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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.

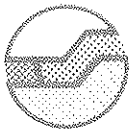
Protect animals and plants: No firearms or pets please.

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

For further information

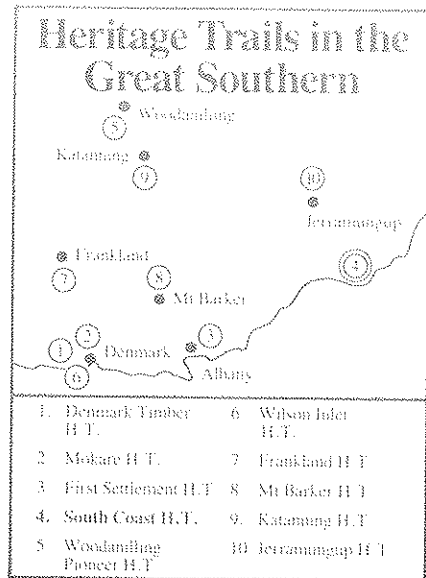
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We hope you have enjoyed this Heritage Trail. Keep this pamphlet if you wish, but if you have no further use for it please return it to the box for other visitors to use.



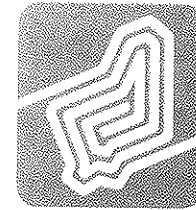
W.A. Heritage Trails Network A Bicentennial Project for Community Participation

Baie de Deux Peuples Heritage Trail is one of nine trails in the South Coast Heritage Trail Network. The South Coast Heritage Trails Booklet, available from CALM and the Heritage Trails Committee, delves into the cultural and natural history of the area, with anecdotes and stories from past to present.

Baie de Deux Peuples Heritage Trail is part of the Heritage Trails Network, a project 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.

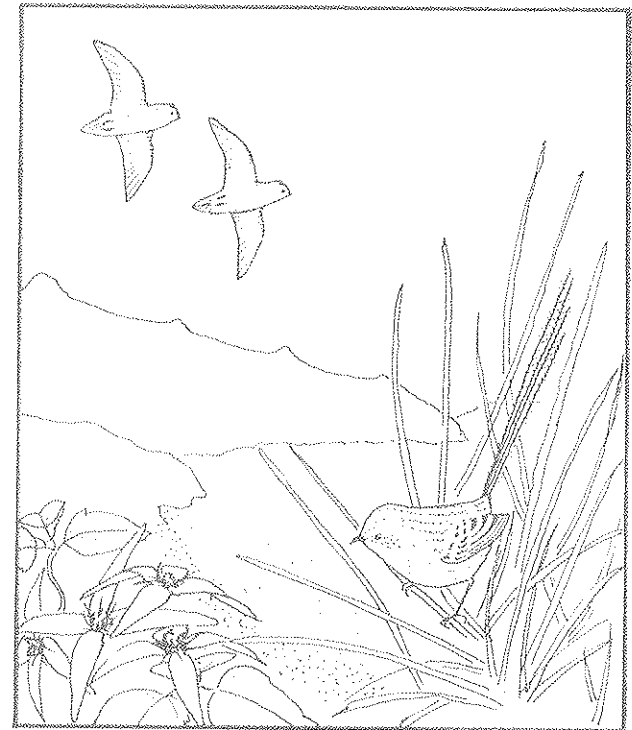
The Heritage Trails Network was jointly funded by the Commonwealth and Western Australian governments under the Commonwealth/State Bicentennial Commemorative Program.



