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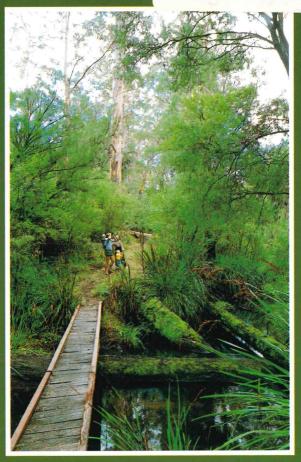
Department of Biodiversity,
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PEMBERTON

bush walks

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Forests at your feet



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Acknowledgements

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HOW TO USE THIS BOOK

Welcome to karri country. . . . and much more!

Here, nature presents a feast of special experiences for people exploring the forests on foot. Imagine being able to watch thirsty bees sipping from sodden moss on a log. Such small delights are in store for bushwalkers hungry for adventure or those simply craving a taste of the bush. This booklet aims to sharpen rather than satisfy your appetite. Consider it a menu from which to choose walks according to individual taste or time constraints.

- ◆ Each walk has a special focus or character which is highlighted in the text.
- ◆ The walks are divided into three categories and colour coded:

a light green strip identifies a short walk less than 1.5km:

the darker green a medium walk more than 1.5km but less than 4km:

and the darkest green a long walk more than 4km.

- This colour code appears throughout the booklet and also on the contents page so you can identify at a glance the walks which appeal to you.
- ♦ Only return distances are used; in other words, the total length of the walk.

- The walks have also been grouped and ordered according to their location. For example, walks starting at the Gloucester Tree picnic site are grouped together and follow each other in this booklet. They appear first, followed by the group of walks in or near the Pemberton townsite, then those to the west, south and east respectively (imagine a huge anti-clockwise circle when looking at the map of the region).
- ◆ Below each walk's title, symbols identify the facilities at each site. These include:

SIGNS IN THE FOREST

Toilets

Canoeing

Barbecues

A Golf

Lookout

Drinking water

Scenic drive

Swimming .

Photo point

Shelter

& Disabled

Shop

The Picnic facilities

Information

HIS Historic site

Caravan

Fishing

△ Camping

Windsurfing

No pets













Observe/conserve

 As a general guide, you can walk about 2.5km in an hour at a leisurely pace. Of course, you can walk faster, but why not take your time and savour each new forest treat?

Walkers, the forests are at your feet.

HOW TO USE THIS BOOK

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SIGNS IN THE FOREST

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Lookout Drinking water

Scenic drive

Photo point Shelter

& Disabled & Shop

Picnic facilities Information

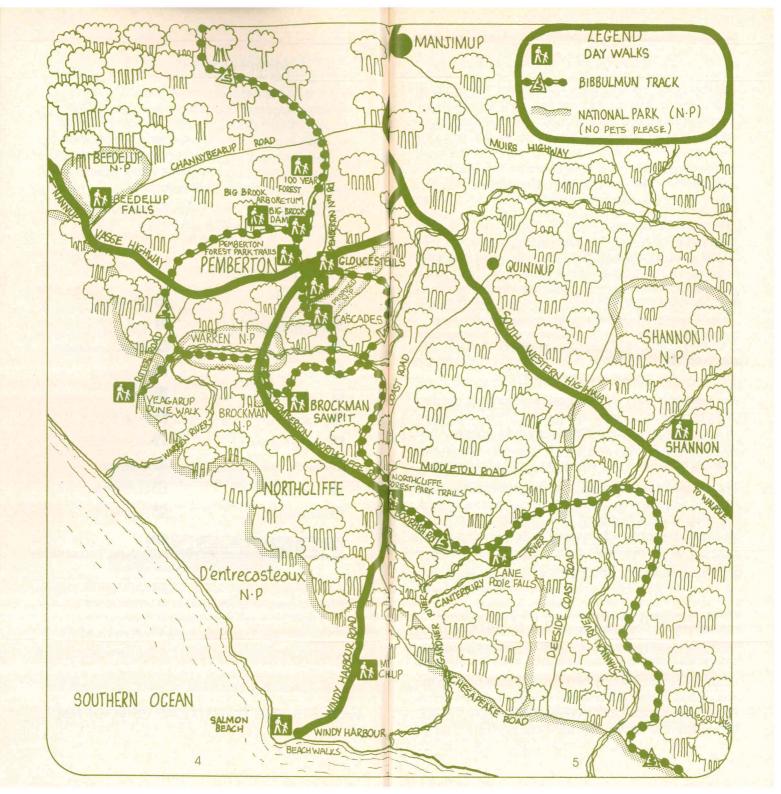
Historic site Cardvan

✓ Windsurfing
No pets

Observe/conserve

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A FOREST FOCUS

The karri forest in Western Australia's cool, well-watered south-west is one of the nation's best forests. Here, between Manjimup and Walpole, the towering, pale-skinned karri and the gnarled marri trees reach up to the sky. Against the emerald green backdrop of the forest understorey, cool rivers flow between the giant trees while on the coast, forest streams give way to wide river mouths and windswept heathlands.

In spring, between September and November, the forest is colourful. This is when the wildflowers awaken from their winter sleep and peep over the blanket of creepers, vines and mosses covering the forest floor. Thirsty rivers, replenished by winter rains, chase the spray as waterfalls tumble merrily over the rocks. Nights are cool so warm clothes and wet weather gear are recommended.

Summer, from December to February, is warm and relatively dry. While sunny days and balmy nights entice you outdoors, please be careful with fires.

Pemberton, here in the heart of karri country, is an ideal base from which to explore the forest. There are dozens of secluded picnic and camping spots near here. The Warren River, its tributaries and several other free-flowing streams offer some of the best trout fishing in the State.

For a feast of karri scenery, visit the Warren, Beedelup and Brockman National Parks. On the coast, D'Entrecasteaux National Park covers 118,000ha of sweeping beaches, wild coastal wetlands, rugged cliffs and dunes. It also offers beach fishing but access is easier if you have a four-wheel-drive.

THE KARRI EXPERIENCE

The living forest dominates life in and around Pemberton. Timber and farming have always been the town's major industries but equally important now is tourism. Both the timber and tourism industries rely on the karri forest which, apart from its biological diversity, produces strong and versatile timber and is popular for recreation.

About half the karri forest in this region is managed for multiple use, which means it provides timber, protects water catchments, provides scenic landscapes and recreation areas, and conserves flora and fauna. The other half is primarily used for conservation and recreation.

Karri grows mainly on red earth soils (karri loams) on lower slopes with more than 1100mm of rainfall. At its best, karri grows in pure stands although it often grows alongside marri and jarrah. In areas with lower rainfall and shallower, less fertile soil, karri is replaced by the hardier marri and jarrah. Most karri trees grow within 40km of the sea and many fine stands grow to the water's edge on inlets permanently open to ocean.

The karri oak -- with its needle-like leaves and corky bark -- is common in the dense forest understorey. Its shrub companions are the waterbush and tree hovea, with its pea-shaped purple flowers. To find out how waterbush got its name, shake it after rain. Near water, the Warren River cedar appears.

Karri trees can live for 400 years but reach their full height in less than a century and their maximum girth in about 200 years. Like other Western Australian plant species, they have adapted to fire and drought. In fact, karri uses wildfires for regeneration.

