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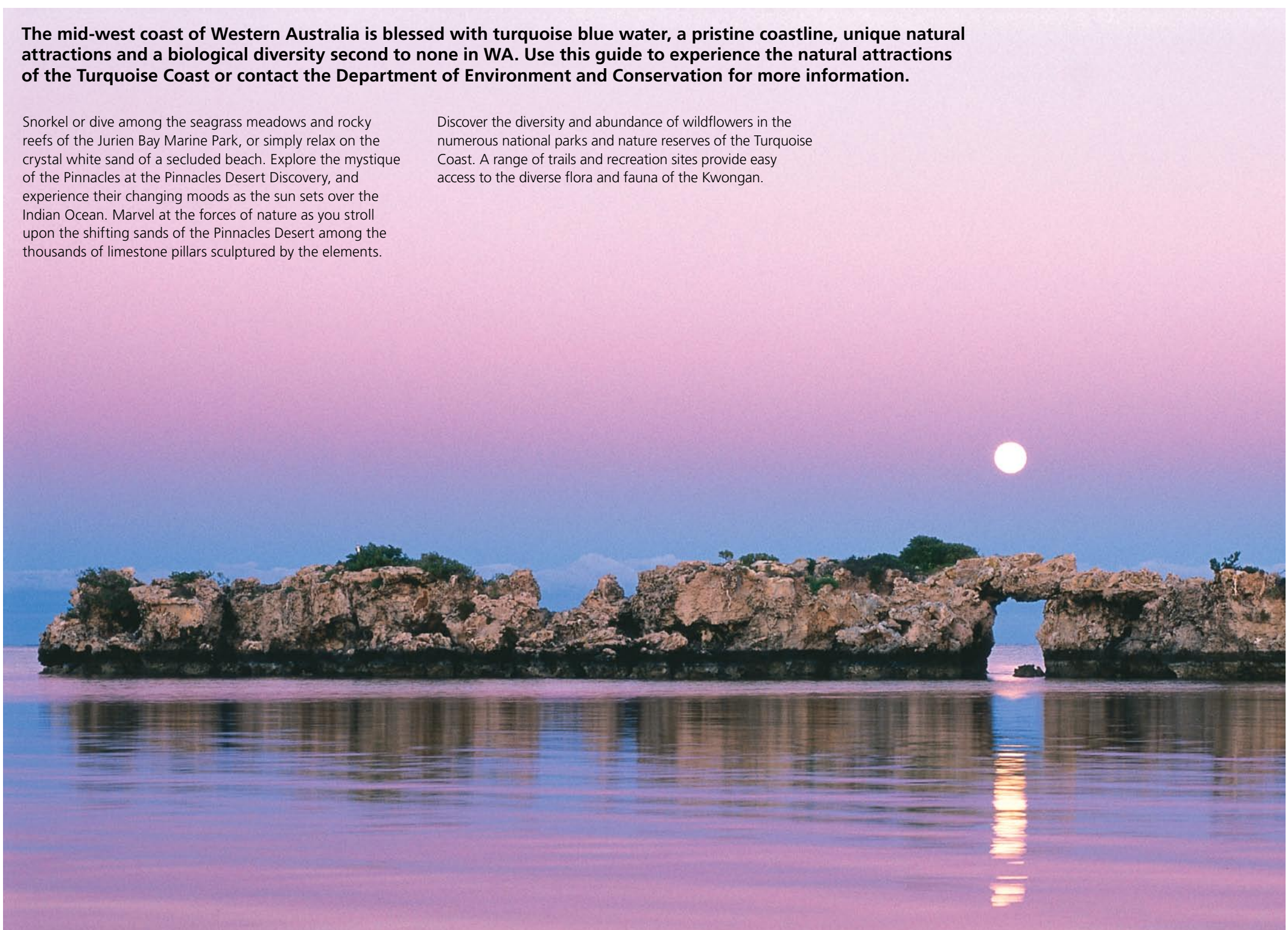
Department of Biodiversity,
Conservation and Attractions

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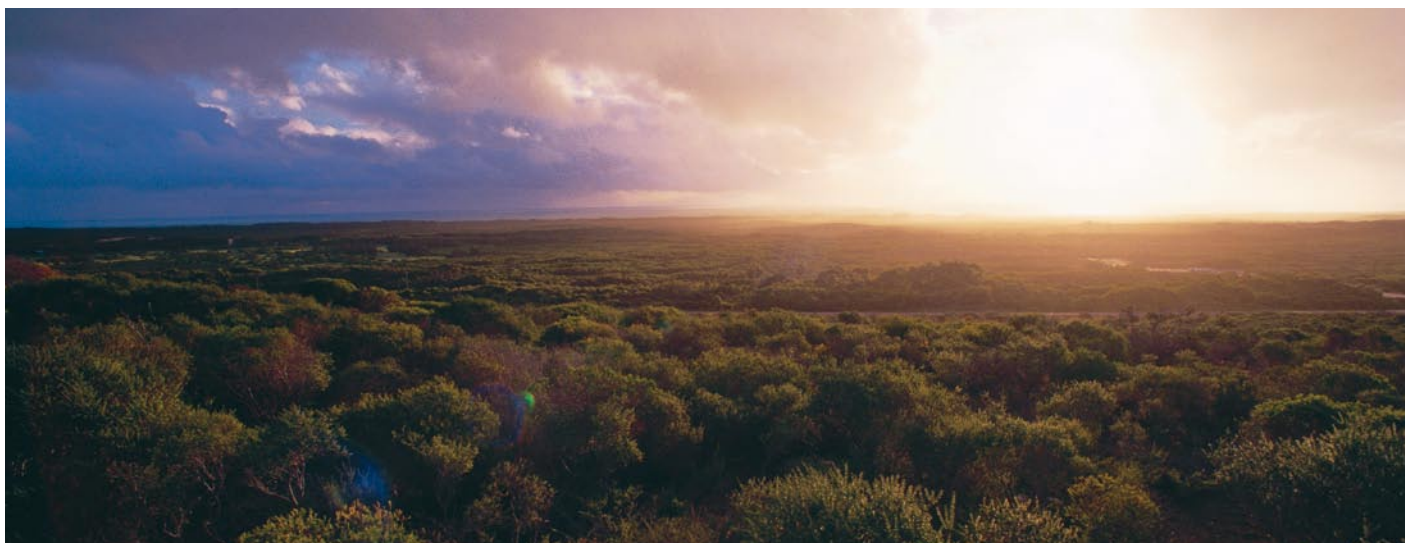
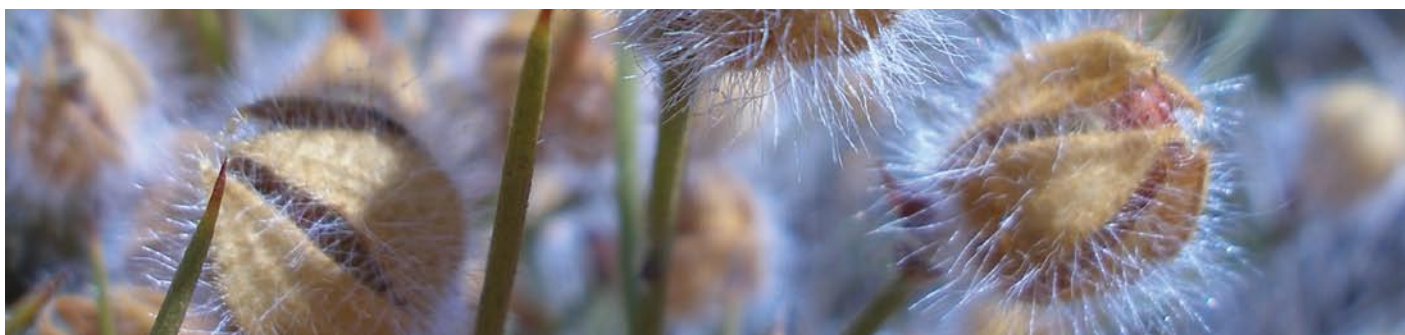
The mid-west coast of Western Australia is blessed with turquoise blue water, a pristine coastline, unique natural attractions and a biological diversity second to none in WA. Use this guide to experience the natural attractions of the Turquoise Coast or contact the Department of Environment and Conservation for more information.

