Heritage Trails in the Great Southern

1. Denmark Timber H.T.
2. Mokare H.T.
3. First Settlement H.T.
4. **South Coast H.T.**
5. Woodanilling Pioneer H.T.
6. Wilson Inlet H.T.
7. Frankland H.T.
8. Mt Barker H.T.
9. Katanning H.T.
10. Jerramungup H.T.

W.A. Heritage Trails Network

A Bicentennial Project for Community Participation

This Heritage Trail is part of the Heritage Trails Network, a project for community participation devised by the Western Australian Heritage Committee to commemorate the 1988 Bicentenary. The project established a statewide network of Heritage Trails - routes designed to enhance awareness and enjoyment of Western Australia's natural and cultural heritage.

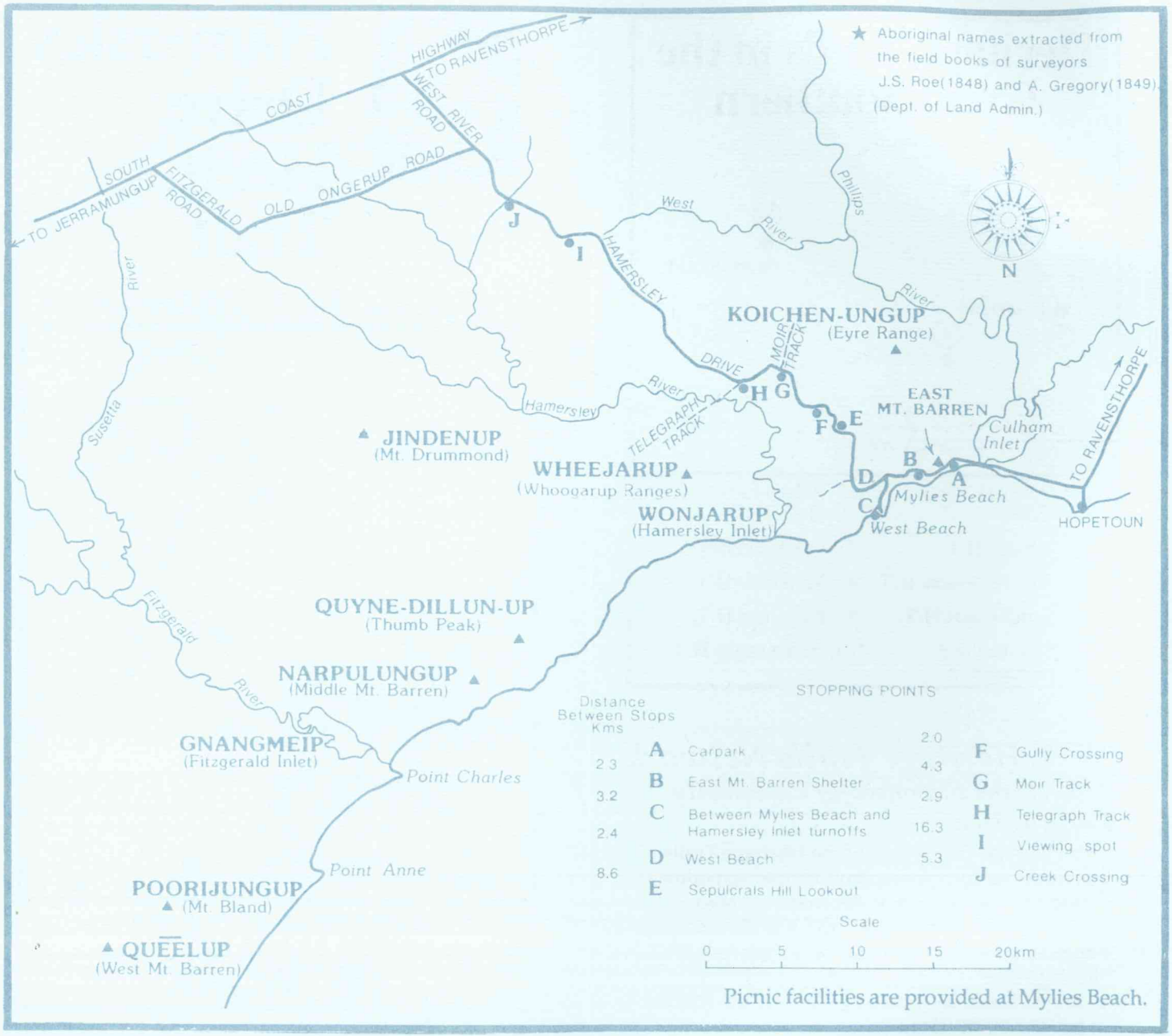
The Heritage Trails Network was jointly funded by the Commonwealth and Western Australian governments under the Commonwealth/State Bicentennial Commemorative Program.