Baie des Deux Peuples Heritage Trail

CALM LIBRARY ARCHIVE
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TWO PEOPLES BAY NATURE RESERVE



SOUTH COAST NETWORK

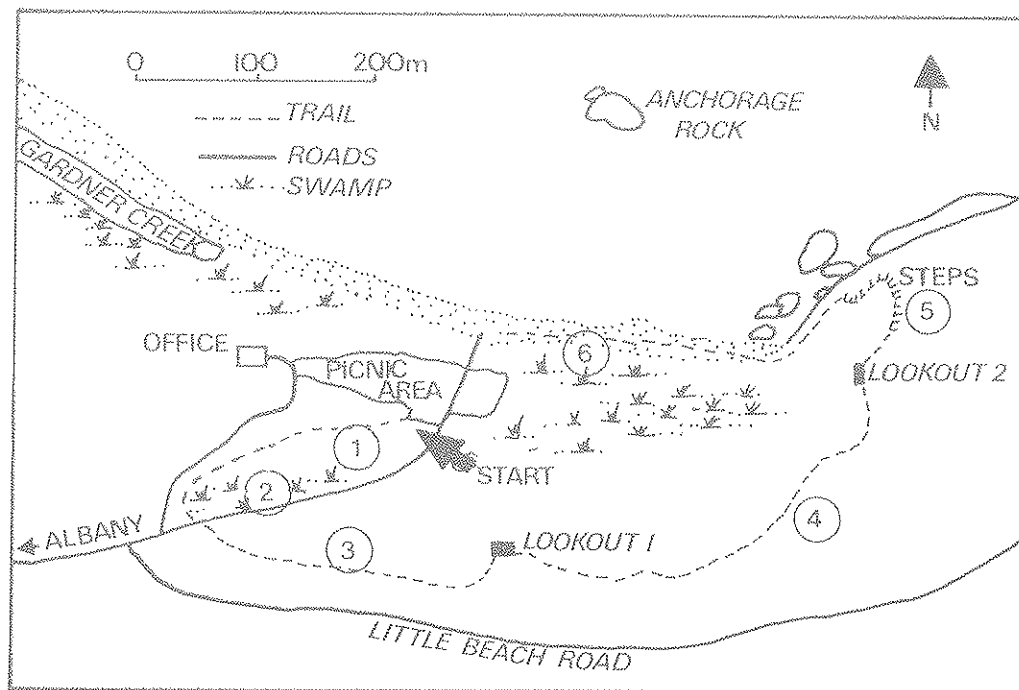


A Commonwealth/State
Bicentennial Project

PAM000068

BAIE DES DEUX PEUPLES HERITAGE TRAIL

Two Peoples Bay Nature Reserve



'Baie Des Deux Peuples' or 'Bay of Two Nations' was the name given the bay by a French expedition led by Nicholas Baudin, in celebration of meeting an American sealing brig here in 1803.

Discover some of the fascinating plants and animals that live in this reserve; from a plant that eats meat to one that robs its neighbour's water supply, from the bullfrog whose call resembles a motor bike changing a gear to the rare Noisy Scrub-bird whose call can carry a kilometre! Its rediscovery here in 1961 (after

72 years in hiding) led to the establishment of this reserve.

Whatever the season there is always plenty to see and hear, and you'll make many discoveries by looking and listening while you stand or sit quietly.

The 1.5 km trail has one steep, stepped section (FIVE). Take your time and allow at least 1 1/4 hours. Times given for each section are estimates.

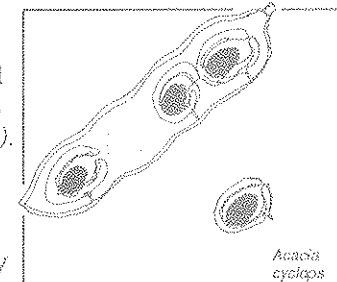
ONE-Picnic area to tree across the path (15 minutes)

The birds most commonly seen along the trail, especially in the woodland of this section, are illustrated on the middle pages.

Listening for their foraging sounds and calls will help you locate these birds.

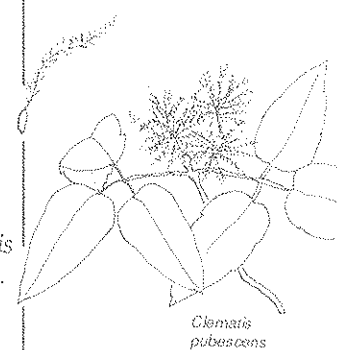
The loudest call you may hear is that of the male Noisy Scrub-bird, sometimes heard from the swamp across the road and on the left. This call is usually the only indication that the Noisy Scrub-bird is present for, although inquisitive, it rarely shows itself.

In summer look for the bright 'red eyes', the seed and associated structures of a wattle (*Acacia cyclops*). The red tissue acts as an umbilical cord to the developing seed and attracts birds, particularly the Grey Currawong, as you can see from their droppings. The seeds are dispersed by birds, and accompanied by ready mixed fertiliser!



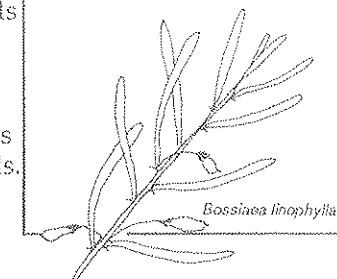
Acacia cyclops

The seed of the climber Old Man's Beard (*Clematis pubescens*) takes to the air. The feathery tail of the seed is ideal for wind dispersal.



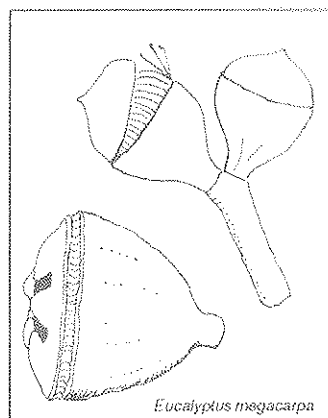
Clematis pubescens

Oil rich stalks on the seeds of the pea flowering *Bossiaea linophylla* are greedily sought by ants. While removing the stalks the ants disperse the seeds.



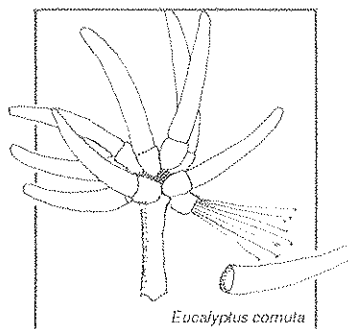
Bossiaea linophylla

The track may be strewn with buds and fruit of bullich (*Eucalyptus megacarpa*). Look at the buds. 'Eucalypta' means well-covered in Greek - referring to the cap that covers the developing flower. All eucalyptus species have this cap, called an operculum.