When a wildfire burns through a patch of forest it does three things: it creates a gap in the canopy by burning down some old trees, allowing sunlight to reach the forest floor; it clears the ground of plant growth, leaving behind a fertile layer of fine ash; and finally, the heat dries out the trees' seed capsules, which later open and scatter their seed on to the fertile bed below.

After the first winter rains following a bushfire, a healthy crop of tiny karri seedlings appear -- and then the struggle for survival begins. As young karri grow toward the sun, in fierce competition with their siblings, the weaker saplings die from lack of moisture and light. This process continues for about 200 years or more until, eventually, each tree has clearly staked out its own territory in the sky. Foresters use this principle to manage or thin regenerated forest.

GLOUCESTER TREE TRAILS

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The Duke's Walk

(400m, easy)

Catch your first close-up glimpse of the karri forest from this short loop trail. Only about 3km from Pemberton, the trail starts from the famous Gloucester Tree — the world's highest fire lookout tree. As you stroll along the track, pause to gaze up at the tall trees competing for space in the sky. You can see that a forest is just like any other natural community; only the strong survive.

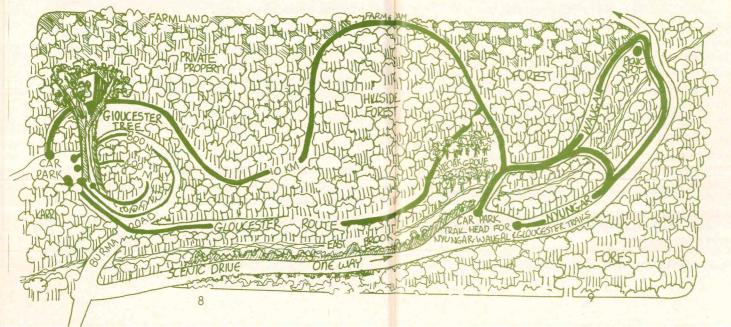
Below them, the thick understorey is a mass of plant life. Look closely to see the vines and creepers scrambling up the trunks of smaller trees; the vivid mosses and fungi clinging to fallen logs; and the bark dangling like discarded clothing on the trees. In spring, the wildflowers rear their colourful heads as the butterflies come to life. Take your time — enjoy your first taste of the forest. It's sure to whet your appetite for bushwalking.

Features: Gloucester Tree, karri.

Eye in the Sky

For the first 50 years of forestry in Western Australia, an early warning system for bushfires depended on a network of lookout towers. These towers were built about 40km apart on prominent hills in the forest and were staffed continuously in summer. But the karri forest posed a special problem. With few hills, and giant trees towering 70-80m above the ground, the task of building a tower to overlook the forest was formidable. Then, in 1937, young forester Don Stewart (who later became Conservator of Forests) suggested using the trees themselves as lookout towers.

The first tower was built on a large marri tree at Alco near Nannup. Eventually, 13 towers — some of them built on trees — watched over the karri forest. Today, only the Gloucester, Boorara, Diamond and the new Warren Bicentennial tree towers remain. The modern "towerman" is a pilot flying high in the sky, watching for smoke and reporting details of any forest fires. However, key towers are still maintained for emergency use when spotter aircraft break down or weather conditions make flying impossible.



This path leads you to the edge of the valley carved by the bubbling Eastbrook below. It offer views across a proposed national park. Here, the undergrowth forms an emerald green backdrop for the stately karri trees, making this a good photographic point. The hillside is vibrant with colour in spring.

To complete this short but scenic loop walk, head up the bitumen road and follow the walker symbol back to the base of the Gloucester Tree.

Features: Karri, valley, a taste of forest splendour.



Nyungar Walk

(1.5km, easy)

A spare hour is all you will need to explore this loop trail which combines the best of on-foot forest discoveries with a drive through scenic karri forest. From the trail head on Eastbrook Scenic Drive, head across the brook and then up the valley, gradually climbing the hillside to get a bird's-eye view of the creek. In spring, sniff the heady scent of fragrant wildflowers and listen to the birds chattering overhead.

The trail links up with the formation (earthworks) of an old logging railway before again crossing the creek and leading you back to Eastbrook Drive. Turn right and follow the dirt road back to your car. Take care — this is a one-way drive.

Features: Scenic drive, karri, valley.

Rather than crossing Eastbrook and returning to the carpark on the Nyungar Walk, continue along the old railway formation. You are now following Waugal's Walk. The Waugal is a mythical Bibbulmun serpent which formed the rivers — even, perhaps, the Eastbrook stream-bed back in the Dreaming.

Follow the bubbling brook through tall karri forest and, for those with the right kind of imagination, watch for the Waugal. You can arrange to be met at the picnic area, making this a 3km stroll, or you can return to the carpark by turning right onto the road and walking the 3km along the old railway formation. Take care as this is a one-way scenic drive.

Features: Karri, brook, old railway formations.



Train Tracks

Many forest roads and walk trails were originally railways or tramways built by hand. The marks of mattocks and shovels can sometimes still be seen and the sweat and toil of the workers only imagined. The railways were used by wood-burning steam trains to haul karri logs to the Pemberton mill. Today, the narrow winding corridors help you explore the forests which were harvested and have now regrown. Waugal's Walk and Eastbrook Scenic Drive are two such formations.

Pump Hill Trail

(1km, easy)

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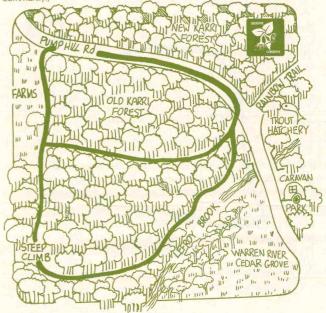
This trail, close to town, takes you through a mature karri forest — part of the Pemberton Forest Park which forms a striking backdrop to the town. The short trail can be walked easily from the caravan park or trout hatchery; just right for a leisurely stroll after an evening meal.

TOWN WALKS

Turn left onto the forest track at the bottom of Pump Hill opposite the start of the Rainbow Trail. After crossing a small stream, the trail climbs steadily up the side of the hill. Unless the area has been recently burnt, the thick understorey will obscure any views of the town. The track hits a private property boundary and here you turn uphill and follow the track to the sealed Pump Hill Road. Now you can elect to head back along the road or return via the same forest path.

Features: Karri, Lefroy Brook

(This park is managed by the Pemberton-Northcliffe Tourist Bureau on behalf of the community.)



For a rich karri experience, step out along this trail which branches off from the Gloucester Tree picnic site. Although quite steep and difficult in sections, the trail is very rewarding. It loops through the towering karri forest — both young and old — of a proposed national park, then leads you over hills, down gullies and across hidden creeks and waterfalls using moss-covered logs as foot bridges.

Plan for half a day of adventure and pack lunch, a flask of water and a raincoat. If you don't want to walk the whole trail, arrange to be met halfway where the walk connects near the Eastbrook trail head.

Features: Karri, creeks, waterfalls.



The Struggle for Survival

Parts of the forest were logged and regenerated in the early 1940s. You can spot these areas where smaller, vigorous, closely spaced karri trees grow among the larger forest veterans.

