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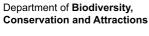
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# Ningaloo Coast World Heritage Area



Visitor guide









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## Ningaloo Coast World Heritage Area



**Above** Turquoise Bay. *Photo – Julian Lance* 

The Ningaloo Coast World Heritage Area covers 6045km<sup>2</sup> and stretches more than 300km along the coast. The area encompasses the Muiron Islands and the Marine Management Area to the north, Bundegi and Jurabi coastal parks at the tip of the Cape, Ningaloo Marine Park and Cape Range National Park, including Shothole and Charles Knife canyons on the eastern side and to the south Learmonth Air Weapons Range.

The Ningaloo Coast was inscribed on the World Heritage List on 24 June 2011 in recognition of its Outstanding Universal Value under the following World Heritage criteria:

- (vii) superlative natural phenomena and areas of exceptional natural beauty
- (x) significant natural habitats for the conservation of biological diversity, including threatened species.

World Heritage status is awarded by the United Nations Educational, Scientific and Cultural Organisation (UNSECO) World Heritage Committee to sites that are deemed to possess 'Outstanding Universal Value'. This means cultural and/or natural significance so exceptional that it transcends national boundaries and is of common importance for present and future generations of all humanity.

World Heritage listing brings with it an obligation to ensure the Outstanding Universal Value of the area is conserved. The Ningaloo Coast World Heritage Area is managed by various Federal, State and local government bodies in collaboration with traditional owners, scientists, local businesses, volunteers and the community. The laws, regulations and plans for each land tenure continue to guide management and decision-making in the area.

## Ningaloo Coast World Heritage Area

Key values of the Ningaloo Coast World Heritage Area:

## **Exceptional natural beauty**

- The stark and striking contrast of the rugged, arid Cape Range, the sparkling white beaches and the clear, turquoise colours and underwater scenery of Ningaloo Reef.
- The proximity of Ningaloo Reef to an arid continental coast distinguishes it from most reefs in the world which are found associated with wet tropical rainforest.

#### Diverse large-scale habitats

- The rare mix of intact, diverse and large-scale terrestrial, coastal and marine habitats form an incredible interconnected ecosystem.
- Habitats include the deep sea, continental shelf, slope and coral reef communities of Ningaloo Reef; coastal, island and estuarine habitats; the rugged gorges, wave-cut limestone escarpments, terraces, caves and subterranean waters of the Cape Range karst system.

#### Ningaloo Reef biodiversity

- One of the longest and most pristine fringing reefs in the world. Ningaloo Reef has an unusually narrow continental shelf. The deep oceanic waters, reef and coastline communities are in close proximity resulting in a huge array of internationally significant and healthy marine life coexisting in one area.
- Over 200 coral; 500 fish; 650 mollusc; 600 crustacean; 1000 marine algae; 155 sponge and 25 echinoderm species are found on the shelf, slope and in deep sea habitats, many of which are new discoveries and endemic to the area.

#### Whale sharks

- One of the largest, most reliable and best managed whale shark aggregations in the world. An estimated 300-500 whale sharks make their way to Ningaloo annually around the time of the mass coral spawning event and seasonal nutrient upwellings.
- Eighty-five per cent of the whale sharks that visit Ningaloo are juvenile males (average size of 5m).

## Mega marine life

- Globally important and threatened mega marine life found here include whales, dolphins, manta rays, dugongs, orcas, sharks, turtles and large fish such as tuna and billfish.
- The Ningaloo Coast is a migratory route for humpback and other whales. The Exmouth Gulf is a key humpback whale nursery with the highest density in the southern hemisphere.

## Ningaloo Coast World Heritage Area

#### Turtle nesting

- The Ningaloo Coast is one of the most important turtle nesting rookeries in the Indian Ocean. Three of the world's seven species of marine turtle mate in the shallows and nest along the Ningaloo Coast: the endangered loggerhead turtle; the vulnerable green turtle and the vulnerable hawksbill turtle.
- The coastline provides a long stretch of undisturbed beach suitable for nesting.