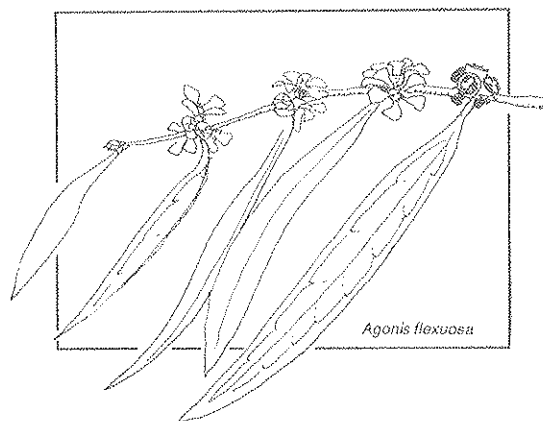
Eucalyptus megacarpa

'Megacarpa' is Greek for big fruit. Another large tree here is the yate (*E. cornuta*). Look at its operculum. "Cornuta" is Latin for horned.



Eucalyptus cornuta

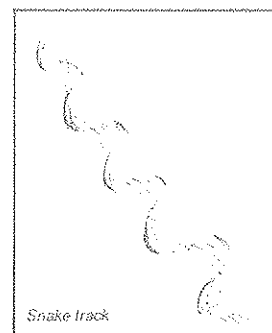
The narrow-leaved tree with weeping branches is native peppermint (*Agonis flexuosa*). Ringtail possums often build their nests in these trees and feed on the young leaves.



Agonis flexuosa

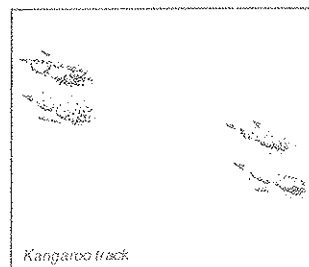
Be a Bush Detective!

Like most mammals in the reserve, ringtails are nocturnal (active at night), so you won't see them during the day. But with a little detective work you might discover telltale signs of the animals - tracks, droppings, nests and diggings.



Snake track

Like tracks, scats are characteristic of particular animals, and a closer look will indicate what the animal eats. Bones, fur and feathers come from a carnivore (meat eater), seeds and plant fibres, a herbivore (plant eater) and beetle remains, an insectivore (insect eater).



Kangaroo track

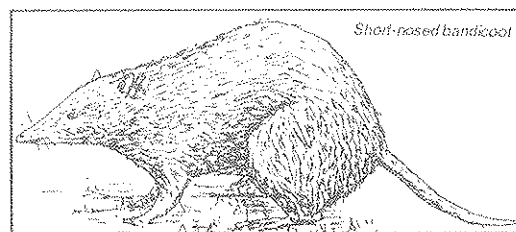


Kangaroo droppings

Possum droppings

Look for these signs all along the trail. Sandy areas are best for tracks.

If you're lucky you may see a very large, rat-like animal run across the track - a short-nosed bandicoot. You may also see shallow conical holes dug by the bandicoot in its search for grubs, worms and insects. Like ringtail possums and kangaroos, bandicoots are marsupials, and carry their young in a pouch.



Short-nosed bandicoot

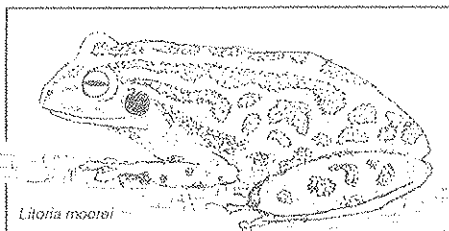
TWO-Tree to road

WATCH FOR CARS - Part of this section uses a management track.

After you pass under the tree trunk close your eyes and listen! You may be surprised at how many noises there are, and how loud they sound. We rely so much on sight that we often don't listen carefully.

Amongst the sounds you hear may be the calls of male frogs serenading females. Listen:

Bonk! Bonk! -
western banjo
frog
(*Limnodynastes dorsalis*)



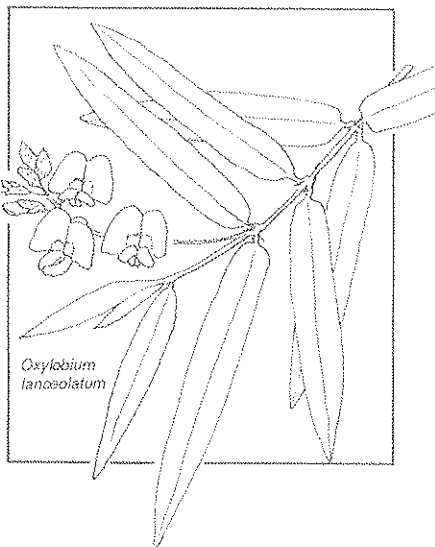
Strident
chirruping -
slender tree frog (*Litoria adelaidensis*)