Karri is a very competitive tree and it is a case of survival of the fittest from the time the seeds germinate. For example, in an area the size of a football oval, 125,000 karri seeds can germinate. Twenty years later, only about 1000 of these have survived and after 400 years, only 20 mature trees may remain. The struggle for water, sunlight, growing space and food from the soil is intense.

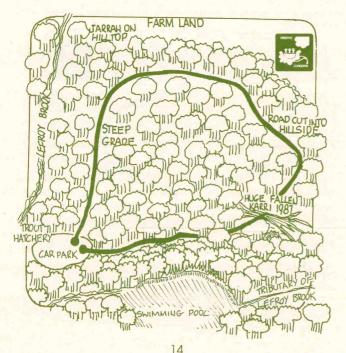
Pemberton Forest Park (1.2km, moderate)

After visiting the trout hatchery, take some extra time to stroll along this trail. It loops north through the imposing karri forest which dominates the hill above the swimming pool and makes an impressive backdrop for the town of Pemberton.

Fifty years ago this hillside was largely cleared and grassed, and formed part of Pemberton's original golf course. Today, a new forest has reclaimed the greens and fairways.

The trail is carved into the hillside and leads you up until you are tiptoeing through the treetops. From here, you may be able to see pardolotes going about their daily business. On a warm day, be tempted to take a quick dip in the swimming pool — a dam on a tributary of Lefroy Brook — before returning to the trout hatchery.

(This park is managed by the Pemberton-Northcliffe Tourist Bureau on behalf of the community.) $\label{eq:community}$





Pardolotes on Patrol

Two types of birds you are likely to see and hear in this karri forest are the spotted and striated pardolote. Both live high up in the karri crowns where they spend most of their time busily — and noisily — searching every leaf and twig for food. They prey on lerps, cicadas, spiders, weevils, caterpillars, native bees and other small forest creatures. Delicious!

There are fewer insects in winter so the birds flock together in groups of 10-20 and patrol the treetops trying to flush them out. Some flocks of striated pardolotes migrate inland, using the eucalypt-lined rivers as corridors for safe travel. However, these faithful birds return to the same nest every year with the same partner. The spotted birds nest in tree hollows while the striated species prefers a nest hole in an earthern bank.

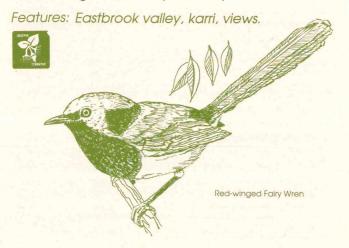
Eastbrook Circuit

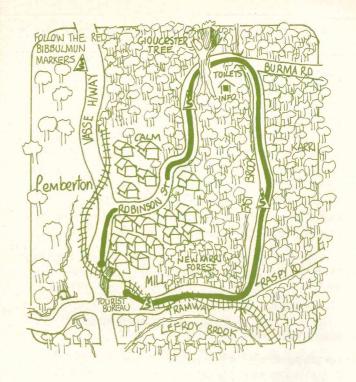
(10km)

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Fill your water flask, don a hat or raincoat (depending on the season) and set off on a half-day adventure along this trail — a branch of the Bibbulmun Track which starts at Gloucester Tree. From there you will follow the gurgling Eastbrook, through the valley which is to be included in a new national park. Listen for the stirrings of many different creatures. For them, the winding brook is a liquid lifeline.

Continue through the forest before turning to follow the old railway formation. This, too, was once a lifeline. Heavy logs were hauled from the forest along the railway to the Pemberton mill. Listen carefully can you hear a ghostly whistle from the steam locomotives which once puffed their way along the twisting track, protesting loudly at having to haul such heavy loads? Now, the tell-tale scar of the track, and of the timber harvest on adjacent hillsides, is gradually fading as the forest continues its silent growth. Timber remains a major industry for Pemberton, as you will see when you look across the town with its weatherboard houses and prominent mill. Equally important now is tourism. Both rely on the same thing: towering karri forest now and in the future. And both can exist together, as they do today.





Karri Fun Facts

Karri is one of the largest living things on our planet. One tree can weigh more than 200 tonnes, grow to 90 metres tall, use 170 litres of water per day, produce 1 kilogram of honey in a good season, take nine people holding hands to span its girth—and do it all in 400 years!

Bibbulmun Track-100 Year Forest Walk

(16km one way, or less)

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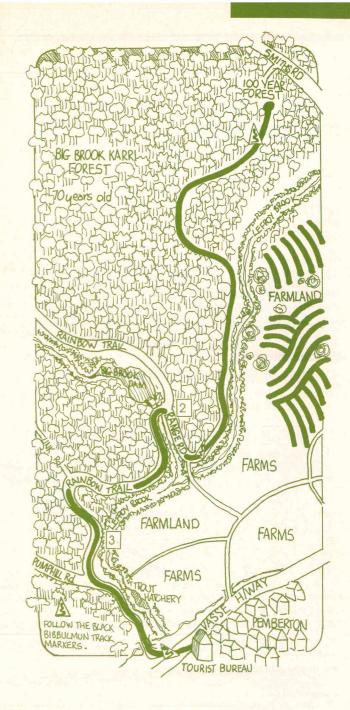
Pack a picnic, grab your camera and take off for a day-long forest adventure along this scenic walk. Head out from town along the Rainbow Trail and follow the Bibbulmun Track markers along the banks of Lefroy Brook to Big Brook Dam. Here, you can enjoy a leisurely lunch and a swim before setting out on the second half of the journey, along old railway formations, to the historic 100 Year Forest (see Lefroy's Dream, page 25).

Less than a day to spare? Don't despair: you can stroll to Big Brook Dam — about halfway — and enjoy the forest tranquility or snap a few photographs before heading back to town. Better still, get someone to meet you at the dam or walk all the way to the 100 Year Forest and be collected from there.

Features: Karri, Lefroy Brook, Big Brook Dam, 100 Year Forest, views.

Karri Fun Facts

Although a karri tree may produce some flowers every year, it takes four years for the flower buds to develop into mature gumnuts ready to drop seed. There is a heavy blossom cycle once every 4-7 years. The purple crowned lorikeet plays an important role in pollinating the karri flowers. It has a tongue designed to collect the protein rich pollen grains.



OUT OF TOWN WALKS

Big Brook Dam

(3.5km, easy)

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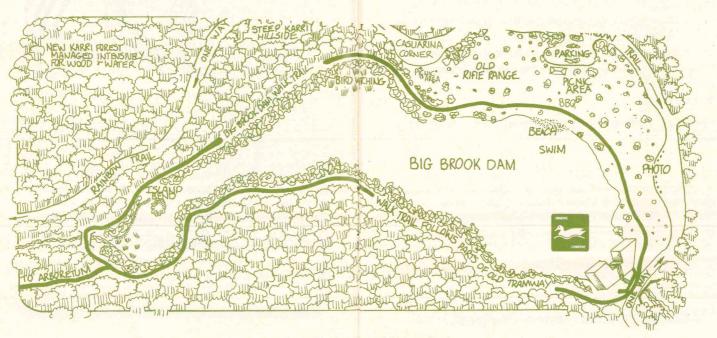
Get into nature by driving north-west from the trout hatchery along the scenic Rainbow Trail to Big Brook Dam. The dam, built in 1986 to supplement water supplies to the town and trout hatchery, is an excellent spot for swimming, fishing, canoeing or sailboarding.

