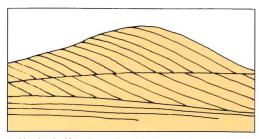
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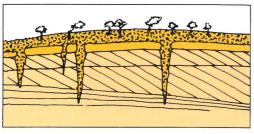
Department of Biodiversity,
Conservation and Attractions

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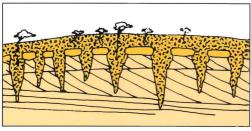
## THE PINNACLES FORM



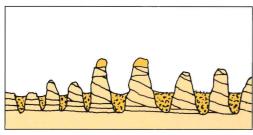
 Lime leached from the sand by rain cements the lower levels of the dune into a soft limestone.



Vegetation forms an acidic layer of soil and humus. A hard cap of calcrete develops above the softer limestone.



Cracks in the calcrete are exploited by plant roots. The softer limestone continues to dissolve. Quartz sand fills the channels that form.



4. Vegetation dies, and winds blow the sand covering the eroded limestone. The pinnacles appear.

## REMEMBER

- Be careful: Your enjoyment and safety in natural environments is our concern, but your responsibility.
- Be clean: Put your litter in bins. Better still, take it with you.
- \* Stay cool: Don't light fires.
- Protect animals and plants: No firearms or pets... please.
- Stay on the road: Follow signs in the Park and stay on the roads marked in this brochure. Other tracks in the Park are for management purposes only and cut across areas of dieback. If you drive through these areas, you may spread infection.

## **FURTHER INFORMATION**

National Park Rangers are always glad to help make your visit more enjoyable and informative. Do not hesitate to contact them if you require any information or assistance.



Department of Conservation and Land Management PO Box 62 Cervantes 6511 Light Industrial Area. Phone: (08) 9652 7043

Moora District Office: PO Box 208 Jurien Bay, 6516 Ph: (08) 9652 1911

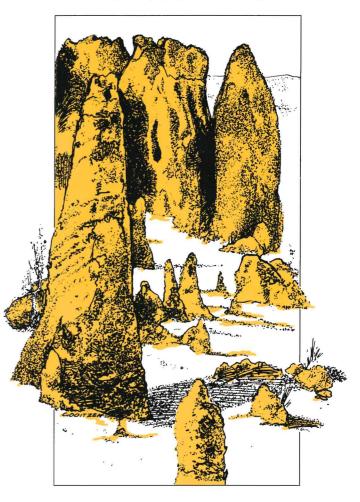
Midwest Regional Office: PO Box 72 Geraldton, 6530 (08) 9921 5955

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## **NAMBUNG**

National Park





# NAMBUNG NATIONAL PARK

Nambung National Park, on the Swan Coastal Plain 245 km north of Perth, contains one of Australia's most fascinating landscapes - the Pinnacles Desert.

Out of the shifting yellow sands rise thousands of huge limestone pillars, standing in stark contrast to the surrounding low heathlands typical of this coast.

The pinnacles often feature in tourist guides to the region, but they are only one part of the 17 491 ha National Park. Beautiful beaches, coastal dune systems and trees and flowering plants typical of the northern coastal plain are all part of this Park.

Summer days between December and March are usually hot and dry, with an afternoon sea breeze. During this time the fire danger is often extreme. Wildlife rests during the heat of the day, and only appears in the cooler hours of early morning and evening.

Most of the annual 600 mm of rain falls between May and September. From September onwards the weather warms up, but the days are still mild and native wildflowers throughout the area start their spring bloom. This is the best time of year to discover the pinnacles and explore the park.



## THE ENVIRONMENT

Three old systems of sand dunes run parallel to the WA coast from Nambung to Busselton. These dunes, formed from wind-blown beach sand rich in lime, mark ancient shorelines on the Swan coastal plain.

The dune systems become older and more gentle and undulating the further they are from the sea. The shape and character of the sands determine the plants that will grow on them.

The Quindalup system of white, lime-rich sands is found immediately inland from the foredunes and is constantly being added to by sand from the foredunes and the beach.