Snorkel or dive among the seagrass meadows and rocky reefs of the Jurien Bay Marine Park, or simply relax on the crystal white sand of a secluded beach. Explore the mystique of the Pinnacles at the Pinnacles Desert Discovery, and experience their changing moods as the sun sets over the Indian Ocean. Marvel at the forces of nature as you stroll upon the shifting sands of the Pinnacles Desert among the thousands of limestone pillars sculptured by the elements.

Discover the diversity and abundance of wildflowers in the numerous national parks and nature reserves of the Turquoise Coast. A range of trails and recreation sites provide easy access to the diverse flora and fauna of the Kwongan.



Parks of the Turquoise Coast



Contact details


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Pinnacles Desert Discovery
Pinnacles Drive
Nambung National Park



Department of
Environment and Conservation
Our environment, our future 

Visit NatureBase at www.naturebase.net

Sea lions of the Turquoise Coast



In Western Australia we are privileged to have Australian sea lions living and breeding around the southern half of our State. These extraordinary wild animals can be seen in the waters and on some of the islands within the Jurien Bay Marine Park.

Australian sea lions live only in Western Australia and South Australia and are among the rarest of the world's seal species.

Sea lions have hair much like a dog and do not have the dense, soft fur of the fur seals so prized by the early sealing industry. Despite this, sea lions were hunted for their meat, oil and leather, particularly in the early nineteenth century. They are now specially protected.

The Australian population of sea lions is thought to be between 10,000 and 12,000 but is decreasing in some areas. It is estimated that less than 1000 sea lions live on the central west coast, between Perth and the Houtman Abrolhos Island Group. It is thought that these animals may represent a genetically distinct sub-population and, if so, are worthy of particular protection.

Sea lions possess an amazing agility and speed underwater, useful not only in chasing their prey, but to avoid their main predator, large sharks. Most sea lions can out-manoeuvre sharks, but the slow, weak or careless can fall prey.

Sea lions are marvellous divers and spend about three days at a time at sea foraging close to the seabed, and another three days on shore resting and renewing energy levels for their next hunting trip. Please respect their need for sleep and don't try to disturb them for entertainment.

While cows and juveniles regularly dive to depths up to 90 metres, bull sea lions have been recorded diving to depths exceeding 300 metres. Their feeding is opportunistic with fish, sharks, squid, octopus, cuttlefish, lobster and even occasionally birds and turtles being included in their diet.



My island home

The islands in Jurien Bay Marine Park are vitally important to the Australian sea lion.

Sea lions use the island habitats either for breeding, nursing or as haul out sites where the animals rest after extended foraging trips at sea. Unlike all other seals, which breed annually, sea lions breed every 17.5 months, and do so at different times at different islands. Breeding females, or cows, live and forage near their island home year-round and will always return to breed at the same island on which they were born. During the breeding season the females defend their pups tenaciously and will attack people who come too close. It is essential to keep away from islands where they breed and never try to walk among a colony of breeding seals.

Breeding-aged males are called bulls and migrate north from the Perth metropolitan area, particularly Carnac and Seal Islands, each breeding cycle. The successful bulls gather and protect their harem of cows and new pups, then most return south after the season is over.

About 21 per cent of the Western Australian population live and breed in, or near, Jurien Bay Marine Park. These important breeding sites are on Buller Island and North Fisherman Islands, which are within the marine park, as well as the Beagle Islands, which are located just outside the park, north of Leeman. All of these islands are prohibited access areas for the protection of visitors as well as for the conservation of the sea lions and are protected as nature reserves under the *Conservation and Land Management Act 1984* (CALM Act). Many more islands within the marine park are used as haul out sites.

An understanding of the life history, population dynamics and foraging behaviour is needed to manage and protect these important breeding colonies. DEC, in partnership with the Department of Fisheries (DoF), undertakes a range of research programs to monitor individual behaviour and breeding success.

It is important to remember that the seals you encounter are not pets or tame. They may have lost some of their fear of people and may tolerate your presence or even be inquisitive towards you. They are, however, unpredictable wild animals, particularly to anyone who gets too close, moves too quickly or somehow threatens or scares them.

Enjoy the privilege of observing sea lions in their own environment; if you do it in a responsible manner the opportunity will remain for future generations.



Stromatolites of Lake Thetis



Lake Thetis is a small saline lake 1.25 kilometres inland from the Indian Ocean, three kilometres south-east of the coastal town of Cervantes and about 237 kilometres north of Perth. It is estimated the lake became isolated from the sea about 4800 years ago when sea levels dropped and coastal dunes formed around the lake.

The lake is one of only a few places in the world with living marine stromatolites, or 'living fossils'. The microbes that build stromatolites are a species of cyanobacteria and are similar to those found in 3500 million year old rocks, which are the earliest record of life on Earth. The lake's stromatolites that look like rocky lumps have been dated to about 3370 years old. Stromatolite communities grow as the thin layer of bacteria on their surface deposit calcium, cementing sediment into bulbous structures. Blister mats of cyanobacteria can also be found growing on the margins of the lake in the flood zone. These mats are sensitive and easily disturbed.

The stromatolites are easily accessible during the drier months when the water level is at its lowest. The best examples can be found at the south-western edge of the shoreline but they are brittle and visitors are asked to look, but don't touch.

Lake Thetis is isolated from major surface drainage and is fed by groundwater flow. The only loss of water comes from evaporation. It is a saline lake but there is no evidence to suggest the lake has a connection to the sea. The water level fluctuates around average sea level but doesn't appear to reflect tidal variations. The lake levels follow trends more closely related to the rainfall for the area.

The lake water is alkaline and nutrient poor but provides an ideal environment for bottom dwelling microbial communities. The lake contains some small fish, amphipods and a few crustacean species adapted to living in highly saline environments.

The circumference of the lake is only 1.2 kilometres and provides an interesting and enjoyable walk. Please stay on the path provided.



Pinnacles Desert Discovery

Take a trip into the world of nature at the newly completed Pinnacles Desert Discovery centre.

Set near one of Australia's most fascinating areas – the Pinnacles Desert where thousands of huge limestone pillars rise from the shifting yellow sands – the discovery centre takes visitors on a new dimension on their journey through Nambung National Park which runs beside the Turquoise Coast.