#### Cape Range plants and animals

- Cape Range is a biogeographic transition zone between the tropic, temperate and desert regions, resulting in an exceptionally high diversity of plants, birds and reptiles, a high proportion of which are found nowhere else in the world.
- Reptile species include; Exmouth spiny-tailed gecko, western netted dragon and west coast banded snake.
- The area hosts eucalypt woodlands, acacia scrublands and spinifex grasslands. There are over 630 plant species on the range including the endemic Yardie morning glory (Ipomoea yardiensis).

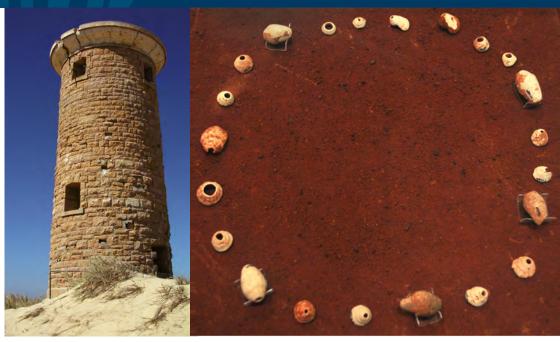
## Cape Range karst system

- Under the Cape Range Peninsula lies a complex limestone karst system that is home to a high diversity of unique subterranean fauna. A total of 535 caves up to 100m deep and interconnected across 6km have been recorded within the area.
- Over 80 species of subterranean fauna inhabit these caves with the majority found only within this area. Many display a high level of adaptation to cave life and are pale and have no eyes, for example the blind cave gudgeon pictured below.

Below The blind cave gudgeon (Milyeringa veritas) is endemic to Cape Range. Photo - Douglas Elford, Western Australian Museum



## **Cultural** heritage



Left Point Cloates Lighthouse. Right The Mandu Mandu necklace found in Mandu Mandu Gorge, Cape Range National Park, within the Ningaloo Coast World Heritage Area dates back to at least 30,000 years.

The Ningaloo Coast is culturally significant and Aboriginal people have an ongoing cultural connection with the area spanning over 30,000 years.

Today, the Ningaloo Coast is still highly valued by traditional owners and the undertaking of customary activities on country is central to maintaining the cultural heritage of the land. Sharing of knowledge, engaging in traditional practices, nurturing relationships with the land and water as well as looking after significant places are all important aspects of being a traditional owner.

The Gnulli native title claim was registered in 1997 in order to pursue formal recognition of the ongoing connection of Baiyungu, Thalanyii and Jinigudira people to the Ningaloo Coast.

Both the Baiyungu and Jiniqudira were predominantly coastal dwelling peoples with an economy that focused on marine resources including turtles, turtle eggs, fish and shellfish. Many historical remains have been found along the Ningaloo Coast including middens (mounds of shells and other remains), fish traps, burial grounds and one of the world's oldest pieces of jewellery - the 30,000-year-old 'Mandu Mandu' shell necklace.

The Ningaloo Coast also has a significant maritime history from explorers, traders, pearl luggers, whaling and fishing. Due to the treacherous coastline, it is a graveyard for many ships.

## Planning your visit to Ningaloo Coast World Heritage Area



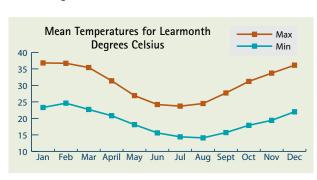
Exmouth, Carnarvon and the small coastal settlement of Coral Bay are the three gateways to the Ningaloo Coast World Heritage Area.

Above Mildura wreck. Photo - Julian Lance

There are daily commercial flights to and from Learmonth Airport (37km south of Exmouth). Coaches and commercial tour groups service Exmouth and Coral Bay. Visitors planning to drive to the Ningaloo Coast should be cautious when travelling after sunset, as the large number of kangaroos and other animals makes driving hazardous.

## Comfort and safety

The Ningaloo Coast World Heritage Area is in the hot and arid tropics of north-west Australia where summer temperatures often exceed 45°C. Most visitors prefer to come during the winter months when temperatures range from the low 20°s to the low 30°s.



Creeks entering the Ningaloo Coast rarely flow and visitors need to carry drinking water. Hot dry weather dehydrates your body quickly, so always carry plenty. Although the cloudless skies are a delight, the low rainfall supports very few trees and shade is scarce. Protect yourself from the sun, both in and out of the water. Remember to always wear sunscreen and a hat.