Hamersley Drive Heritage Trail

FITZGERALD RIVER NATIONAL PARK

SOUTH COAST NETWORK

A Commonwealth/State Bicentennial Project



Picnic facilities are provided at Mylies Beach.

Stops are easily recognised by features such as carparks, or road signs. Stops I and F are marked by Heritage Trail markers.

Old Ongerup Road at the northern edge of the Park has not been included as part of the Trail, but we recommend driving along the track (as far as Fitzgerald Road for conventional vehicles) to see more interesting plants and spectacular views.

Hamersley Drive Heritage Trail

'Worthless' was the opinion of early explorers of this area. With no grassy plains or rich soils, and little fresh water, there was nothing to recommend it to them. But today the area is recognised as one of the most diverse botanical regions in the world, renowned for its spectacular plants and scenery.

Over 1 700 plant species, excluding the myriad lichens, mosses and fungi, have been found in Fitzgerald River National Park. This is nearly 20% of the total number of plant species in Western Australia, in an area that covers only 0.1% of the State.

This drive and walk trail is an introduction to just a few of the beautiful and bizarre plants along Hamersley Drive.

The trail is divided into several stops, and can be used from either end of Hamersley Drive. Stops are shown on the map, and are easily identified by track signs, carparks or, at stops F and I, Heritage Trail stage markers.

Remember, the plants are not clustered in one spot. The more you get out and look, smell and feel, the more you will discover. There are also beaches, mountains, birds, inlets and lizards to see, so take your time. Take half a day or a week.

ONE-Carpark

Locally known as Quaalup soldiers, royal hakea *(Hakea victoria)* was first described by James Drummond in 1847:

'...by far the most conspicuous part of the foliage of this superb plant is its bracts (leaves)... The variation of these bracts is so extraordinary that I almost fear to attempt description... So this most splendid vegetable production which I have ever seen in a wild or cultivated state, I have given the name of our gracious Queen, Hakea victoria. It will soon be in cultivation in every country of note in Europe and in many other countries...'

So ecstatic was Mr Drummond that he carried a 14-foot specimen 80 km from West Mt Barren to Cape Riche. But the brilliant colours soon faded. In the relatively rich soils of gardens this plant remains a sombre green. On the poor soils here, the colouring is part of a no-waste program. The plant gets essential nutrients for new growth by removing them from older leaves, and this removal causes the colour changes. The brightest coloured plants are in the western area of the Park.

Like royal hakea, oak leaf dryandra *(Dryandra quercifolia)* is restricted to the Park and immediate vicinity, but it occurs on many soil types. Mountain banksia *(Banksia oreophila)* is so named as it occurs only on the Barrens, the Stirling Range and a few coastal mountains.

TWO-East Mt. Barren Shelter

From the modern-day convenience of a road, it is easy to admire the views and the plants such as the showy banksia *(Banksia speciosa)*. But Eyre was not so impressed as he struggled through the bush on his epic journey from South Australia to Albany in 1841:

'Most properly had it been called Mt Barren, for a more wretched, arid looking country never existed than around it'.

Like other coastal hills in the Park, East Mount Barren is made of quartzite. It is on this rock type that many of the Park's endemic species, plants found nowhere else in the world, occur. There are over 70 endemic plants in Fitzgerald River National Park and a short walk to the base of East Mt Barren will reveal the silver-leafed barrens regelia *(Regelia velutina)*, the red-flowering barrens clawflower *(Calothamus validus)*, and the veined jugflower *(Adenanthos venosus)*. A pea-flowering plant, *Jacksonia compressa*, has dispensed with leaves; a flattened stem serves the same purpose.

Another distinctive plant here is the miniature pine look-alike, dense clawflower *(Calothamus pinifolius)*. If the plant is flowering, it is easy to see where the common name came from.

Here you can also see the tilted rock beds that form East Mt Barren. These beds were once layers of sand deposited on the sea floor. Earth movements heated and uplifted these beds to form mountains. Today wind and water erodes the rock to sand grains, and the cycle is continued.