A walk trail loops around the dam, passing through the new Big Brook forest. The forest, now 60 years old, provides pure water, animal homes, timber and an inspiring backdrop for visitors — just as the old forest once did. Young karri trees grow vigorously, greedily absorbing carbon from the atmosphere to convert into cellulose and wood fibre. By acting as a carbon sink, they can help slow the projected greenhouse effect.

As you walk along the trail through regrowth forest, keep an eye out for water fowl on the dam and many other forest birds. If you can't see them, chances are you will hear them in the treetops overhead. Try to identify the Warren River cedar trees (use the guide in this booklet) before crossing Big Brook on a log bridge. From here, you can do three things: you can circle back along the other side of the dam to your starting point, you can arrange to be picked up from the Big Brook Arboretum picnic site, or you can link up with the Big Brook Arboretum trail for an extra 1.2km walk. The trails are well sign-posted and the choice is yours.

Note: There are plans to seal this walk loop so it can be used by disabled people. It will also be ideal for prams and cycles. Check with CALM's Pemberton Office (see page (ii)) for progress on this project. You can walk the trail now.

Features: The dam, new forest, fishing, views, easy walking, sealed access, water sports.



Big Brook Arboretum

(1.2km, easy)



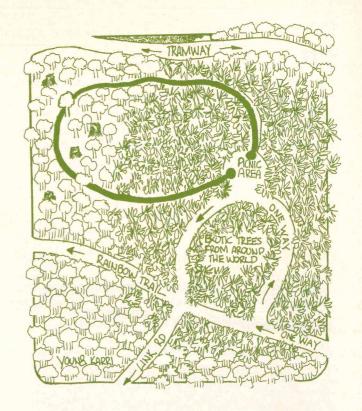
On the Rainbow Trail, about 10km from town, is an arboretum, or botanical tree garden. Many different species of trees — some from Australia and some, like the American redwood, from overseas — were planted here by foresters in 1929 to study their growth in the Pemberton area. Later, eucalypts from the Eastern States were planted.

The test achieved mixed results. While most of the European pines and the giant redwoods disliked the climate here, some of the eucalypts grew well. Foresters found that yellow stringybark, which produces an exceptionally durable timber, grew as fast as karri for the first 40 years of its life. This tree has been planted in old gravel pits to provide future electricity poles for Western Australia's State Energy Commission.

Recognising the different tree species as you weave your way through the plantation is an interesting challenge. You will stroll through a grove of sequoias, or American redwoods, past spotted gums from New South Wales and through natural karri forest as you circle back to the picnic site. Then you might be ready for a refreshing swim in the nearby Big Brook Dam or wish to continue your drive along the Rainbow Trail.

Features: Different types of trees from all over the world.





Karri Fun Facts

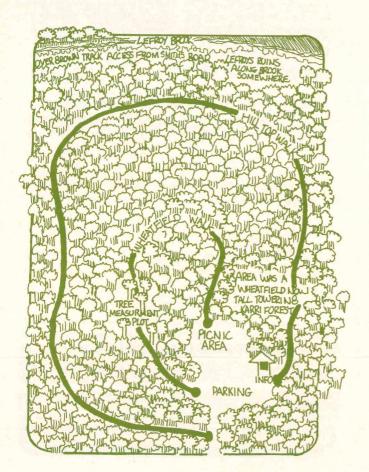
The botanical name for karri is *Eucalyptus diversicolor*. Eucalyptus is a latin word meaning "well covered", as is the flowerbud. Diversicolor refers to the leaf having light and dark green sides. Karri is an Aboriginal name for the tree.

100 Year Forest

(400m, 1km, easy)

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Head east of Pemberton on the Vasse Highway then follow the signs north to this forest, now more than a century old. As you drive and walk through this new forest of towering karri trees, try to imagine it as a wheatfield. That's what it was in the 1860s before nature took charge after the farm was abandoned.



Two loop trails — the 400m Wheatfield Walk and 1km Hilltop Loop — lead you from the picnic area through this regenerated forest. In places, thick undergrowth forms a natural corridor while overhead, the sun battles to peep through the karri crowns. Look closely at old tree stumps beside the track; often they will be smothered by delicate moss or vivid fungi. Pause, too, to listen to the birds and the wind in the trees. They seem to be whispering tales of a pioneer's past plans for a farm — a dream which was lost but nevertheless brought promise of a future for the forest.

Features: New karri forest, historic site, undergrowth.



Lefroy's Dream

Mr De'Courcey Lefroy, a member of one of Western Australia's pioneering families, once had a dream: he was going to clear the karri forest and transform the land into a wheat farm. In the mid 1860s, on the site where the 100 Year Forest now stands, he did just that. He also built a house nearby and a small flour mill, powered by a water-wheel, down beside the brook which now bears his name. But Lefroy's crops failed and in the early 1870s he abandoned the farm and left the district.

In 1875, fire swept through the area. Soon after, the karri forest seeded and the following winter a new crop sprouted — this time a crop of tiny karri seedlings. In 1916, the new trees became the first karri forest to be protected by Western Australia's Forests Department. Today, it is managed by the Department of Conservation and Land Management as a demonstration forest.

Beedelup Falls

(300m, moderate)



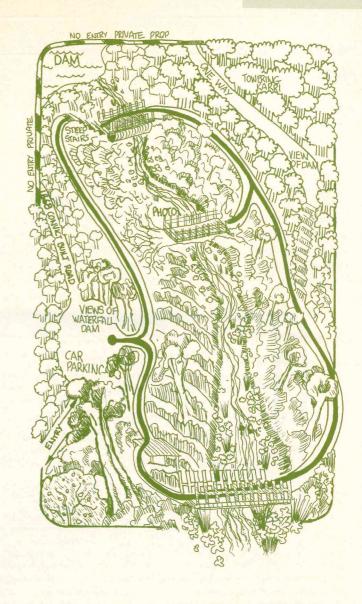
Pack a picnic lunch and head to these falls in Beedelup National Park. To get there, drive 17km west of Pemberton along the Vasse Highway then follow the signs. When you arrive at the picnic site, where the walk loop starts, listen for the birds and the muted roar of the falls. Then, as you descend the steps through a corridor of trees and creepers, pause to listen to the forest and look out over Waterfall Dam, the huge lake into which the falls empty.

You can get a view of the falls — the feature of this walk — from a log platform which crosses Beedelup Brook. In winter, when the falls are rapid, you may be able to feel the spray. As you walk upstream to another bridge, look for the masses of maidenhair fern and moss stealthily creeping up the base of trees. On a fine day, try to catch the sun filtering through karri treetops or spot the melancholy frogs calling from their hidden homes.

Features: The Falls, mosses, ferns, wildflowers (in spring), birds.

What's in a Name?

Beedelup is an Aboriginal term said to mean "a place of water". But be prepared: the falls can be reduced to a trickle and a network of pools in a dry summer. The main focus for the trail in this season is the noisy birds which use the brook as a corridor centering on water, the liquid of life.