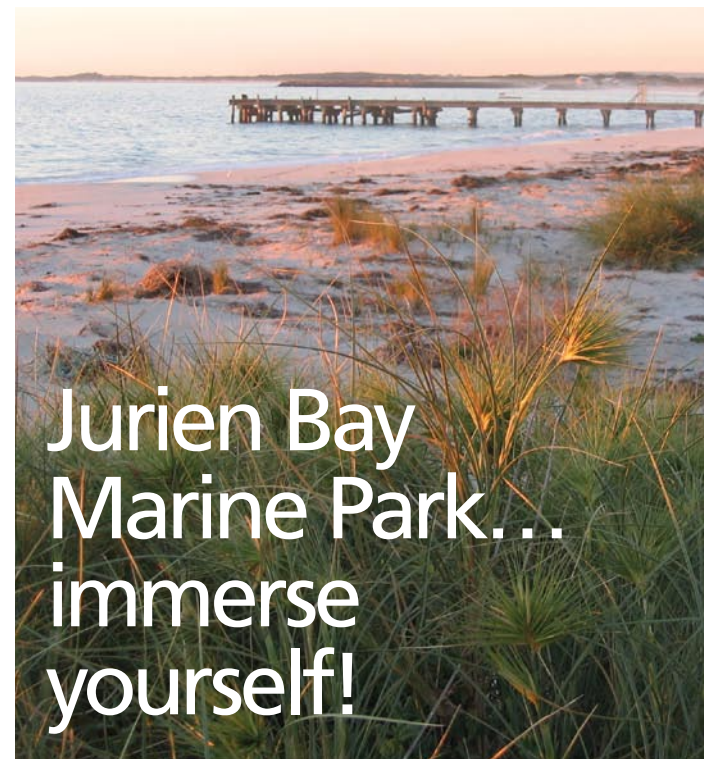
The park has beautiful beaches, coastal dune systems, shady groves of tuart trees and low heathlands of plants that produce vibrantly coloured flowers between August and October.

The centre is a stepping stone into the park with a track for walkers and an interpretive centre that encourages you to use all your senses to identify the hidden wonders and signs of life in the desert. Often it is not the features of the landscape that grip us, but the contrast of the spaces. It certainly takes time to tune in to this new environment and to view the Pinnacles landscape in a different light.

Designed by John Nichols, project architect for Woodhead International, who also designed the award winning Karijini Visitors Centre, the Pinnacles Desert Discovery has been designed in response to the landscape and has a strong relationship with the site that facilitates a sense of place to those who visit it.

Construction materials are reflective of the area: free standing limestone walls were inspired by the Pinnacles, the vertical timber beams are tuart, mimicking the northern woodland being engulfed by the shifting sand. Lower portions of these tuart beams were deliberately set on fire to reveal the significance of fire in the forming of this landscape. Engraved into the burnt wood are Nyoongar words provided by the Yued people, echoing the strong links they have to their country and the use they made of fire to manage and live in harmony with it.

The grey roof that spills over the front and rear walls of the centre echoes the spreading dodder laurel creeper that engulfs coastal heath, producing a dark sheltered and mysterious world beneath. The Pinnacles Desert Discovery is a must see on your journey through the Turquoise Coast.



Jurien Bay Marine Park... immerse yourself!

Western Australia has a coastline of 13,500 kilometres ranging from the northern tropics to the temperate south. State waters include 12.6 million hectares of ocean. As with our land, our oceans are recognised globally for their biodiversity and are some of the most pristine in the world.

One of the biologically significant areas of our coast is the central west, where species of the tropical north and the temperate south mix in a biogeographic overlap. The Jurien Bay Marine Park was created to conserve this unique assemblage of tropical and temperate species and the pristine nature of this marine and coastal environment. The park extends from Wedge Island in the south to Green Head in the north and west to the State boundary. The marine plants and animals in the park are heavily influenced by the southward-flowing Leeuwin Current. This warm tropical current carries larval and juvenile tropical marine species, taking them further south along the west coast of Australia.

The marine park boasts environments from sandy beaches and rocky shores to seagrass meadows and limestone reefs with a diverse range of species. It also provides many recreational opportunities.

The many shallow bays and rocky reefs provide a snorkelling paradise. Hangover Bay and areas near Sandy Cape are great examples, where snorkellers can access reef and seagrass meadows from the shore. Marine life here is abundant, even in the shallows. Often the smaller cryptic things are the most interesting when you look closely. Similarly divers are spoilt for choice in the Jurien Bay Marine Park. The chain of reef and islands just off the shore has deep ledges and swim throughs encrusted with colourful sponges and corals, and are crawling with invertebrates. Many of these are endemic to WA and are at their northern or southern limits of their range. Exploring these areas reveals a kaleidoscope of colour and form, and an abundance of fish that will delight the underwater enthusiast. Take advantage of local knowledge and book a dive charter to immerse yourself in this magnificent environment.

While the park has a number of sanctuary (no take) zones these are small in comparison to the opportunities available in other areas of the park. For details, refer to the Jurien Bay Marine Park Guide, map and permitted activities table available from marine, tourism, and fishing outlets, and on signage along the coast. Shore-based anglers can catch highly prized species such as mulloway, tailor, skippy and herring. Areas such as the mouth of the Hill River, Kangaroo Point, and the jetties at Cervantes and Jurien are popular. Boat anglers can have good catches of the prized dhufish, baldchin groper, snapper and mackerel at the right time of year. Good launch facilities can be found at Cervantes, Jurien Bay and Greenhead.

The park's magnificent beaches are a great place to just relax and enjoy cooling off in the turquoise blue water. For the more energetic, there are many accessible beaches providing a base for wind and kite surfing and nearby islands provide rewarding sea kayaking opportunities.

The Jurien Bay Marine Park has many values – recreational, cultural, environmental and economic. Spend some time and enjoy all the park has to offer. Please remember the marine environment can be dangerous. Conditions can change quickly and unexpectedly. Before heading out, consider the weather conditions, your equipment needs and tell someone where you are going and when you expect to be back.

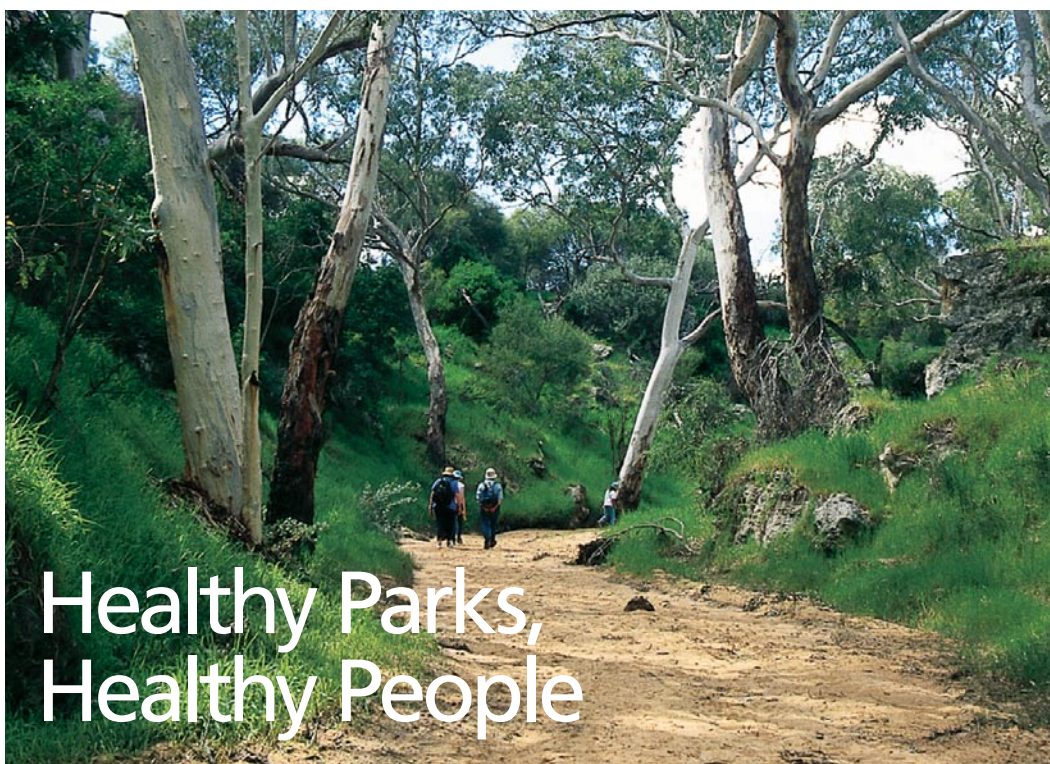
Mt Lesueur grevillea – Back from the Brink