THREE-Between Mylies Beach and Hamersley Inlet Road

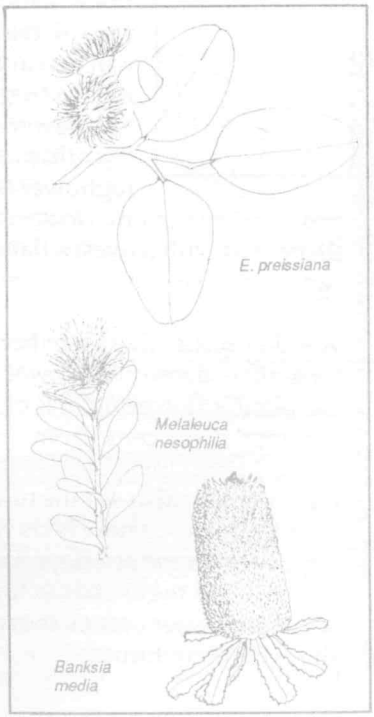
In the late afternoon the drive between these turnoffs can be spectacular, with evening light illuminating the royal hakea, the red flowers of *Beaufortia anisandra* and reflections of the bluish leaves of blue mallee, or tallerack, *(Eucalyptus tetragona).*

The bell fruited mallee *(E. preissiana)* has large yellow flowers and grows abundantly along this section, though it is difficult to spot when not in flower. A prolific flowerer in some seasons, this mallee provides abundant food for honey possums, dibblers and birds.

FOUR-West Beach

Natural hedging

The heavily pruned look of bushes near the coast, seen close up on the short walk to West Beach, is caused by salt burning the growing tips. Leaves furthest from the sea survive best, hence the lopsided shape of bushes.

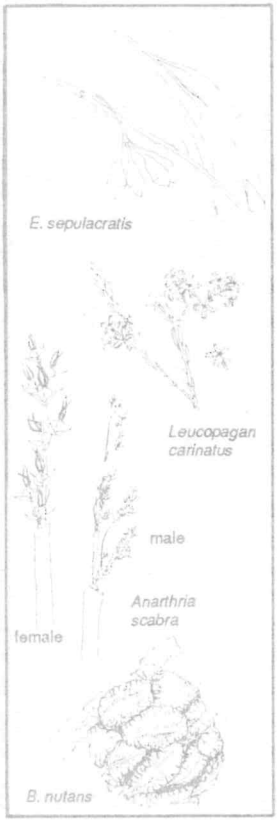


Mauve flowering western honey myrtle *(Melaleuca nesophila)* only reaches a few metres here but grows to 15 m in sheltered sites beside Hamersley Inlet. Likewise, coastal banksia *(Banksia media)* is often only a few centimetres high on the coast but a tall shrub in sheltered spots.

FIVE-Sepulcralis Hill

Mumbo jumbo

Scientific names may sound like mumbo jumbo, but if you know some Greek or Latin they make sense.



The forlorn looking weeping gum *(E. sepulcralis)* was so named because it was thought to be ideal for cemeteries. 'Sepulcralis' means 'of the tomb'. 'Eucalyptus' means 'well covered', and refers to the 'cap' or the operculum that covers the developing flower. All eucalypts have an operculum.

Weeping gum grows only on quartzite in the Park and can be seen as a fuzz on the Eyre Range skyline to the east.

On the short walk to the lookout, keep an eye out for a beard heath *(Leucopogon carinatus).* Have a look at the flowers: 'leucopogon' means 'white beard'; 'carinatus', which refers to the leaves, means 'keeled'.

A common rush along the track is *(Anarthria scabra).* Run your hand softly along the edge of the leaf. 'Anarthria' means 'no joints', and 'scabra' means 'rough'. Unlike most plants this rush bears male and female flowers on different plants.

Try to identify three banksia species along the track from their scientific names:
B. repens (crawling),
B. nutans (nodding) and
B. violacea (violet).
Banksias, named after botanist Joseph Banks, have large woody fruit.

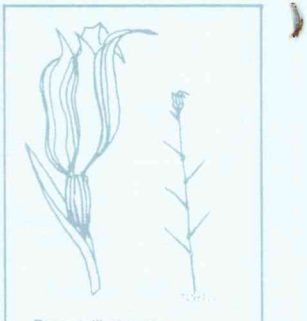
SIX-Gully Crossing

Bush Tucker

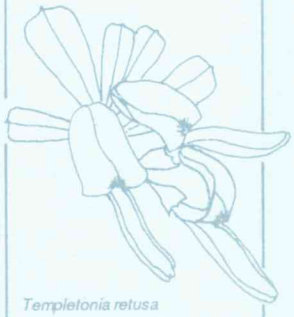
Listen and you will probably hear the calls of many birds, especially in autumn when the tall trees and shrubs such as flat topped yate *(E. occidentalis)* and pincushion hakea *(Hakea laurina)* are flowering. Taste the nectar of the hakea flower; it's an instant dessert.