Yeagarup Diversion

(3km return)

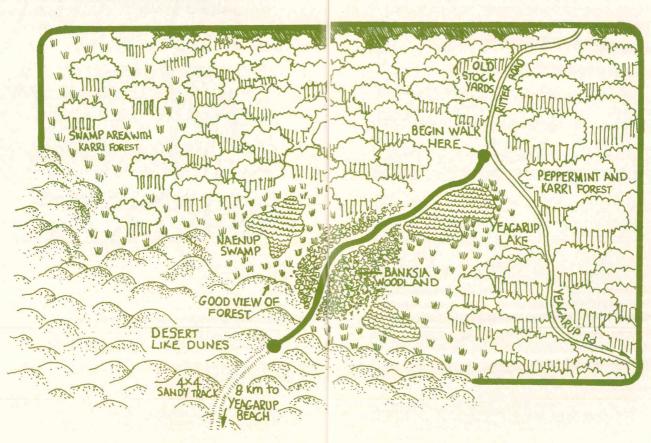


Combine a scenic drive with some on-foot exploring by heading south to this walk which takes you into D'Entrecasteaux National Park. To get there, drive south along Ritter Road to the picnic site near Yeagarup Lake. The trail, a branch of the Bibbulmun Track, takes you through banksia woodlands and overlooks the lakes and surrounding swamps. These freshwater areas are perched on top of sand. Organic matter, such as leaves, bark and dead plants, have formed a waterproof layer on the bottom of the lake or swamp, catching and holding any water that falls or drains into them.

This is an area of continual change. Here, coastal winds whip the white sands into mobile dunes, which are constantly on the move. They march relentlessly forward like a silent army reclaiming lakes and forest. The walk follows a sandy four-wheel-drive track to the base of the sandhills. You return by the same track, but be prepared to step aside: vehicles use this road regularly for access to the coast.

Features: Woodlands, lakes, dunes.



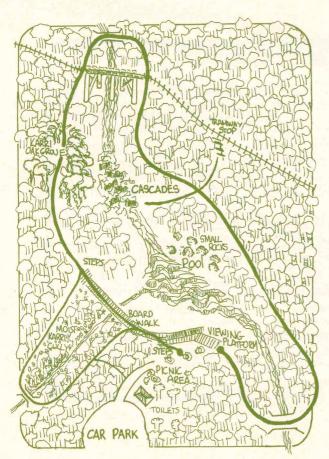


The Cascades

(1.2km, easy)



Set amid the karri forest about 8km south of Pemberton off the Northcliffe Road, these rocky rapids and surrounds provide a place for an outdoor lunch, a leisurely afternoon stroll, or a few peaceful hours of fly fishing. As you wander down to the picnic site from the parking area, listen to the voices of the birds as they chatter in the trees. Water is always a focus for forest life. From there, it's just a few steps to the lookout or you can get a closer view of the Cascades by stepping down to a boardwalk which crosses a tributary of the Lefroy Brook.



The loop trail, which starts from the picnic area and crosses the Northcliffe tramway, takes you through different types of forest and you'll see some lush fern and reed growth near the water. The trail passes through peppermints and sheoaks, so try to identify the trees (use the guide in this booklet) or catch a glimpse of a trout or marron in the brook.

Features: The Cascades, birds, ferns and reeds, fish, bridges, Lefroy Brook.

It's a Trout's Life!

Western Australia has two species of trout — brown and rainbow — which live in freshwater rivers and dams throughout the south-west. Most waters, however, do not have the right breeding environment for these introduced fish so they seldom reproduce in the wild. Instead, they are raised in hatcheries where eggs are fertilised and allowed to hatch. The tiny babies are known as fry until they grow several centimetres. They then become fingerlings which are used to restock local waters.

You can fish for trout from September 1 to April 30, although the season is open all year in the main streams of the Murray, Blackwood, Donnelly and Warren Rivers. No licence is needed. Use rods only (no nets or spears, please) and throw back any fish you catch which are less than 30cm long. There is a bag limit of 10 trout per person per day but take only what you need. If you're down Warren River way, you may be lucky enough to capture a record trout. The biggest rainbow trout caught in Western Australia was 3.42kg while the biggest brown was 4.13kg — and both were hooked in the Warren! Good luck.

Brockman Sawpit

(500m, 200m, easy)

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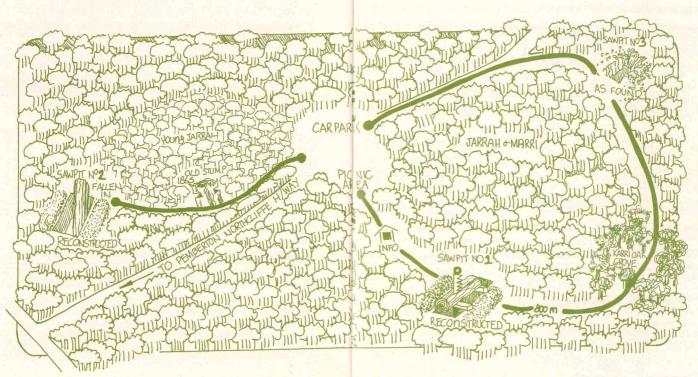
You will drive back in time as you head 16km south along the Pemberton-Northcliffe Road then turn left into Rowes Road to get to this historic site. The sawpit was used to provide timber for the Brockman Homestead, 5km north-west of the pit on the banks of the Warren River. Pemberton pioneer Edward Brockman settled here in the early 1860s. He built a house with mud bricks and pitsawn timber cut by convict labour. As you cross the Warren bridge, you can see the original homestead nestled by the river. The convicts, and the 'ticket of leave' tradesmen who followed them, were the forerunners of the timber industry which has been the backbone of Pemberton since early this century.

As you stroll the 500m to the original sawpit, imagine the convicts — sweating and covered in a fine net of sawdust — heaving a log saw up and down to cut the timber. Scattered around the forest are the stumps of the original jarrah trees felled by the convicts to provide the logs for pit sawyers. Young vigorous jarrah trees have regrown in the gaps that were left after prime trees were cut. These trees are the forest's new growing stock.

Before you go, wander along the 200m trail to the reconstructed sawpit, built to give today's generation a glimpse of history. Take time to read the information board on site; it will give you a valuable insight as to what life was like in days gone by.

Features: Historic sawpit, jarrah forest.





WALKS IN AND AROUND NORTHCLIFFE

Northcliffe Forest Park



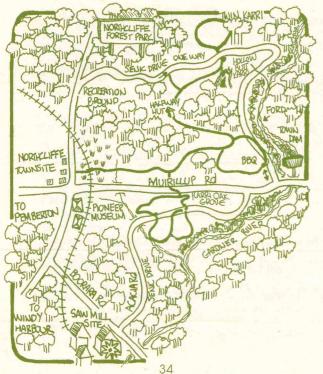
Several trails twist through the Northcliffe Forest Park, linking up in places before disappearing again into the forest. To get there by car, follow the signs from the townsite or walk from opposite the town shops.

The park was developed by the Northcliffe community which wanted to share this special forest with you. Pack a picnic lunch or something to barbecue and make the most of the facilities which have been provided in this natural setting.

(This park is managed by the Pemberton-Northcliffe Tourist Bureau on behalf of the community.)