The vegetation here is strongly influenced by the shape of the dunes. Acacia thickets are common in the small valleys between the dunes and on the leeward slopes.

Further inland the older Spearwood dunes occur. These are yellow and brownish quartz sands, and often overlie limestone. The pinnacles are the eroded remnants of what was once a thick bed of limestone beneath these sands.

Tuart woodlands occur in the valleys, but it is the low exposed heaths of acacia and myrtles extending inland to the Pinnacles Desert which dominate the landscape. Scattered over these low heaths grow casuarinas and banksias. The brilliant orange-flowered *Banksia prionotes* is common.

The silica-rich sands of the Bassendean system are found on the east of the Park where the vegetation is low, open banksia woodland.

Most animals in the Park are nocturnal, but during the day you may see emus or western grey kangaroos. Reptiles of many sorts are common, particularly bobtail skinks and snakes. Over 90 species of birds common to the Swan Coastal Plain have been recorded in the Park.

#### THE PINNACLES

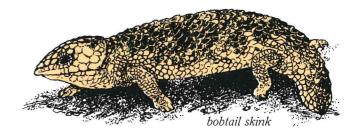
The most popular attraction of the Park is the Pinnacles Desert. Thousands of limestone pillars, up to four metres tall, rise out of a stark landscape of yellow sand. Some are jagged, sharp-edged columns, rising to a point; others resemble tombstones. What exactly are the pinnacles? What natural processes have created these odd and spectacular structures?

The raw material for the limestone of the pinnacles came from sea shells in an earlier epoch rich in marine life. These shells were broken down into lime-rich sands which were carried inland by wind to form high, mobile dunes.

Winter rain leached the lime from these sands, cementing grains of sand together in the lower levels of the dunes. Vegetation became established and stabilised the dunes. At the same time, an acidic layer of soil and humus developed over the remaining quartz sand.

This acidic soil accelerated the leaching process, and a hard layer of calcrete formed over the softer limestone below. Today this calcrete can be seen as a distinct cap on many pinnacles and has helped protect the softer limestone below.

Cracks formed in the calcrete layer and were exploited by plant roots. Water seeped down along these channels to leach away the softer limestone beneath. The channels gradually filled with quartz sand. This subsurface erosion continued until only the most resilient columns remained. The pinnacles as we see them today were exposed by prevailing winds blowing away the overlying quartz sand.



## THINGS TO SEE AND DO

#### PINNACLES DESERT LOOP DRIVE AND LOOKOUT

A one-way loop track leads through the Pinnacles Desert. At the northern end of the loop a timber lookout is provided. A ramp allows access for people with disabilities, although assistance may be required for wheelchair access. Large coaches (with carrying capacity greater than 24) may not be able to negotiate this track and should not proceed beyond the carpark. The track is not suitable for caravans and trailers, which should be left in Cervantes.

#### FISHING:

Fishing is popular at Hangover Bay and Kangaroo Point. Contact the Fisheries Department for the latest rules and regulations. Please note that the offshore islands are all nature reserves, and you must have a permit to land there.

## FIRES:

Open fires are not permitted in the Park at any time of the year. Bring your own portable gas stove, or use the free gas barbecues provided.

## CAMPING:

There are no camp sites in the Park, although Cervantes offers several types of accommodation.

## **BUSHWALKING:**

Bushwalking is encouraged, but summer temperatures are very hot and there is no drinking water in the Park. If you plan any lengthy walks, please inform the Park Ranger beforehand.

#### ROADS:

Access to the park is from the Cervantes Road. Although the gravel road from the Hangover Bay turn-off to the Pinnacles is suitable for conventional vehicles, at times it may become rough, particularly after heavy rain. South to Grey and beyond, the coastal track is 4WD only. Please note that just south of the park is Wanagarren Nature Reserve. National Park regulations apply in this area as well.

#### SUPPLIES:

Petrol, water, medical treatment, caravan park, motel accommodation and food stores are available in Cervantes.

For your safety and to protect the Pinnacles, please do not climb on the formations.