A motor bike changing gears - bull frog (*Litoria moorei*)

Creaking door sound - creaking door frog (*Crinia glauerti*)

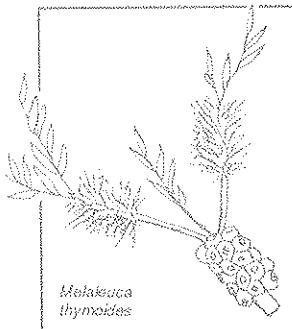
A dry rattling or a soft clucking noise is probably the call of the Spotted Crake. This secretive bird lives in the swamps.

Tall sword sedge (*Lepidosperma gladiatum*) is the dominant plant of the swamp, and native willow (*Oxylobium lanceolatum*) is common at the edge.



THREE-Road to lookout(15 minutes)

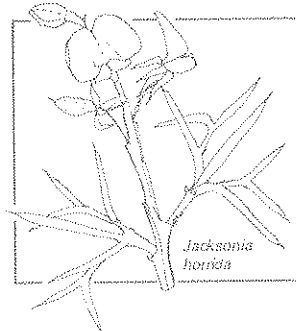
You are entering the more open heath known as kwongan. This type of vegetation is one of the most diverse in the world.



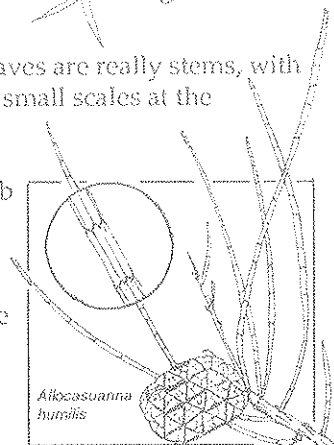
Do you see the difference in leaf shape and texture of the plants here, compared with those beside the swamp?

On this exposed slope plants have evolved many adaptations to reduce water loss. Here are three.

When Smaller is Better
The small leaves of honey myrtle (*Melaleuca thymoides*) and the spiky leaves of *Jacksonia horrida* have small surface areas, therefore reduced evapotranspiration. This is extreme in scrub sheoak (*Allocasuarina humilis*). What look like leaves are really stems, with the true leaves reduced to small scales at the junctions of these stems.



Unlike most plants, a scrub sheoak is male or female. The female has hard woody fruit. In spring the male has masses of minute flowers appearing as red tips on the branches.



If a sheoak is flowering, give a branch a flick. The sheoak is wind pollinated, so there is no need for showy flowers. But massive amounts of pollen must be produced to ensure a few pollen grains reach the flowers of the female tree.

The thick 'skin' of harsh hakea (*Hakea prostrata*) and spike hakea (*H. ruscifolia*) also reduce evapotranspiration, whilst very stiff leaves prevent wilting.

A Water Tank

The fleshy leaves of *Gyrostemon sheathii* use another method - storing water when it's available.

Shields Up

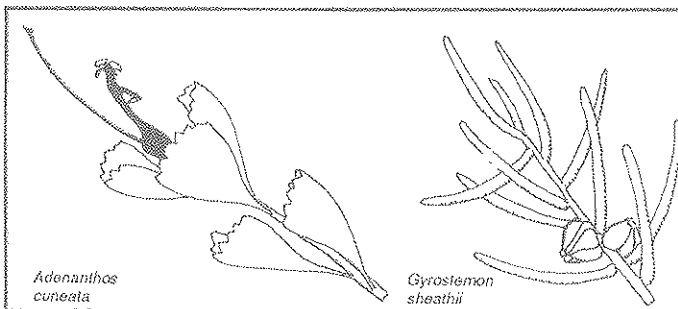
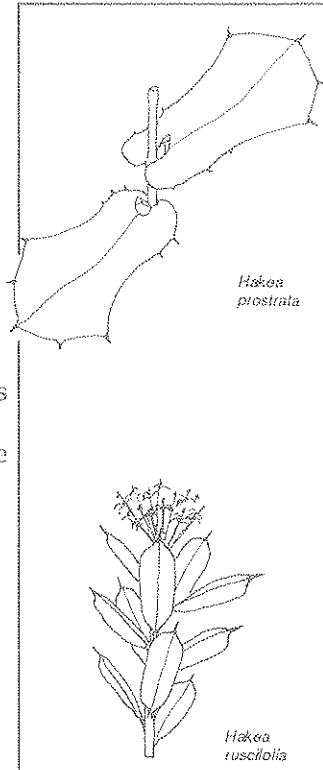
A fine layer of hairs on the leaves of the jugflower (*Adenanthos cuneata*) acts as a shield, protecting the leaf surface from drying winds. New growth on the jugflower is a brilliant crimson.

Hitch hiking seeds

Common grass-like tussocks are really a sedge - *Cyathochaeta clandestina*. Like sheoak, this sedge is wind pollinated.