Twin Karri (500m, easy)

This short walk loop starts at the Hollow Butt Karri and leads you through thick karri forest. There is much to



see here: look up at the towering trees soaring into the sky, look down to see the delicate wildflowers peeping up from the forest floor in spring, and look around at the thick understorey which provides hidden homes for many forest animals.

Walk in the opposite direction from the start point and you can wind through 1.4km of forest to link up with the Town Dam Walk Trail. Stop at the Halfway Hut to catch your breath or just enjoy the forest peace.

2 Town Dam (500m, easy)

Make your way to the tranquil picnic spot at the town dam by following the road past the Hollow Butt Karri and then along the Gardner River. Ducks are often seen swimming on the dam, which was built as a town water supply but never used due to poor water quality.

From here, the walk loop leads you through mixed jarrah, marri and karri forest. Watch for banksia and sheoak trees as well as old logs, felled in the Group Settlement days. Rather than return to the dam, continue along the main track to the Bardi Creek Trail or the Riverway Adventure Trail.

3 Bardi Creek (800m, easy to moderate)

Through coastal swamp vegetation, this trail will take you back to town. In winter, take care as you use the stepping stones to cross Bardi Creek and, in summer, watch for flashes of colour from the bright red bottlebrush.

4 Riverway Adventure Trail (600m, challenging)

Branching off the main track, this trail — as the name suggests — is more challenging. You can set out from either the Acacia or Casuarina picnic areas on Acacia Road and scramble down steep slopes into the Gardner River valley. After crossing fallen logs and log bridges, the trail leads you away from the river back to Acacia Road. In spring, colourful wildflowers carpet the forest floor and look for a huge karri tree which has a burnt lightning scar down its trunk.

Boorara Tree, Lane Poole Falls (5km,easy)



Venture into wild forest on this trail, about 18km southeast of Northcliffe. Follow the signs off Boorara Road to the tree which, until 1977, was a fire lookout tower. The tree, with its rickety cabin perched high in the branches, is surrounded by a shady picnic area. This marks the start of the track to the misty veil of Lane Poole Falls on the Canterbury River.

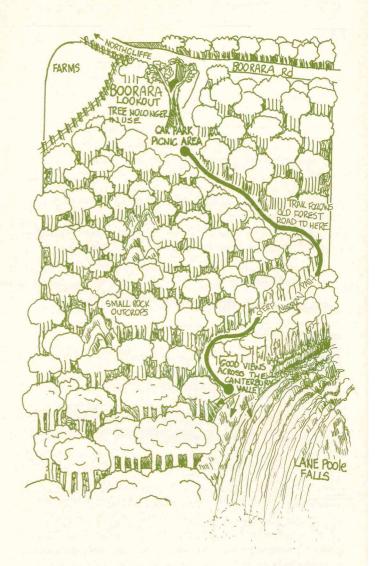
The trail was once a firebreak, designed to bring a raging wildfire to a sudden halt. These days, all it will stop is you as you pause to admire the tall karri trees keeping quiet sentinel over the creepers, vines and mosses scrambling across the dense forest floor. In spring, the awakening wildflowers peep over the blanket of undergrowth. As you near the falls, the track descends steeply before you emerge to see the fast-flowing water tumbling over a granite wall to a pool 12 metres below. In summer, the flow may be reduced to a trickle but you can still soak up the untouched atmosphere of this hidden valley with its towering river banksia.

Features: Karri, waterfall, valley, Boorara Tree, wildflowers.



Karri Fun Facts

Karri leaves are shed and replaced each year and karri bark is shed every year in late summer or autumn. For each hectare of karri forest, seven tonnes of leaf and bark litter fall to the forest floor every year. If an area was left unburnt for 50 years, the litter layer on the forest floor could be several metres thick and weigh as much as 50 tonnes per hectare.



Mount Chudalup (1km, moderate to steep)



Situated 15km south of Northcliffe just off the Windy Harbour Road, Mt Chudalup towers over the surrounding karri forest. The climb to the top of this 163m granite dome is steep in places but worth the effort. Follow the mossy path as it weaves a track to the top. In spring, watch for orchids and other wildflowers which peep out from the weathering rocks.

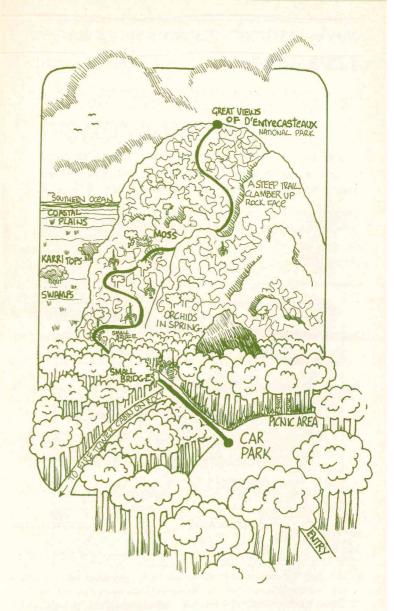
From the top, you can enjoy sweeping views of the coast and surrounds including the Meerup and Doggerup Dunes, the Southern Ocean, D'Entrecasteaux National Park and the Shannon forest. In winter, listen for the surf and feel the salty blast of the great Southern Ocean winds.

Features: Views, flowers and animals of granite outcrops, karri.



Park Patterns

From the top of Mt Chudalup you can see the patterns of the land which give the D'Entrecasteaux National Park its unique character. It is a transition between the coastal belt and the tall forests. Continual lashing by Southern Ocean winds has created an extensive sand dune system. These coastal dunes have blocked the flow of streams and creeks trying to empty into the ocean. Over time, this has created a chain of lakes and wetlands extending from Broke Inlet in the south to Lake Jasper (the largest freshwater lake in the south-west) north of here.



Windy Harbour/D'Entrecasteaux National Park

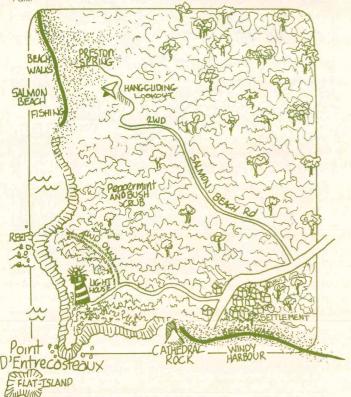
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(Beach walks)

After seeing the wild southern coast from the top of Mt Chudalup, take time to drive another 11km south to Windy Harbour for a closer look. There are many beaches to stroll along and some rugged coastal cliffs to see. A protected swimming area is suitable for children so pack your bathers, fishing rod, snorkelling gear and a picnic lunch and make a day of it.

Recreation development is underway at scenic Salmon Beach and the lighthouse. Check with CALM's Pemberton office for progress on this project (see page (ii)).

Pets are permitted in Windy Harbour Settlement but not in the surrounding National



SHANNON WALKS

Shannon Dam

(3.5km, easy)

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Get away for a day at Shannon — the one-time timber town now a popular tourist destination deep in the heart of the Shannon National Park. To get there, head north-east of Pemberton to the South-West Highway and turn right, or drive south to Northcliffe and then head east. After a peaceful picnic or barbecue lunch, take a step back in time. As you wander along the river to the dam, you will walk through history; through the forests which were the lifeblood of the mill town. These have regrown and again provide pure, natural enjoyment for today's generations. Disabled people, too, can capture the spirit of a bygone era: the first 600 metres of the trail are sealed and suitable for wheelchairs (and prams).