Take adequate fuel when driving and boating – fuel can only be obtained at Exmouth, Carnarvon and Coral Bay.

When boating, swimming or snorkelling, keep in mind that ocean conditions can become hazardous quickly, especially near gaps in the reef. If in doubt, don't go out.

## Planning your visit to Ningaloo Coast World Heritage Area

Tropical cyclones are occasionally experienced between November and April and summer visitors are advised to listen for cyclone warnings.

For more safety information see page 18 (snorkelling), page 22 (kayaking), page 24 (boating), page 39 (walking) and page 47 (four-wheel driving).

## Services and facilities

**Exmouth** has caravan parks and other accommodation, as well as shops, entertainment and a range of services including limited banking, a post office, hospital and police station. Contact the Ningaloo Visitor Centre for more information on (08) 9949 3070.

**Coral Bay** has caravan parks, chalets, a hotel/motel and a range of other accommodation. Public telephones, fuel, food and other supplies are also available.

Milyering Discovery Centre in Cape Range National Park is open every day 9am to 3.45pm, except Christmas Day. There are displays, brochures and videos about the natural wonders of the Ningaloo Coast. Light refreshments and souvenirs are available from the shop. There is a public telephone next to the centre, which takes coins and phone cards.

**Carnarvon** has a number of hotels, caravan parks and other accommodation. Its services include banking, a post office, hospital, police and a number of other government departments. There are shops and a number of fuel stations. For more information about Carnarvon please contact the Carnarvon Visitor Centre on (08) 9941 1146.

Commercial park tours are conducted in both Cape Range National Park and Ningaloo Marine Park from Coral Bay and Exmouth. Tours cover a wide range of activities including snorkelling, diving, sea kayaking, glass-bottom boat tours and four-wheel-drive trips. Contact the Ningaloo Visitor Centre for more information.

**Boat ramps** are located at Exmouth marina, Bundegi, Tantabiddi and Coral Bay. Numerous informal boat launching areas for smaller vessels can be found along the Ningaloo Coast.

**Diving** is a great way to experience Ningaloo. Diving lessons, compressed air and equipment hire are available at both Exmouth and Coral Bay. Contact the Ningaloo Visitor Centre for more information.



Above Exmouth



Above Coral Bay



Above Milyering Discovery Centre

## Ningaloo Marine Park and Murion Islands Marine Management Area



Above Aerial view of Muiron Islands. Photo - Tony Howard

Ningaloo Marine Park and Muiron Islands Marine Management Area are located off the North West Cape and protect an area of 290,000 hectares. Ningaloo Reef is the largest fringing coral reef in Australia and one of the healthiest and most accessible coral reef systems in the world.

Ningaloo Reef stretches more than 300km from the North West Cape to Red Bluff. The reef is one of only two coral reefs in the world that have formed on the western side of a continent and is considered WA's premier marine conservation icon.

The shallow lagoons formed by the reef and the deeper offshore waters create a diverse array of habitats for a multitude of colourful corals and more than 500 species of fish. Many other creatures are found in the marine park, including whale sharks (the world's largest fish), turtles, dugongs, dolphins, manta rays, humpback whales and orcas.

What can I do there? Swim, snorkel, dive, fish (see marine park zoning map for more information), observe marine life and relax on the beach.

Boat access via boat ramps – see 'Services and facilities', page 9.

Visitor fees - do not apply to the marine park.

## Ningaloo Marine Park (Commonwealth waters)



Above Humpback whale pod (Megaptera novaeangliae) charging north, along the Ningaloo Coast. Photo - Lyn Irvine

The Ningaloo Marine Park (Commonwealth waters) borders the western edge of the State marine park covering 2435km<sup>2</sup> with water depths ranging from 30m to more than 500m. The park includes a range of seafloor habitats including continental shelf and slope and undersea canyons, as well as open ocean (pelagic) waters. The park is important in connecting the deep offshore waters with the coastal waters of the State marine park and provides important nutrients to support reef communities. Despite sharing the same name as its neighbouring State marine park, this park lies in Commonwealth waters and was declared under Commonwealth legislation. Parks Australia works with the Department of Biodiversity, Conservation and Attractions (DBCA), and Department of Primary Industries and Regional Development (DPIRD) to provide a consistent management approach across both parks despite variations with some rules.