In summer, 3 cm long stamens covered in pollen hang down from the inconspicuous flowers.

The long, curved seed is a hitch hiker - readily attaching to passing fur and socks.

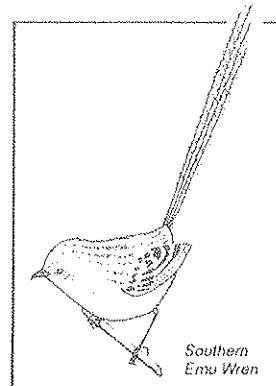
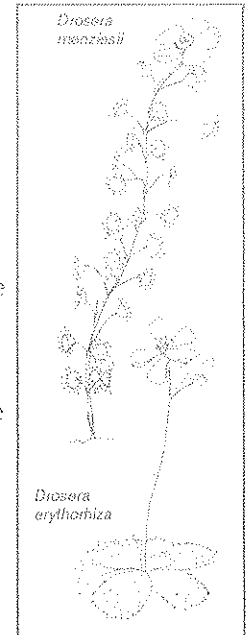


In wetter months you can see two species of insectivorous plants - the climbing pink sundew (*Drosera menziesii*) and the red ink sundew (*D. erythorkiza*). Sundews often grow on poor and waterlogged soils, getting necessary nourishment from the insects they trap.

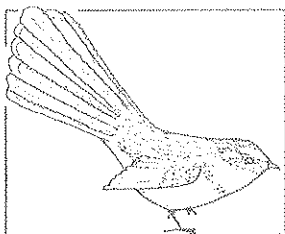
Do you see any insects on the glands of the leaves?

As you walk look for young peppermints like those on the first section of the track. Imagine them at mature size - 3-6 metres high. You'd have branches above you, not heath around your knees. These changes in vegetation are slow but occurring all the time. The animals and birds associated with these different vegetation communities will also change as the vegetation changes.

The rare and endangered Western Bristlebird found on these slopes usually lives in heath older than eight years. If the heath were any younger it would be too open to provide shelter. Its camouflaging colours and ground hugging habits make the Bristlebird hard to see, though it is frequently heard as the male defends his territory by singing.



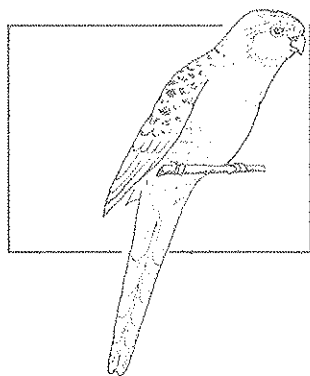
The Southern Emu Wren is common in the heath. The name is derived from its si. emu-like tail feathers. The male Emu Wren has a pale blue bib. They are very small and inconspicuous, but often become inquisitive if you make a sucking noise.



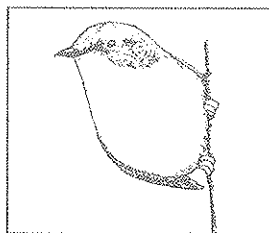
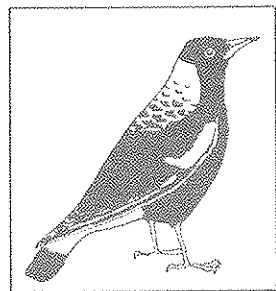
Common birds

* GREY FANTAIL
(16 cm) Often follows
walkers, catching the
insects they disturb.

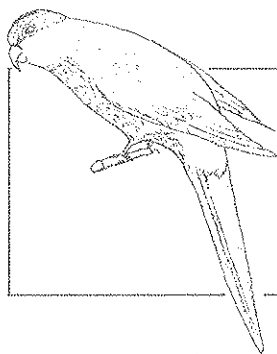
* WHITE BREASTED
ROBIN
(14 cm) Usually seen in
pairs.



RED CAPPED PARROT
(36 cm) A blue breast,
yellow face and red head
are the most distinctive
features.

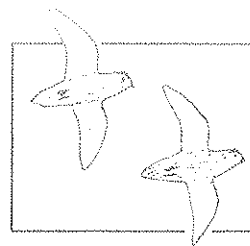


* WESTERN ROSELLA
Males have a bright red
breast and head and a
yellow cheek. Females
are a duller green.



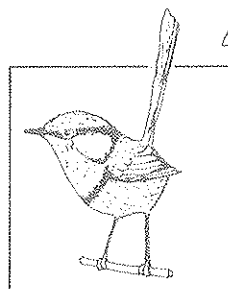
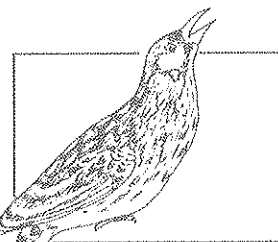
WESTERN MAGPIE
(40 cm) Females have a
scalloped or a black back,
whilst males have a
white back.

PURPLE CROWNED
LORIKEET
(16 cm) Screeching of these
emerald green birds will
give their location away.