As you walk, try to spot the remnants of the railway line, built almost entirely by hand, which transported the huge logs. Now, this line is being quietly invaded and reclaimed by the surrounding forest and will soon disappear — remembered only by the ghosts of this once flourishing timber town.

The Shannon Dam, set against a backdrop of tall karri forest, was a vital water supply for the townspeople and the mill. It was also a favourite picnic place and families today still find it an ideal spot for fishing, canoeing, swimming, marroning or simply watching reflections of the towering trees and the woodswallows gliding and dipping to drink from the dam.

Features: River, new forest, water.

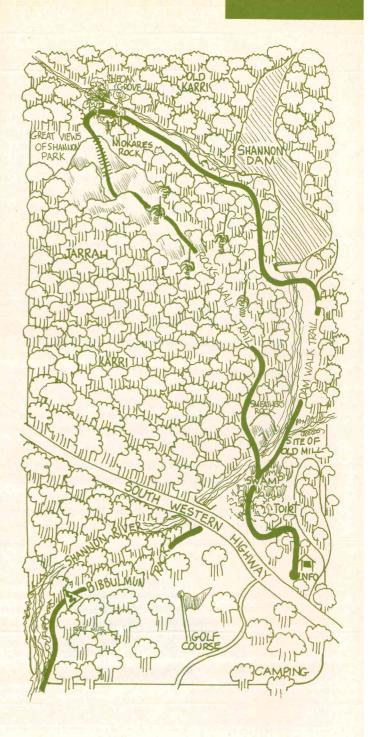
The Rocks Walk Trail (5.5km, moderate but steep in places)

Detour left across the river from the Shannon Dam trail and climb alongside the karri crowns. As you walk, try to identify the different tree species (use the guide in this booklet) before pausing to catch your breath at Smeather's Rock. From here, high above the ground among the leafy karri crowns, you can get a bird'seye view of the forest and back across the river to the old Shannon townsite.

The chattering birds urge you to continue your climb. As you go higher, the trees thin out and the drought tolerant jarrah tree becomes more prevalent as the ground gets rocky. Turn a corner in the trail and there it is: Mokare's Rock, complete with colourful carpet of flowers, mosses and lichens. From a boardwalk, you can get a close look at the delicate foliage without damaging it. Pause for a moment to enjoy the view across the Shannon River Basin before slowly winding your way down through shady glens of karri oaks and across trickling creeks to the Shannon Dam. Time for a swim? You can arrange to be met here or you can link up with the Shannon Dam trail to wander back along the river to the recreation site.

Features: Views, granite outcrops, mosses and lichens, variety of trees.





Life In Lilliput

The islands of rock rising above the forest and shrubland in the south-west are vestiges of an ancient land -- the residual remains of eroded plains. These granite outcrops provide variation in the gentle landscape, and many reward a climb with a fine view over the surrounding countryside. They also offer the inquisitive a Lilliputian spectacle of the seasonal cycle of life.

In summer, the outcrops bake and plants are exposed to searing winds. The rock and soil surface appears dry and lifeless, but don't be deceived: one careless step on the dry and fragile lichen may destroy many year's growth. This seemingly sterile surface will spring to life with the first winter rains.

While summer lingers, however, lichen and other plants near the rock surface are brittle, and the bulbs and corms of many perennials lie hidden in the shallow soil. The leaves of the shrubs in the deeper soil aprons appear as muted greys, golds, browns and blues. Animal life however, is easily seen. The rocks and crevices of the outcrop surface provide shelter for many reptiles active only during the warmer months.

As the first winter rainstorms flood the granite, the thin soil becomes waterlogged and the almost bare rock springs to life. Lichens, mosses and algae clinging to tiny depressions in the rock suddenly appear alive and vibrant. A multitude of shapes, colours and textures are visible.



Where the soil and natural litter are a few millimetres deep, a moss sward develops. The storage organs of plants hidden in the dry moss of summer respond rapidly to the surge of moisture.

As the lizards of summer disappear, they are replaced by other animals. Tiny, fragile invertebrates appear in the rock pools, and frogs shelter during the day under the rocks near the pools.

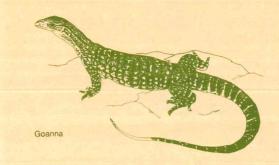
Next time you visit a rock outcrop, take a close look at its living features. You might need to get down on your hands and knees to appreciate the detail. Take care not to slip, and also not to break up the delicate swards that take so long to grow and develop. Don't forget that you are a giant privileged to take a peek into Lilliput.

Where to go:

Mt Chudalup - south of Northcliffe.

Mokare's Rock - on the Shannon walk trail.

Any granite outcrop you stumble upon in your travels,



BIBBULMUNTRACK

Western Australia's longest bushwalking track, the 650km Bibbulmun Track, stretches from the Perth suburb of Kalamunda to Walpole on the State's far south coast. Named after an Aboriginal language group known as the Bibbulmun, the track winds through the Pemberton/Northcliffe forests and has something for everyone. You can disappear into the wilderness for days on end or you can try one or more of the short circuit walks along the way. We have included only the day walks in this booklet. They are the 3km Yeagarup Diversion, the 16km or less 100 Year Forest Walk and the 10km Eastbrook Circuit.

Intrepid walkers who have been bitten by the hiking bug can tackle two longer circuit routes. They are the Warren Circuit (5 days, 63km) and the Crowea Circuit (3 days, 37km). Alternatively, a 25km one-way walk from Shannon to Dog Pool travels through the Shannon River Basin.

The Bibbulmun Track is clearly marked and campsites have been placed about 15-25km apart so you can plan a menu of walks to suit yourself.

For detailed maps and information on the Bibbulmun Track, ask the nearest tourist bureau or CALM office for a copy of the CALM publication, A GUIDE TO THE BIBBULMUN TRACK, which sells for \$14.95. You can also buy a detailed map of the area you want to explore. CALM's 1:50 000 series sell for \$6 per map (see page (ii) for contact numbers).



TREE SPOTTER'S GUIDE

Trees of the Pemberton Forests

Even when you know the names of the forest trees, telling them apart can be difficult. This guide will help you recognise the trees in this region.

Each tree's most recognisable feature is highlighted so you know what to look for.

Many plant species thrive in these forests despite the relatively infertile soil and the long, dry summers. Precisely where they grow depends largely on soil types and moisture. In fact, the trees provide a clue to the environmental conditions of the site on which they grow.

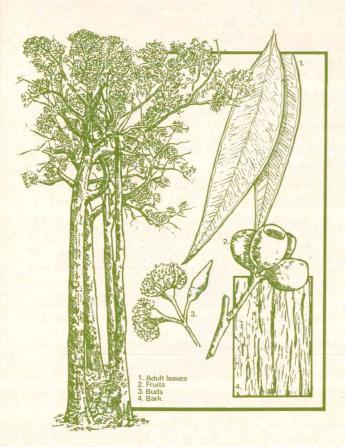
All the species in this guide grow naturally only in Western Australia.