The purplish gum of flat topped yate is very sweet, and local Aborigines once baked patties of this and ground wattle seed *(Acacia saligna)*. Long shiny leaves help identify this wattle.

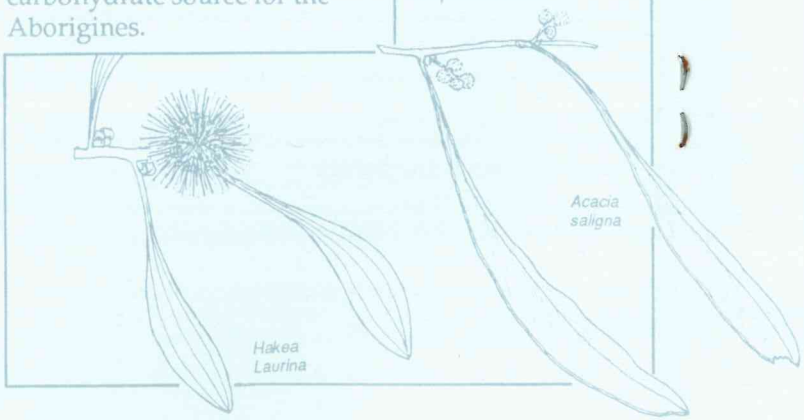
Yate woodland, found mostly on drainage lines in the Park, is ideal for walking because of the open understorey. For early explorers and settlers, the presence of yate indicated better grazing land and many of the settlements along the south coast were established where yate grew. Over 60 types of fungi have been found here, from bizarre coral fungi to iridescent orange bracket fungi. A number of fungi can be tasty morsels in season, but many are very toxic. In winter and spring keep an eye out for orchids such as jug orchid *(Pterostylis recurva)*. Bulbs of many orchids were a small but valuable carbohydrate source for the Aborigines.



Pterostylis recurva



Templetonia retusa



SEVEN-Moir Track

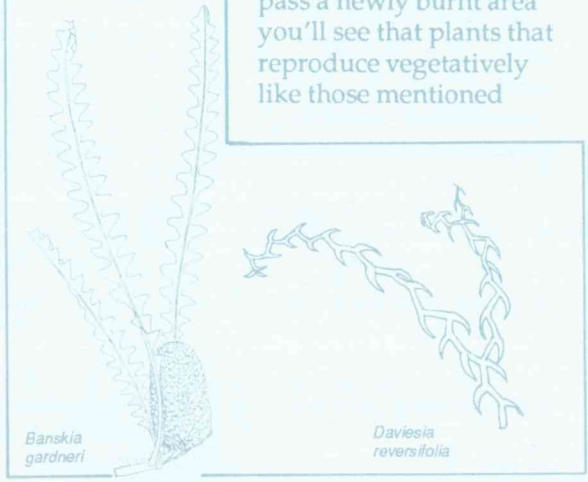
A walk down the closed southern section of Moir Track is an ideal way to discover the diversity of the sandplain flora and to discover how plants cope with fire.

Look at the large woody fruit of four winged mallee *(E. tetraptera)* and of thick leafed hakea *(H. crassifolia)*, more colourfully known as dogs ball hakea. These fruit are insulators, protecting seed from passing fires. The fire dries the fruit quickly, making it open and release the seed, which falls onto ash, a ready-mix fertiliser.

Chinese Puzzle *(Caustis dioica)* and Gardner's banksia *(B. gardneri var. hiemalis)* are also insulated, but the insulator is soil. Both these plants have underground stems.

Eucalyptus falcata

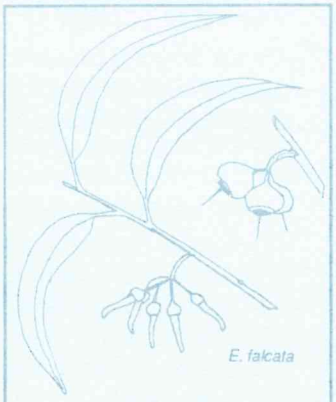
Four winged mallee and silver mallee *(E. falcata)* have enormous rootstocks. Buds hidden in these mallee roots shoot after fire, giving them their multistemmed appearance. Depending on the ferocity of a fire, bark is also a good protector of buds. If you pass a newly burnt area you'll see that plants that reproduce vegetatively like those mentioned



above are the first to reappear.