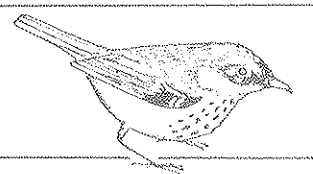


NEW HOLLAND
HONEYEATER
(18 cm) Found just about
anywhere there's nectar.

* RED WATTLEBIRD
(35 cm) Identified by
a red ear lobe and
harsh raucous call.

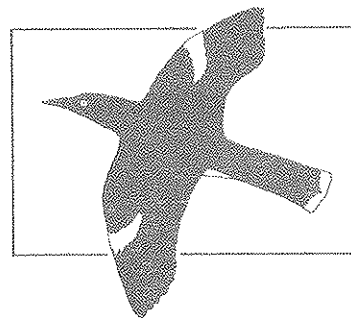


* WHITE BROWED
SCRUBWREN
(13 cm) Very common
in the undergrowth
and very inquisitive.



The brilliant blue
SPLENDID WREN(15cm) is
common in the heath, the
RED WINGED WREN
common in the woodland.
Only males are brightly
coloured, and then only
when they're breeding.

GREY
CURRAWONG
(48 cm) A large bird
commonly found in
the picnic area.



Lookout One-(5 mins)

In winter watch for whales

Sealers were the first white visitors to the bay, following the explorer Vancouver, who surveyed the south coast of Western Australia in 1791, and reported an abundance of seals.

Whalers came in the 1830s, chasing the southern right whale, so called because it was the right whale to hunt. It was slow, came close to shore, floated when dead and yielded abundant oil and baleen.

Several whaling stations were set up here, though these probably only consisted of a large tripot for melting down blubber, some shacks and some rowboats.

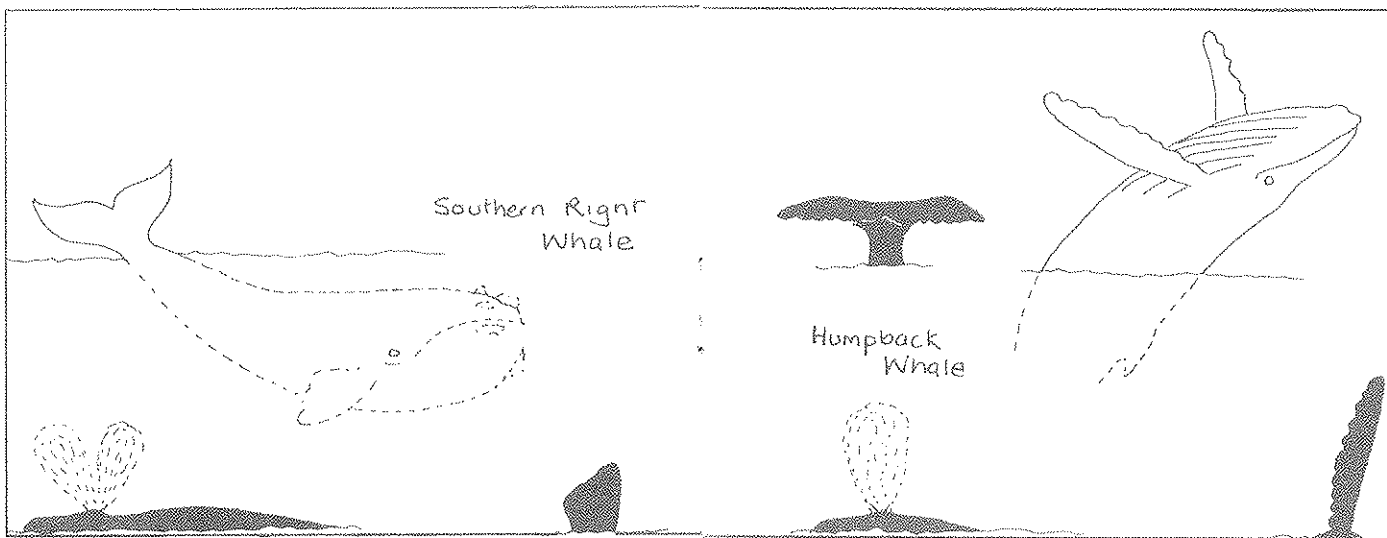
The seals and whales, victims of uncontrolled exploitation, were soon gone, hunted to near

extermination. The sealers had left the area by the 1830s and the whalers by the 1880s.

Today, with protection, the numbers of sea-lions and right whales are increasing. You may see some whales in the bay in winter - probably a mother with her calf. The female (up to 18 m) comes close to shore to give birth and nurse the calf, during which time she doesn't feed.

Right whales are identified by a V-shaped 'blow', large squarish flippers and white blotches (encrustations of barnacles) on the head and face.

You may also see humpback whales, but in deeper sea to the east. They have very long flippers and a dorsal fin.

