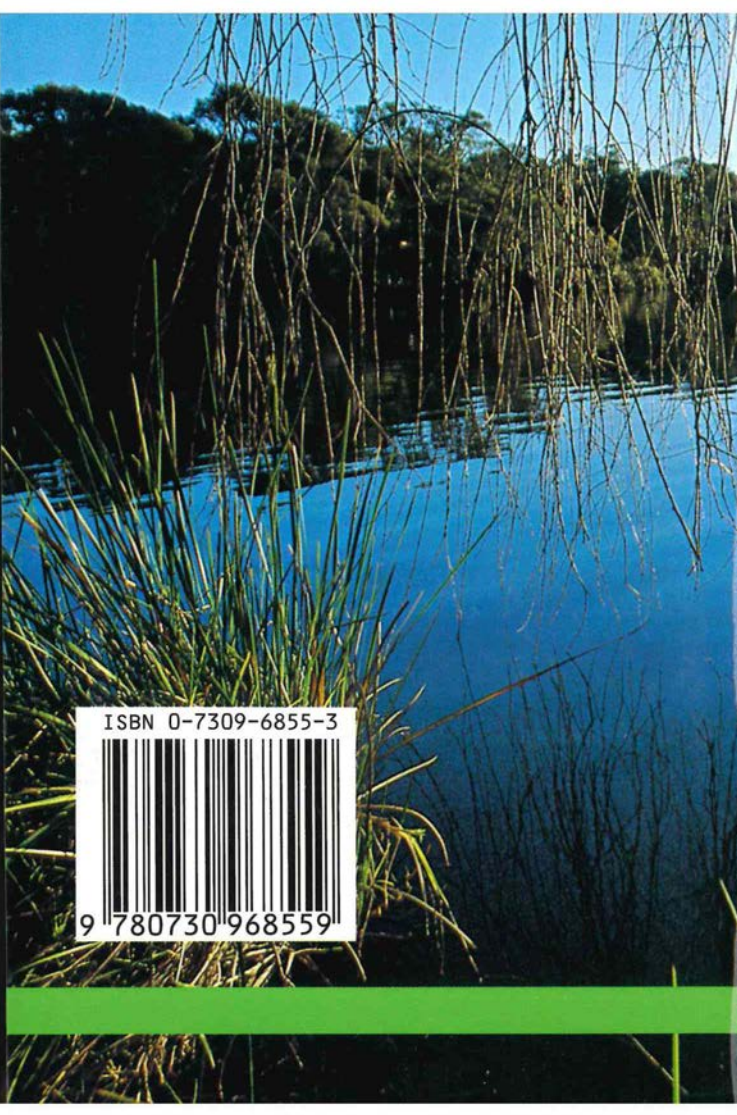

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