Some plants can only regenerate by seed, like the yellow flowering wattle *(Acacia delphina)* and *Daviesia reversifolia* with its fishhook-like leaves. Fire stimulates the hard seed of these plants to germinate. For these plants, it is essential that fires do not occur too frequently or infrequently. If it takes 4-5 years to set seed, two fires in four years will eliminate that plant because there is no new seed source. On the other hand if there are no fires these plants may disappear with old age.

Fire is an essential and integral part of this environment and understanding how different fires affect different plants, and the animals and birds dependent on them, is vital in managing the natural environment.


E. falcata


Hakea crassifolia


Acacia delphinia

Caustis dioca

EIGHT-Telegraph Track

In 1876 the Surveyor of the Intercolonial Telegraph Line concluded *'I don't think I exaggerate when I say the country is almost worthless...'* Perhaps he didn't like flowers. In a 10-minute stroll down the old maintenance track you may spot some remaining telegraph posts on the right as well as 24 members of the banksia family, Proteaceae, some of which are illustrated here. In W.A. the 'banksia family' is like the Smith family. There are hundreds of them. Over 125 different members are found in the Park, and they are one of the most conspicuous groups with their showy flowers and bizarre leaves.

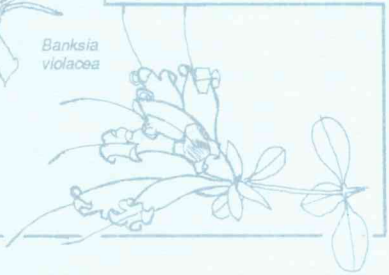
If in flower, *Hakea rubiflora* will be smelt before seen. Its blood red flowers are pollinated by blowflies. Other hakeas here can be identified by woody fruit that split in two.


Hakea rubriflora

Banksias have the largest inflorescences and those of violet banksia *(B. violacea)* are usually dripping with nectar ideal for birds, honey possums and humans. But the food isn't free. By delving amongst the flowers, you pass pollen from one plant to another.

Dryandras are often confused with banksias but distinctive bracts around the yellow and brown flowers help distinguish them. Can


Banksia violacea


Lambertia inermis

you find *D. pteridifolia*? 'Pteridifolia' means 'fern-like leaves'.

Graveyard or wilderness?
The banksia family is very susceptible to a disease that threatens much of our native vegetation. 'Dieback' is caused by the introduced tropical fungus *Phytophthora cinnamomi*, which kills plants by invading roots and inhibiting water intake.

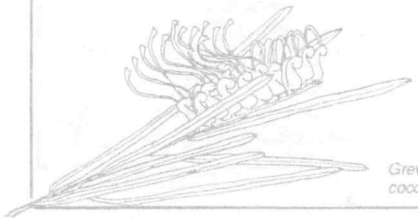
Not all plants die. Some species have defence systems that can overcome the invasion, but some have no defences. Many of the plants in the Park are disease prone.

The spread of the disease in recent years is due to our movements through the bush. Microscopic spores picked up in soil can travel hundreds of kilometres on tyres, under carriages and even on the soles of shoes. At present there is no way to eradicate this disease in the bush, but its spread can be greatly reduced. For this reason, roads in the Park are periodically closed, and it is essential that cars and shoes are cleaned thoroughly after leaving infected areas and before entering national parks.

Stop the rot. Help save our unique wildflowers and the animals and birds dependent upon them. Keep to the track.


Hakea corymbosa

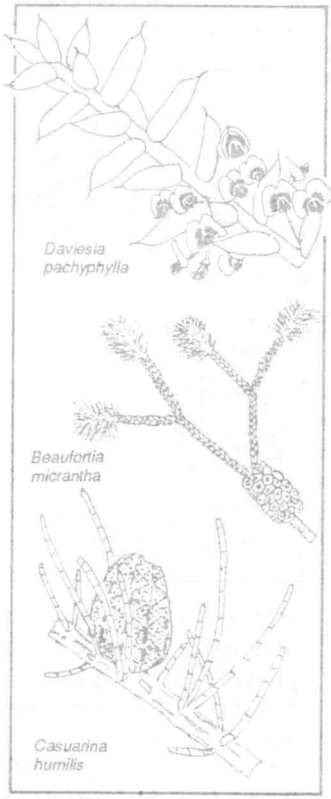

Isopogon trilobus


Grevillea coccinea

NINE-Ridge with Heritage Marker

From this vantage point you get a splendid view of the Park. From a distance the coastal mountains, known collectively as the Barrens, appear deceptively high. Thumb Peak, the highest, is only 500 m.