Lesueur National Park is recognised internationally for its incredible floristic diversity and provides a safe habitat for some of the State's rarest flora species. These include the critically endangered *Grevillea batrachioides* (bat-rack-ee-oy-dees), commonly known as Mt Lesueur grevillea, which is only known from one small area within the national park.

Mt Lesueur grevillea was first collected in 1850 by James Drummond in the Pallinup region of the State's south coast. The species was presumed to be extinct as Drummond's population could no longer be found and no other specimens had been collected from other areas. That was until an unidentified specimen collected in Lesueur National Park was identified as the elusive grevillea and named after the location of the only known population. The population from which this collection was made was carefully mapped in 1991 and, despite extensive searches, no other populations have been located.

Mt Lesueur grevillea is a bushy shrub to two metres tall with rounded hairy branchlets and stiff leaves. The red flowers are produced in late spring at the ends of the branchlets and are about five centimetres long. The only natural population totalling less than 100 plants occurs on a flat sandstone outcrop in brown sandy loam on a north-west facing slope below a breakaway. The associated vegetation is dense heath with open woodland of mallee and Lesueur banksia (*Banksia tricuspis*).

The main threats to the Mt Lesueur grevillea are dieback disease caused by the plant pathogen *Phytophthora* sp., inappropriate fire regimes and recreational activities. DEC is working to protect the species from these threats, helping to bring the Mt Lesueur grevillea back from the brink.



Healthy Parks, Healthy People

There is no doubt about it: parks provide the perfect setting to improve your health and wellbeing and also keep the environment healthy.

There is considerable evidence worldwide that establishes a strong correlation between spending time in parks and the physical and mental health of individuals and a healthy community. Parks also keep the environment healthy by improving air quality, reducing erosion, delivering clean drinking water and contributing to clear healthy waterways.

Parks offer the opportunity to meet the different needs of different people. People may choose to walk the trails in Lesueur National Park, or swim in the cool clear waters of the Jurien Bay Marine Park, while others may simply enjoy a picnic at one of many recreation sites in the parks of the Turquoise Coast.

So help your health by stepping out into the bush!

Healthy Parks
Healthy People





Fire: a natural part of the Australian environment

Fire is as much part of Western Australia's natural environment as wind, sun and rain. As a natural element, it has not only helped shape the environment, it has also been among the driving forces in the evolution of native flora and fauna.

Fire has such an impact on native plants that many of them have developed remarkable partnerships and rely on periodic fire for their survival. Many plant species reproduce or regenerate after fire. In fact, some cannot reproduce without it. Native fauna also relies on fire for habitat regeneration, creation of nest holes and stimulation of fresh growth to graze on.

The use of fire by humans has also made an indelible impact on many species, including humans themselves. For millennia, Aboriginal people have used fire for warmth, hunting, cooking and even safety, to protect themselves from the rages of summer bushfires. To this day, Australians use fire for much the same reasons. We use it to conserve our natural environment and help protect life, property, community assets and environmental values from the devastation of summer wildfires.

Native plants, animals and ecosystems have evolved in this fire-prone environment. Many plant communities need particular fire regimes to maintain their structural diversity. Fires, in particular sequence and scale, are needed to provide diversity of habitat for many animals. However, the way in which species and ecosystems respond to fire varies. Some are quite resilient, returning to their pre-fire condition relatively quickly, while others can take decades to recover. No single fire regime (fire interval, season, intensity, patchiness and scale) is optimal for all species.

Fire diversity can promote biodiversity, but some fire regimes – including infrequent very large and intense wildfires – can threaten biodiversity, especially in fragmented habitats or where introduced pests and disease are present. These fires quite often cause substantial environmental, social and economic damage.

Within weeks of a fire passing, even very hot fires, the first green sprouts emerge from the burnt ground. These are sprouts from plants such as zamia palms, kingias and grasstrees leading the way in the regeneration. Many kingias resprout and flower within the first month and disperse seed soon after. In the following weeks and months, other plant species resprout either from epicormic buds buried under bark, or from below ground organs such as lignotubers, bulbs, corms and rhizomes. Other plants regenerate prolifically from seed, either stored in the soil or in woody capsules on the plant. Heat, smoke and other products from the fire stimulate a massive, synchronised release of seed and trigger germination of dozens of species. The fire ash provides the ideal conditions for seedlings to survive and grow. These then establish in the following winter and the cycle continues.

See 'Fire: the force of life' *LANDSCOPE* special, available from DEC offices and online at www.naturebase.net for more information.



Western Shield in the district



Since March 2001 DEC's Moora District has been involved in what is now the biggest and boldest wildlife recovery initiative ever attempted in Australia – *Western Shield*.

Western Shield is a broadscale predator control program initiated by the then Department of Conservation and Land Management (CALM) in 1996. Its aim is to reduce feral predators on DEC-managed lands to enable the recovery of existing native animals. This is achieved through the dispersal of dried meat baits that have been injected with sodium fluoroacetate known as '1080'. The 1080 poison baits are aerially and hand distributed four times a year (March, June, September and December) at a density of five baits per kilometre to about 3.9 million hectares of DEC-managed land from Karratha in the north to Esperance in the south.

The 1080 poison is found naturally in native plants called gastrolobiums or 'poison peas' and, as a result, native animals have built up a high tolerance to the poison. Introduced and domestic animals do not have the same tolerance so if they ingest a bait they will be affected. The baited areas should be considered dangerous at all times. Members of the public are reminded to take notice of the 1080 baiting signs and leave their pets at home when visiting these areas.

The *Western Shield* program in the northern sandplains relies on the joint sponsorship between Tiwest, the Department of Defence and DEC which has enabled a fox control baiting program to be implemented in the area between Jurien Bay and Lancelin. This area is known as the Nambung baiting cell and it covers 1117 square kilometres including Nambung and Badgingarra national parks; Southern Beekeepers, Wanagarren, Eneminga and Namming reserves; Department of Defence and unallocated Crown lands; and Tiwest's Cooljarloo mine site.

In addition to the baiting operations, *Western Shield* involves monitoring native fauna to assess recovery in the local baited area. Regular trapping using small cages, Elliott and pitfall traps is aimed at the small mammal and reptile species that respond to fox control. The trapping will also assist in building a species list for the area and provide data on the abundance of each species of fauna. Trap sites include Badgingarra and Nambung national parks and Lancelin Defence Training Area.