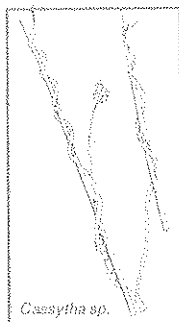


FOUR-Lookout to lookout(10 minutes)

Using the Neighbour's Water Supply
Water and nutrients are not a
problem for dodder (*Cassytha* sp.) or
olax (*Olex phyllanthi*) - they tap into
another plant's supply!

Olex is readily identified by its pale
green leaves, which look as if they're
dying. These semi-parasitic plants have suckers that
attach to other plants to steal supplies. Suckers
develop on the stem of dodder, and on the roots of
olax.

Contrary to popular belief parasites don't normally
kill their hosts - if they did they'd be left without
supplies and die too.



Cassytha sp.

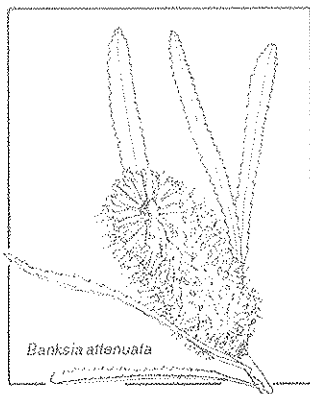


Dryandra sessilis

Nectar is Not a Free Handout
Slender banksia (*Banksia attenuata*)
and parrot bush (*Dryandra sessilis*)
produce copious amounts of nectar -
but the taster must pay. The price is
pollen transfer. Whilst birds and
insects are probing for nectar, pollen
is brushed on and off their heads
and onto other flowers.

As you enter the shallow gully note what plants
grow here. Yate, old man's
beard and *Bossiaea*
linophylla also grow in
Section One. Their
occurrence here reflects the
more sheltered aspect and
wetter environment of this
hollow.

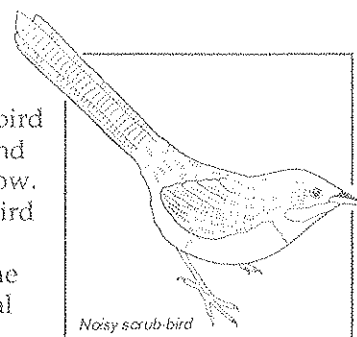
**PLEASE DO NOT
DISTURB THE TERMITE
MOUND. IT IS FRAGILE.**



Banksia attenuata

Lookout Two (5 minutes)

This is a good spot to
observe a Noisy Scrub-bird
territory - the swamp and
adjacent vegetation below.
Like our farms, Scrub-bird
territories vary in size
according to quality. The
territory below is typical
for this flat swampy
habitat.



Noisy scrub-bird

Like Bristlebirds, male Scrub-birds defend a territory
by singing, and are particularly vocal in May and
June. One or two females may breed in a territory.

FIVE-Lookout to beach (10 minutes)

Look for Anchorage Rock (see map). When the tide is
out you can observe some land building processes
here.

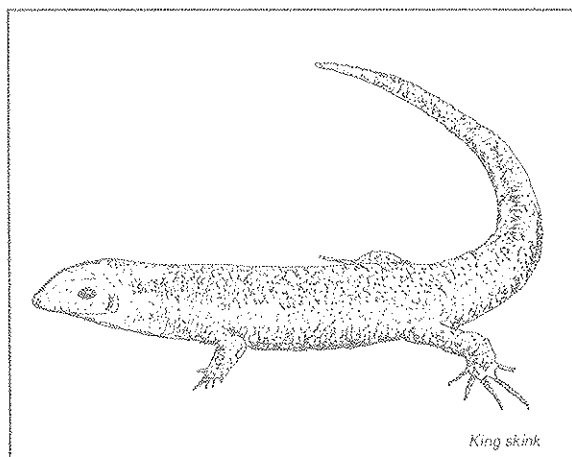
Locate the small wedge-shaped sand spit opposite
the rock. Waves bending around the rocks meet and
therefore slow down, causing the sand they carry to
drop, forming this spit.

Mt Gardner, behind you, may have become part of
the mainland in a similar way thousands of years
ago. Then, the sea level was higher and Mt Gardner
an island. As the sea level dropped with the onset of
an ice age, waves sweeping around either side of
'Gardner Island' met and deposited their load
forming a sand bar, then a sand spit.

However, the sea level continued to drop until it was
well below the present level. The sand of the exposed
sea floor was blown by winds and caught against
rocky outcrops - forming the bare dunes and the
vegetated sandy areas you see now.

The distinctive rocks at the bottom of the steps are granite.

King Skinks are often seen sunning themselves here and absorbing heat from the rocks. You may be lucky enough to see one stalk a moth or other insect.



King skink

Look at the variety of plants colonising the top of the rocks in front of you.

Lichen (flat and pale green or orange) is one of the first colonisers of rocky surfaces. Lichens are really two plants in one, an algae and a fungus. Neither can live alone - the algae makes essential sugars from the sun's energy whilst the fungus prevents the algae from drying out and provides a hold.