Islands and Tropical Seas
The white spongolite cliffs along Hamersley River are apparent from this ridge. Silica skeletons of sponges, deposited here some 43 million years ago when a warm sea invaded the landscape, are a major component of this rock. The sea level was then about 80 m higher than its present level and the 'Barrens' were islands. When the sea level dropped, water carved through this soft rock, creating the river gorges. From here you can also pick out the blue of the tallerack heaths and tall yates of the valley floor.


Daviesia pachyphylla

Beaufortia micrantha

Casuarina humilis

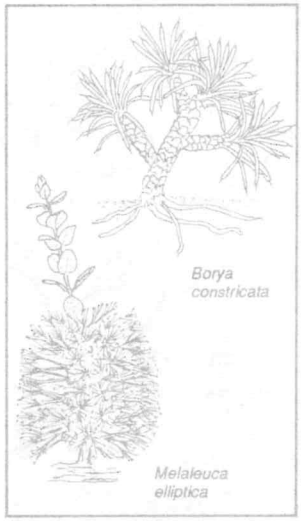
Some interesting plants found here include the aptly named ouch bush *(Daviesia pachyphylla)* with its bluish leaves, and purple flowering little bottlebrush *(Beaufortia micrantha)*. The latter, with its minute leaves, is easily overlooked unless it is flowering, as is pink bottlebrush *(B. schaueri)*.

Another plant with minute leaves is scrub sheoak *(Casuarina humilis)*. What look like leaves are really stems. The true leaves are reduced to small scales at the joints in these stems.

TEN-Creek crossing

(Please do not park on the granite outcrop)

Granite exposures such as this have a distinctive flora and fauna especially adapted to harsh and changeable conditions. In summer the thin soils overlying the rock rapidly bake dry, whilst in winter they are frequently waterlogged.



A pincushion plant *(Borya constricta)* is found only on granites, and if you arrive in summer it will appear dead, its leaves orange-brown. But in winter each leaf revives and turns green. This remarkable ability has led to another name: Resurrection plant. Only a few plant species do this, though many will die off in summer and sprout from a bulb, like the insectivorous sundews *(Drosera sp.)*.

Is there an insect caught on the sticky leaves? These insects are slowly being absorbed by the plants. They provide a rich supply of nutrients, especially nitrogen, which is not readily available in waterlogged soils.

Another plant restricted to granite is the red flowering granite bottlebrush *(Melaleuca elliptica)*. The underside of the leaf is covered by small dots - oil glands - which give this plant and many of the same family (*Myrtaceace* or 'gum tree family') their distinctive aroma.

If it's warm, you're sure to see an ornate dragon *(Amphibolorus ornatus)* basking on the rocks here. Although it is well camouflaged, its head bobbing movement can give it away.

Further reading:

How to Identify Western Australian Plants I-IV, by W.E. Blackall & B.J. Grieve. (UWA Press, 1980-85).

Flowers and Plants of Western Australia, by R. Erickson et al. (Reed, 1979).

Kwongan, Plant Life of the Sandplain, by J.S. Pate & J.S. Beard (eds). (UWA Press, 1984).

Acknowledgements

The assistance of the Department of Land and Administration and members of the Fitzgerald River National Park Association and Albany Wildflower Society is appreciated.

Remember

Be careful: Your enjoyment and safety in natural environments is our concern but your responsibility.

Be clean: Put your litter in bins, or better still take it with you.

Stay cool: Don't light fires.

Protect animals and plants: No firearms or pets please.

Be aware: Persons using this Heritage Trail do so at their own risk.

For further information

This Heritage Trail is one of nine trails in the South Coast Network and further information is available from:

Department of Conservation and Land Management
South Coast Region
44 Serpentine Road
ALBANY
(098) 41 7133

CALM Esperance District Office
Wallace Way Centre
Dempster Street
ESPERANCE
(090) 71 3733

W. A. Heritage Trails Committee (09) 322 4375

Department of Conservation and Land Management
P.O. Box 104, COMO WA 6152
Phone: (09) 367 0333

We hope you have enjoyed this Heritage Trail. Keep this pamphlet if you wish, but if you have no further use for it please return it to the box for other visitors to use.