Since the introduction of predators such as the fox and feral cat, 10 of Western Australia's native animals have become extinct and several others are fighting for survival. In some areas, a reintroduction program is implemented to help restore some of the original fauna that, because of predation pressures, have become locally extinct. The tammar wallaby (*Macropus eugenii derbianus*), woylie (*Bettongia penicillata ogilbyi*) and quenda (*Isoodon obesulus fusciventer*) have been released into Nambung National Park and are being monitored to determine the success of the translocation. It is hoped that further reintroductions to other areas within the Nambung baiting cell will include species such as the quenda, chuditch and western barred bandicoot.



Revealed by shifting sands, thousands of limestone pinnacles stand as monuments to a distant past, exposing an ethereal landscape with a mood that changes with the passage of day.

A hot desolate landscape in the midday heat becomes warm and intriguing as the light from the setting sun sneaks through the vertical pillars of rock creating long contrasting shadows that play over the rippled sand. The Pinnacles Desert is a landscape that should not be viewed but experienced in all her moods.

Sculptured by the forces of nature, each pinnacle is unique, revealing the harsh environment from which it was created.

Many thousands of years ago lime sands accumulated on the shore and bed of an ocean, rich in marine life. These sands were blown inland forming high mobile dunes similar to those seen today along the Turquoise Coast. Water from winter rains percolated through a humus layer rich in decaying plant material on the surface of these dunes, becoming acidic.

This mildly acidic water then dissolved and leached the calcium from the sand as it percolated deeper into the sandy soil leaving only the tough silica sand particles behind. Deep in the soil profile as ground water levels fell in summer, calcium carbonate was deposited, cementing the silicate sand particles together to form limestone. Replenished by calcium-laden water the following winter, the process continued season after season, forming a hard layer of calcrete on the surface of the limestone deposit.

It is here that part of the mystery of the pinnacles begins. They were hidden beneath the soil and formed over hundreds, if not thousands of years, and geologists are still divided as to how the limestone formed into columns creating the pinnacles. Some believe that the limestone between the pinnacles was leached away more rapidly in areas where plant roots increased the acidity of the soil; others believe that the pinnacles formed around the roots and trunks of buried trees. In both theories however, the pinnacles were formed beneath ground from the varied influence of acidic water as it percolated through the soil profile, first leaching then accreting calcium carbonate into interesting and diverse forms.



The Pinnacles...

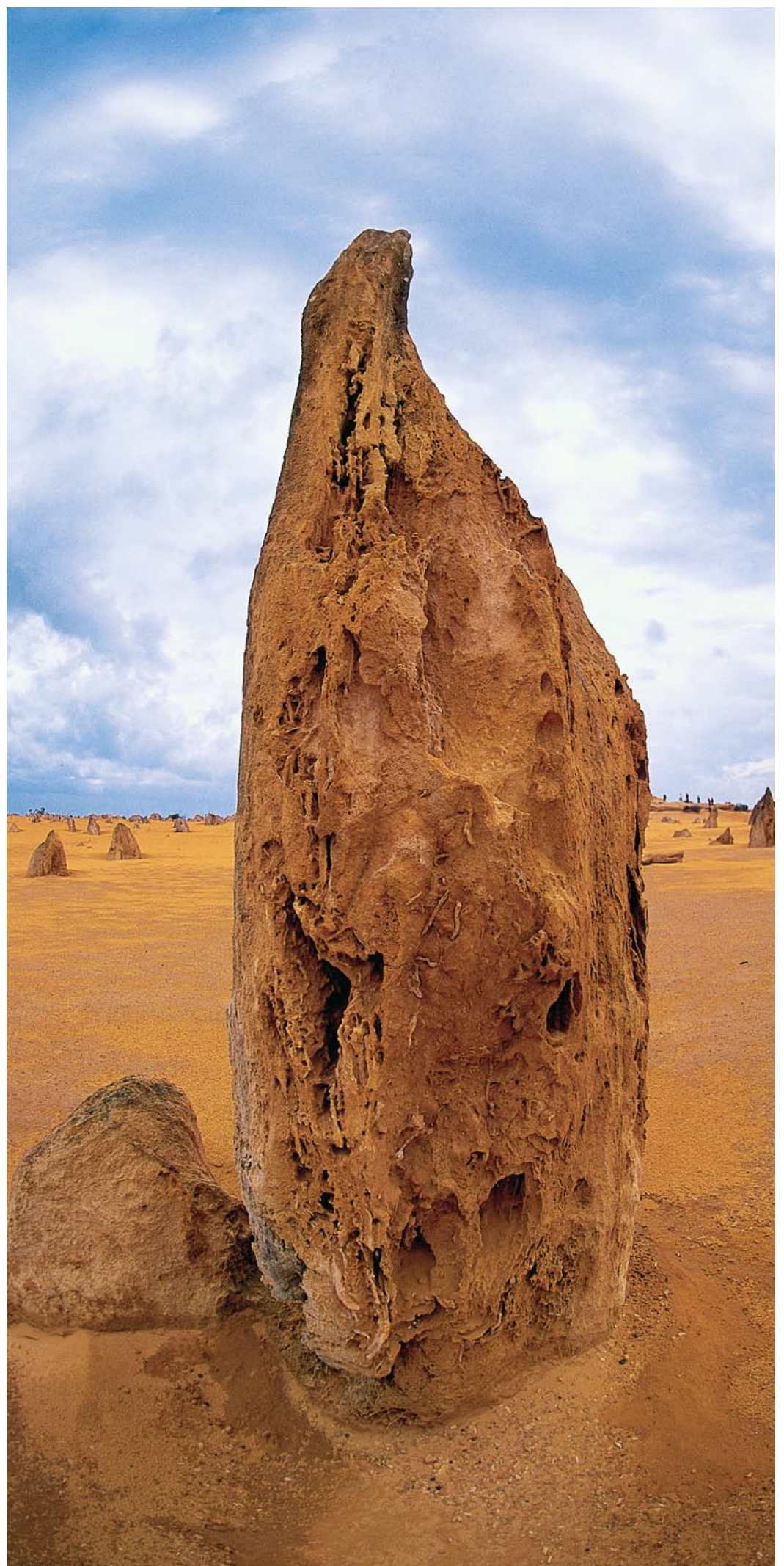
sculptured by nature



As the vegetation stabilising the silicate sand was removed, probably by fire, the sand was blown away, exposing the pinnacles to the elements of the atmosphere. The pinnacles were sculptured further by wind, rain and the blistering sun into what we see today.

The Yued people have a more mythical explanation for this unique landscape that connects them to the land and carries the stories of their past.

The pinnacles experience is entirely personal and distinct. To some they are a pile of interesting rocks while others see them in a more spiritual or artistic light. Regardless, this is an experience of the Turquoise Coast that cannot be missed.



Honey possums

'Noolbenger' is the name given to the honey possum by Aboriginal people. Many years later when the French were exploring the Western Australian coast, this tiny possum was given the scientific name *Tarsipes rostratus*. Even though it is the size of a mouse, weighing nine grams, this species is not related to mice or possums. It is distinguishable by the dark bands running along its back and its long slender snout that contains a tongue with a stiffened keel and a brush-like tip. The specialised tongue is used to reach into flowers and gather pollen and sugar-rich nectar that is its sole source of nourishment.

The honey possum is only found in the south-west of Western Australia roughly west of a line from Geraldton to Esperance where the high diversity of flowering plants includes *Proteaceae* and *Myrtaceae* families.