Weak acids from lichens aid in the breakdown of the rock surface, and, with sand particles trapped in the lichens from the wind, help develop a soil base in which other plants may grow, such as those on top of the big rocks. The plant with large white flowers is a sticky tail flower (*Anthocercis viscosa*).

SIX-Along the beach (10 minutes)

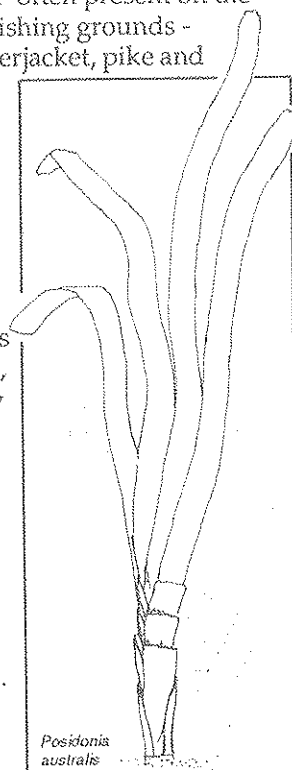
The rotting banks of 'seaweed' often present on the beach are sure signs of good fishing grounds - particularly for whiting, leatherjacket, pike and flathead.

The seaweed is really a grass called fibre ball sea grass (*Posidonia australis*). It forms extensive meadows in the shallow, sheltered bay. These meadows are important breeding and feeding grounds for fish and other sea animals, such as shells and crabs. They also help stabilise the sand.

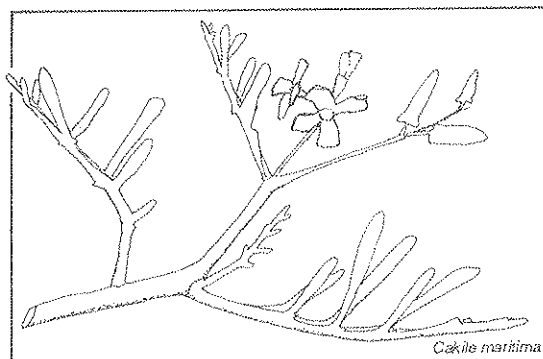
The rotting sea grass will eventually decompose, releasing nutrients to the sea and sand where they are available for further growth. This process is a vital link in the continuing life of the area.

The odd-shaped balls on the beach are formed from the fibres of this sea grass constantly rolling back and forth on the sea floor with the waves.

Further up the shore is the mauve flowered sea rocket (*Cakile maritima*). This is one of the first plant species to colonise the sandy shores.

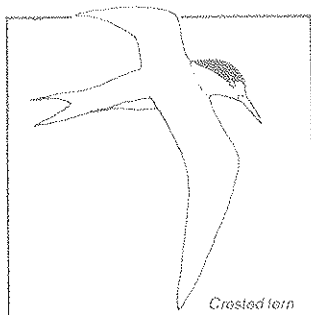


Posidonia australis

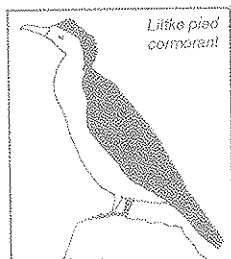


Cakile maritima

The rich fishing grounds attract many seabirds. One of the most striking is the Caspian Tern with its large, blood red bill. Like the smaller Crested Tern (yellow bill) it is an aerial predator that divebombs for fish.

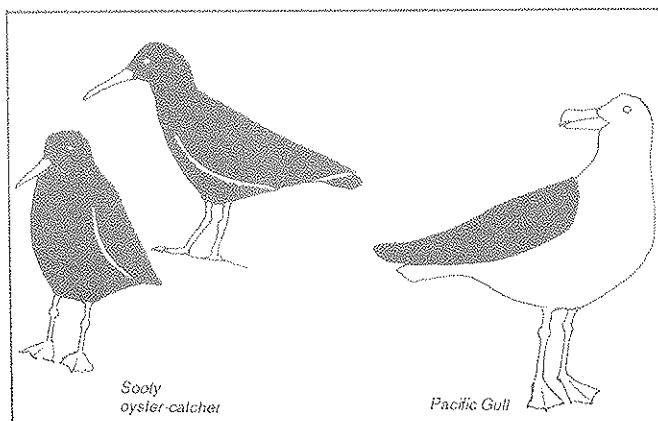


The Sooty Oystercatcher prefers rocky areas where it hunts for limpets and other shells. Usually seen in pairs they are identified by their red feet, bill and eyes and black bodies.



Little Pied, Little Black and larger Black Cormorants are underwater fishers. Unlike most waterbirds their feathers aren't very waterproof, and they must frequently dry out their wings so they can fly easily.

The large Pacific Gulls are scavengers. Immature Pacific Gulls are recognised by their murky brown colour.



Further reading

A.N. Barker, Whales and Dolphins of New Zealand and Australia, An Identification Guide (VUP Press, 1983).

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P. Slater et al, Slater's Field Guide to Australian Birds (Rigby, 1986).

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