Jarrah (Eucalyptus marginata):

These trees have *stringy dark grey or reddish brown bark*, with deep vertical grooves. They grow to 40m tall on rich, well-watered soils but seldom reach more than 15m on poorer, sandy soils, as in coastal areas.

In their natural forest setting, jarrah trees grow about 0.5cm in diameter a year and live more than 400 years. On hot summer days, young trees transpire at least one litre of water per hour through their leaves. The botanical name 'marginata' refers to the thick margin around the leaf's edge.

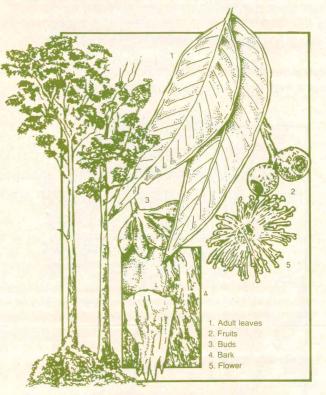


Karri (Eucalyptus diversicolor):

These giant trees have *a pale, smooth bark* which turns salmon pink in autumn when it is shed. They grow only on deep red clay loams where more than 750mm of rain falls annually.

Karri grows several metres upward each year when young but takes longer to thicken out. The trees are mature at about 80 years old and can grow up to 90m in height, making them the world's third tallest tree.

The botanical name 'diversicolor' means 'separate colours', and refers to the difference between the top of the leaf and its underside.

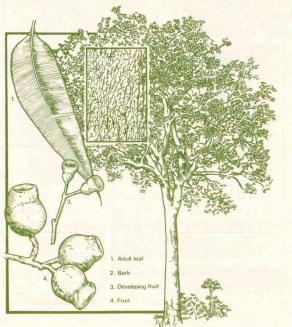


Marri (Eucalyptus calophylla):

Marri trees, often called redgum, have dark grey bark which forms a rough, criss-cross pattern over the trunk. They can be distinguished from jarrah by their *large fruits*, *called honky nuts*, and the wide spread of their branches. Their leaves are also broader and have closer veins than those of jarrah. The botanical name 'calophylla' means 'beautiful leaf'.

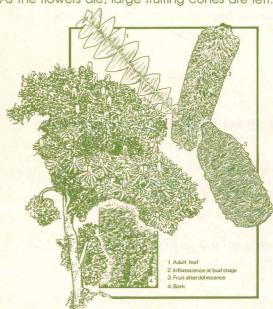
Marri varies in height from less than 10m in drier areas to forest giants up to 60m tall in the deep soils of the karri forest. Like jarrah, it is a long-living, slow-growing hardwood, although in the first few years, it will sprout rapidly.

From close quarters, a marri can be easily recognised by the drips of dark red gum, or kino, oozing from its veins. It is a honey tree and its prolific white blossoms are an important food source for bees. Parrots feed on the seeds while ringtail and brushtail possums often make their home in hollow trunks and branch stubs.



Banksia (Banksia grandis):

Much smaller than the forest trees, the banksia forms part of the understorey on upper slopes and grows to about 10m tall. It has *long, dark green, serrated leaves* which surround the pale yellow flower spikes. As the flowers die, large fruiting cones are left.



Sheoak Karri oak

(Allocasaurina fraserana) (Allocasaurina decussata):

Sheoaks grow on well-drained sites in fine gravel and, because of the poor soils, few other plants grow underneath them. The sheoak has very small flowers and leaves. The flowers are specially adapted for wind pollination while the *leaves* are reduced to minute scales on modified stems which *look like pine needles*. The female flowers develop into woody fruits.



Peppermint (Agonis flexuosa):

This species, which looks similar to a weeping willow, grows mainly as a small tree up to 12m tall or as a 3m high shrub. It grows in sandy soils near the coast or in the understorey of karri and marri forests and can be identified by its fibrous bark or *the peppermint smell of its crushed leaves*. It has white flowers which blossom from October to November.

Warren River Cedar (Agonis juniperina):

Belonging to the ti-tree family, this tree grows in valleys or along water courses and creeks. It is usually about 15m tall with a *straight trunk and tufts and clumps of leaves*. When it blossoms in May, its white flowers look like icing sugar sprinkled over a cake. Aboriginals used the `wattie', as they called it, to make spear shafts.

Paperbark

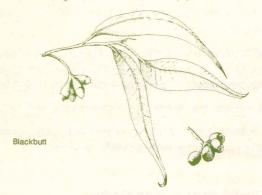
(Melaleuca preissiana, Melaleuca rhaphiophylla, Melaeuca cuticularis):

This tree is easily recognised by its *distinctive paper-like bark*, which peels and flakes in sheets, and its strange wizened shape. Found mostly in coastal areas up to 80km inland, it grows on flat waterlogged areas or on wet river plains in winter. Belonging to the ti-tree family, this small or medium-sized tree has flat, needle-like leaves and small woody seed capsules and grows to about 10m tall. In January and February, it sprouts small, fluffy, cream-coloured flowers.

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Blackbutt (Eucalyptus patens):

This tree gets its name from its durable *bark* which is often *charred and blackened from past fires*. It looks similar to jarrah but has a smaller fruit and bluish leaves. Unlike jarrah, it prefers fertile alluvial soil or red loam. Its botanical name 'patens' means 'spreading open', referring to its broad canopy.



Bullich (Eucalyptus megacarpa):

Lured by moisture, this tree usually grows in gullies and near creeks. Growing up to 30m in height, it has smooth, yellowy-white deciduous bark and unusual gumnuts. In fact, the name 'megacarpa' means large fruit. It flowers in late spring.



BUSHWALKER'S CODE OF ETHICS

Step out in style

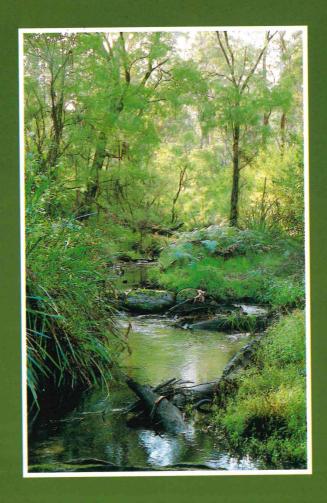
- Wear sturdy, but comfortable shoes. Joggers are suitable but take care on mossy rocks. Long socks or jeans will give some leg protection.
- Carry a raincoat in winter and wear layers of clothing that can easily be put on or taken off as you warm up or cool down.
- ◆ Pack a small haversack with camera, snack, picnic lunch, a drink, extra layers of clothes, bush walk guide, binoculars — but don't overdo it! Travel light.
- ♦ Wear a bush hat for protection from the sun or rain.
- ♦ In summer, carry drinking water for walks graded medium and long. Always keep a supply in the car.

Be careful and considerate

- Give way to walkers moving uphill.
- Respect the solitude of other walkers by travelling quietly in the forest. This also increases your chance of seeing wildlife. Wear earth-coloured clothing as your camouflage.
- In areas without toilets, bury waste 15cm deep and 100m from streams.
- ◆ Light fires only in barbecues provided or bring your own portable gas stove.

Walk Softly

- Keep to the marked trail and avoid cutting corners or taking short cuts.
- ◆ Please carry out all your rubbish.



CALM Caring...Naturally