While feeding at night the extremely active and agile honey possum can sometimes be seen climbing, darting and swinging from flower to flower by its long tail. The honey possum holds at least two records – the male has the longest sperm of any mammal, including whales, and females give birth to the smallest young of any mammal.



Turquoise Coast Island Nature Reserves

Sprinkled along the Turquoise Coast is a chain of about 40 islands, islets and rocks, which makes up the Turquoise Coast Island Nature Reserves. The chain extends from Lancelin and Edwards Islands (approximately 110 kilometres north of Perth) to the Beagle Islands group just north of Leeman.

The islands range in size from less than 0.1 hectare to approximately 31.5 hectares and are grouped into 13 nature reserves which support a diverse assemblage of flora and fauna. They also possess a richness and diversity of scenic features which contribute significantly to the appreciation of the landscape values of the area.

A key factor in the islands' conservation value is their location in the Central West Coast marine bioregion, a zone of overlap between temperate and tropical marine biogeographic areas. The presence of corals and many other tropical species on and around the islands is the result of the cold temperate waters of the Capes Current blending with the warm waters of the Leeuwin Current.

Three of the islands provide key breeding sites for the Australian sea lion (*Neophoca cinerea*) while at least 21 are used regularly as haul out sites.

The Turquoise Coast islands were isolated from the mainland more than 6000 years ago and provide a perfect refuge from a range of threats including fire and introduced predators. As a result of this isolation, some animals have evolved into distinct sub species. These include the endangered dibbler (*Parantechinus apicalis*), which naturally occurs on two of the islands and has been translocated to a third island, and the Lancelin Island skink (*Ctenotus lancelini*).

The islands are important nesting and breeding sites for at least 26 bird species. These range from the tiny fairy terns (*Sterna nereies*) which nest in a shallow scrape on the sand to the magnificent osprey (*Pandion halaetus*) and white-bellied sea eagles (*Haliaeetus leucogaster*) whose towering nesting platforms of sticks and flotsam can dominate the landscape. A further 38 species use the islands' beaches and vegetation for resting or fishing.

To preserve the values that make these islands unique, a land classification system has been developed. Some islands are classified as Prohibited Access Areas in the interests of visitor safety or where wildlife and vegetation can be easily disturbed. Others are designated as Limited Access Areas, which allow visitors to use only the beaches and intertidal reef platforms to preserve the fragile vegetation and its inhabitants.

More information relating to island access can be found in the Turquoise Coast Island Nature Reserves Management Plan 2004 available at www.naturebase.net.

Threatened flora management



Jacksonia pungens

DEC's Moora District is characterised by contrasting landscapes and ecosystems, ranging from harsh coastal dunes to ironstone capped breakaways, quartz ridges and deep sand plains. The presence of these diverse and ancient ecosystems coupled with recent land use changes has led to many flora species becoming threatened.

The Moora District is home to 72 species of Declared Rare Flora, accounting for approximately 20 per cent of WA's Declared Rare Flora species. Some of these species are naturally rare having evolved over millions of years to only occur in specific habitats, while others have become threatened from the loss of habitat as a result of changes in land use, inappropriate fire regimes, disease, salinity and the introduction of feral animals and weeds.

DEC is responsible for the management of WA's flora to ensure this important aspect of our natural history is conserved. Through the implementation of recovery actions such as weed control, regular monitoring, seed collection, education, fencing and the establishment of new populations in secure locations, DEC is ensuring threatened flora species will continue to be around for the enjoyment of future generations.

Eremophila scaberula



Lancelin Island skink (*Ctenotus lancelini*)

Many islands along the central west coast support unique and fragile ecosystems and provide refuge for species that occur nowhere else in the world. One of these species is the rare Lancelin Island skink, Western Australia's most geographically restricted vertebrate animal. Known from the 7.6-hectare Lancelin Island, it has one of the smallest known home ranges of any reptile.

The Lancelin Island skink was first discovered in 1961 and was recognised as a distinct species in 1972. It was named *Ctenotus lancelini*, after its island home. It grows up to 22 centimetres long and weighs up to 10 grams. It feeds on insects and spiders found among the leaf litter. Females lay clutches of two to five eggs in early summer and hatchlings emerge in mid to late summer.

As the skink was known from a single island population, its chances of extinction were dangerously high. So DEC and the Perth Zoo established a captive breeding program. Proving very successful, the program supported the species' translocation to an additional island in the Jurien Bay Marine Park. The Lancelin Island skinks are monitored regularly and populations appear stable.

Dibbler recovery



The dibbler is a unique and intrinsic animal found on Jurien Bay's offshore islands. A small marsupial, the dibbler feeds mainly on insects, small lizards and nectar. They are characterised by the white rings around their eyes and a tail that is thick at the base, tapered to a point and covered with dense hairs. Dibblers are speckled with brown, grey and white hairs, with a light coloured underbody.

Dibblers were presumed to have become extinct after the last specimen was collected in 1904. That was until wildlife photographer Michael Morcombe caught two dibblers while trapping for honey possums at Cheyne Beach, east of Albany, in 1967. However, it wasn't until 1985 that dibblers were discovered on two small islands off Jurien Bay, some 600 kilometres north-west of their point of rediscovery. Sub-fossil records suggest that dibblers once extended across the south-western corner of Australia, from Shark Bay to Israelite Bay, excluding the wetter south-west corner. They also occurred on the Eyre Peninsula in South Australia.

Dibblers are ranked as endangered. The primary threats to their survival include predation from introduced animals such as foxes and cats, habitat clearing, inappropriate fire regimes and dieback disease, caused by the pathogen *Phytophthora* sp.

In an effort to conserve this species, DEC and the Dibbler Recovery Team are implementing a 10-year recovery plan which outlines actions to be implemented to secure the future of the species.

While the island populations are currently free of introduced predators, in other parts of the State dibbler populations are protected under the *Western Shield* baiting program. Access is limited to the reserves in which they occur in order to protect dibbler habitat from dieback spread and recreational impacts. Fire management is also planned according to the species' requirements where possible.

The Perth Zoo has established a captive breeding program for the dibbler, which has enabled individuals to be bred for the establishment of new populations. Dibblers from the Jurien Bay islands have been bred at the zoo and released on an additional nearby island. Mainland dibblers have also been bred and released at two additional reserves on the south coast.

Further surveys of potential mainland habitat continue in the hope of locating additional populations of this shy and elusive creature as well as determining suitable habitat for possible future translocations.

Places to see



Molah Hill Lookout

Lancelin Island Nature Reserve



Located only 600 metres from shore adjacent to the town of Lancelin, Lancelin Island is only accessible by boat or kayak. The island is an important seabird breeding island and boardwalks have been built to enable visitors to view the island's resident seabirds and learn a little of their biology with minimal disturbance. The island is popular for its sheltered beach on the eastern side.

Nambung National Park



At the heart of Nambung National Park is the iconic Pinnacles Desert. Out of the shifting sands rise thousands of limestone pillars. Explore these unique geological formations at the Pinnacles Desert Discovery. Spend some time in the interpretive centre, stroll among the pinnacles or take the drive trail through the desert. The Pinnacles are at their best in the early morning or as the sun sets over the Indian Ocean, casting its soft light over the desert bringing out the colours and contrast.

The park offers good access to the Jurien Bay Marine Park, beautiful beaches and coastal scenery.

Recreation sites at Kangaroo Point and Hangover Bay have gas barbecues, picnic shelters and toilets. Enjoy a refreshing swim, try your luck fishing or simply relax on the white sandy beaches.

Molah Hill Lookout



Halfway between Cervantes and Jurien, Molah Hill provides uninterrupted views of the Turquoise Coast. A short concrete path provides access to the top of the hill and the hexagonal lookout. Look inland over Beekeepers Nature Reserve to the wind farm and Mt Lesueur, or watch the sun set over the waters and islands of the Jurien Bay Marine Park.

Badgingarra National Park

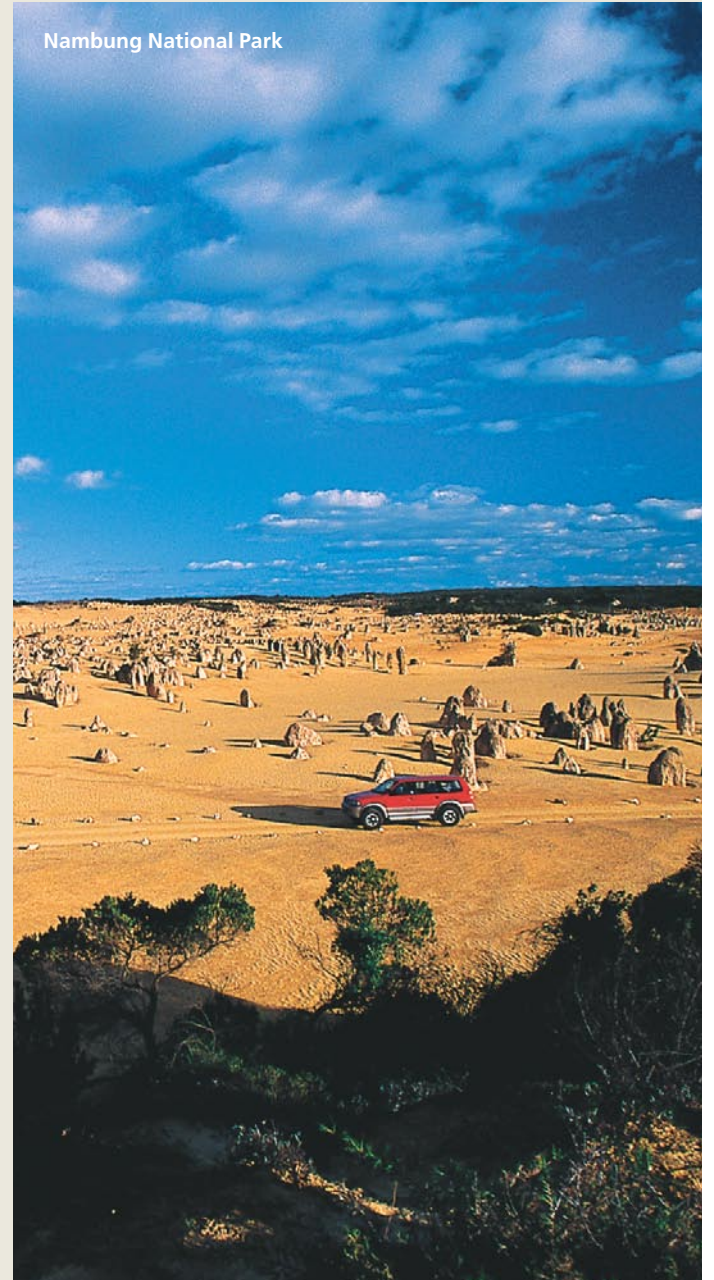


Exploding with colour in spring, Badgingarra National Park is renowned for its flora diversity. The park is dominated by 'Kwongan' (Nyoongar name for this low heath) that is one of the most diverse vegetation types in Western Australia. The area which includes Badgingarra, Coomallo, and Lesueur is so significant for flora species it is referred to internationally as a 'biodiversity hot spot'.

Experience this rich flora as you explore the park by road and stop safely at your leisure.

The Badgingarra Nature Trail departs from and returns to the Badgingarra Road House on the Brand Highway. The 3.5-kilometre trail can be completed in two hours. The trail has some interpretive signage and a guide book can be obtained from the roadhouse. Remember to wear appropriate clothing and carry sufficient water. Bibby Road, 13 kilometres south of Badgingarra, bisects the park. Yerramullaah Road forms part of the western boundary and Cadda Road the north.

Nambung National Park



Jewel beetle

Cervantes to Lancelin



The coastline between Cervantes and Lancelin passes through Nambung National Park and the Nilgen and Wanagarren nature reserves. Informal tracks, evolved over many years, service the shack communities of Grey and Wedge and provide access to this beautiful coastline. The area is accessible by 4WD only and the soft sand and rugged coastal limestone makes driving slow and difficult. When driving in this area consider other users, lower your tyre pressure, fly a vehicle flag to warn oncoming traffic and take it easy. Consider the environment, remain on tracks and take your rubbish with you.

Kangaroo paw at Badgingarra National Park



Mt Lesueur



Watheroo National Park



Conserving a large area of eastern sand plain vegetation, Watheroo National Park is a must see on any wildflower drive. Marchagee Track and the Watheroo West Road provide access to the park and its interesting flora, including the scarlet feather-flower, lilac hibiscus and the compact poverty bush.

From Midlands Road, Eagle Hill Road leads to Jingemia Cave. The cave lies in Noondine Chert once used by Aboriginal people for the making of tools. In the base of the lower levels of the cave there is a layer of highly soluble limestone. Water percolating through fissures in the chert dissolved the limestone below forming a large cavern. This cavern collapsed leaving the depression we see today. Guano, the accumulated waste of birds and bats, was mined from the lower portions of the cave between 1940 and 1941 for use as fertiliser.

The small section of remaining cave presents a rock fall risk. For your own safety do not enter the cave.

Watheroo National Park



Lesueur National Park



One of the most important parks for flora conservation in the State, Lesueur National Park features a variety of landforms and ecosystems. From the coastal dunes and lakes adjacent to the Indian Ocean Drive to the mesas and breakaways of the Gairdner Range, Lesueur National Park provides opportunities for the nature enthusiast to the weekend picnicker.

Twenty-five minutes north-east of Jurien Bay off Cockleshell Gully Road the Lesueur scenic drive directs visitors through the best that Lesueur has to offer. The drive has six flora discovery bays that enable visitors to safely pull off the road and view the adjacent flora.

Drummonds day-use area provides information on the park and its natural attractions and is the starting point for trails to the top of Mt Lesueur and around the Gairdner Ridge. The Lesueur and Gardner trails provide magnificent views of the area and showcase the floral diversity for which the park is renowned.

Cockleshell Gully picnic area is nestled among the trees in Cockleshell Gully and offers a shaded respite after the day's activities.

Grigson Lookout



Grigson Lookout



Ten kilometres south of Green Head in Beekeepers Nature Reserve, Grigson's lookout offers visitors a view of the area's amazing coastal environment ranging from mobile white sand dunes rolling over coastal vegetation at a rate of 10 metres a year, to the chain of salt lakes in the reserve that are so important for migratory waders. A short walktrail explores the area's coastal heath that is so well-adapted to this harsh environment.

Stockyard Gully Conservation Park and Cave



At the northern end of Cockleshell Gully Road, Stockyard Gully is accessible by 4WD only. During the latter parts of the eighteenth century, the site was an important rest point for drovers moving stock along the stock route between Geraldton and the burgeoning agricultural areas of Midland and Guildford. The creek bed or gully near the inflow into the cave formed a natural 'stockyard' where stock could be held overnight.

Follow the circuit trail that takes you through the gully and cave and then returns over the top of this limestone system providing an opportunity to investigate the area's flora. Don't forget to take a good torch to safely explore the 100 metres of Stockyard Gully Cave. Relax after your activities and enjoy a picnic at this interesting site.

Limestone caves and formations can be unstable. Please obey the signs that have been provided for your safety.



Stockyard Gully

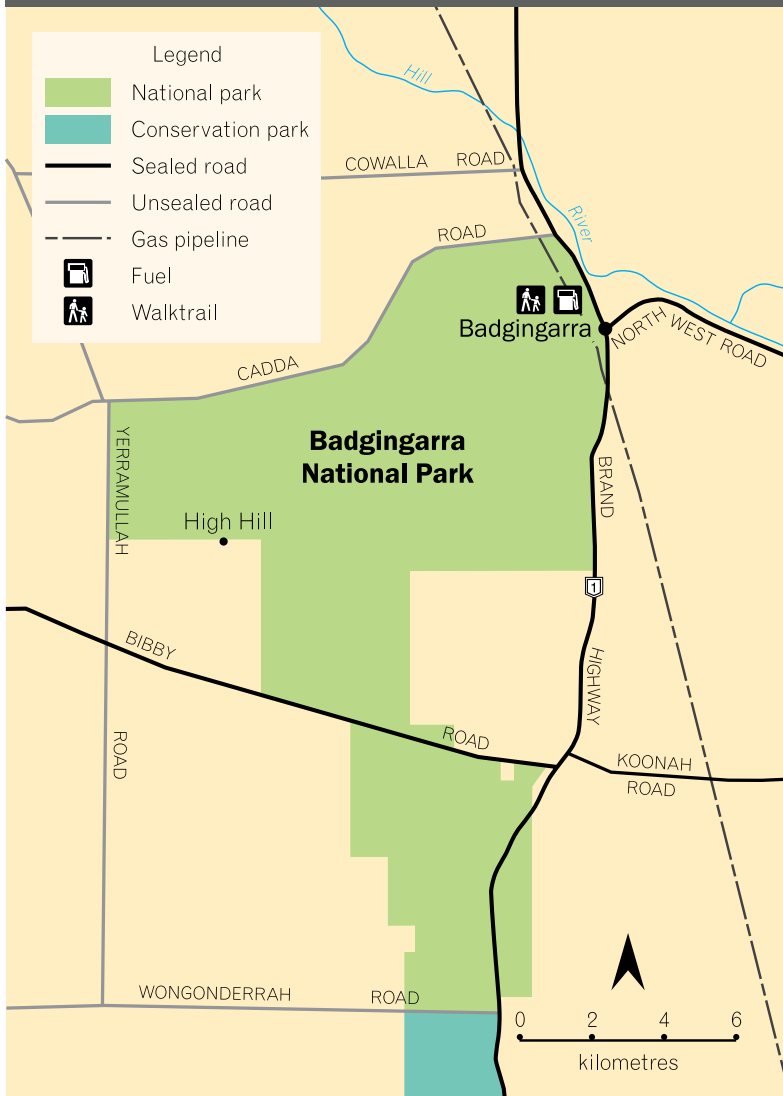
The Turquoise Coast



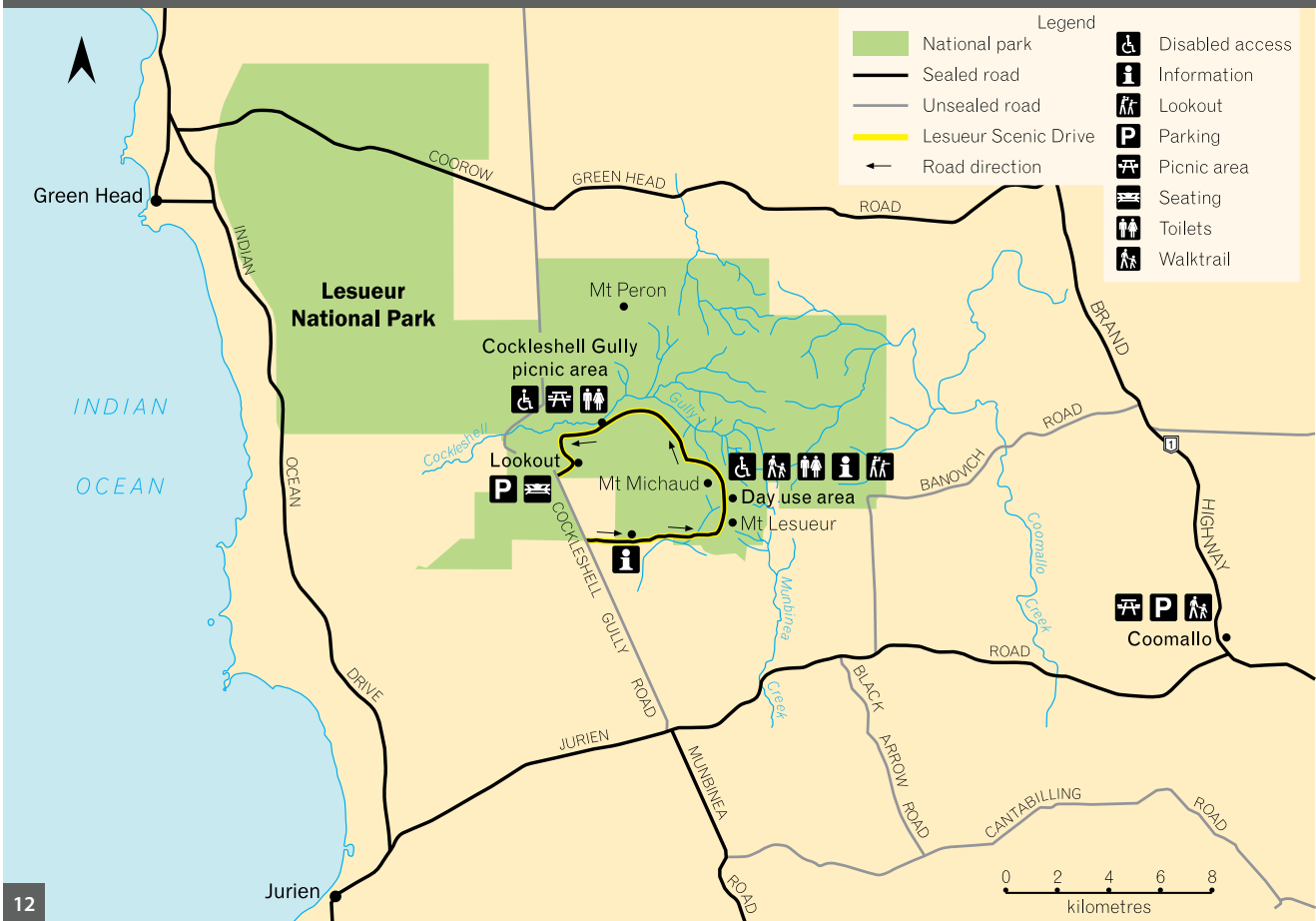
Nambung National Park



Badgingarra National Park



Lesueur National Park



Stockyard Gully Reserve