The park has international and national significance due to its diverse range of marine species and unique seafloor features. It provides essential biological and ecological links that sustain Ningaloo Reef and its biodiversity, including the supply of nutrients to reef communities from deeper waters further offshore. On the continental slope, different communities of demersal (bottom-living) fish exist, along with sponges, crustaceans and burrowing worms. At the continental shelf, diverse sponge and soft coral communities can be found while the highly productive open waters above attract schools of mackerel, tuna and trevally as well as seabirds and whale sharks.

Humpback whales pass through the marine park on their annual migration between calving grounds along the north Western Australian coastline and their feeding grounds in Antarctica. The marine park also supports feeding areas for pygmy blue whales and other species sighted include blue, dwarf minke and Brydes whales and orcas.

## Ningaloo Marine Park (Commonwealth waters)

To discover more about Ningaloo Marine Park (Commonwealth waters), visit the Australian Marine Parks website parksaustralia.gov.au/marine/

What can I do there? Swim, snorkel, watch wildlife and go recreational fishing (other than in the National Park Zone).

When interacting with whales in Commonwealth waters please refer to the national guidelines available at environment.gov.au/marine/publications/australian-national-quidelines-whale-anddolphin-watching-2017.

Boat access via boat ramps - see 'Services and facilities', page 9.

Visitor fees - do not apply in the Ningaloo Marine Park (Commonwealth waters).

Below Breaching humpback whale (Megaptera novaeangliae). Photo - Aimee Jan



## Fishing and marine park zoning along the Ningaloo Coast



Ningaloo Marine Park is a popular destination for recreational fishing. Species such as spangled emperor, coral and coronation trout, spanish mackerel and trevally are just a few of the prized species inhabiting these waters.

Ningaloo Marine Park is divided into a number of zones designed not only to conserve fish populations and habitat but also to allow visitors to responsibly enjoy a great fishing experience. Whether you are fishing for a delicious catch for dinner or to catch and release, please refer to the Department of Primary Industries and Regional Development (DPIRD) website. Information about the zones and permitted activities, including spearfishing, are included in this booklet.

Sanctuary zones and the National Park Zone (Commonwealth waters) are 'look but don't take' marine areas and provide the highest level of protection. They have been identified as important habitats to help conserve marine biodiversity and to protect representative habitats from human disturbance so that marine life can be seen and studied in an undisturbed state. Sanctuary zones and the National Park Zone (Commonwealth waters) also protect nursery and schooling areas for important fish species. These areas are protected from fishing and other extractive activities – nothing living or non-living is to be taken from these areas. Penalties apply.

## How do I know where the sanctuary zones and the National Park Zone (Commonwealth waters) are?

Sanctuary zones and the National Park Zone (Commonwealth waters) locations are detailed on the insert map. When boat fishing, particularly when further offshore, the best method of determining your position in relation to the nearest sanctuary zone or the National Park Zone (Commonwealth waters) is by using a global positioning system (GPS) device.

There are also on-site markers. Most sanctuary zones are demarcated on the shore and some are demarcated in the water.

Shore marker reference posts consist of a sign and two yellow posts wherever a sanctuary zone boundary meets the shore When the two posts are lined up they provide a visual reference for the direction of the sanctuary zone boundary. A reflective triangle points into the sanctuary zone.

In-water marker buoys are yellow buoys in the water that mark the corner points or boundaries of some sanctuary zones. Sanctuary zones that have these markers in place include Tantabiddi, Lakeside and Maud sanctuary zones. You will need to rely on your GPS or shore markers to identify other sanctuary zones and the National Park Zone (Commonwealth waters).



Above Shore marker reference posts.

## Fishing and marine park zoning along the Ningaloo Coast

## How do I use my electronic device to find the sanctuary zones and the National Park Zone (Commonwealth waters)?

Using the coordinates on the fold-out Ningaloo Marine Park zoning map (see map insert), you can:

- 1. Enter the offshore sanctuary or the National Park Zone (Commonwealth waters) coordinates in your device and display them as 'waypoints' or, if your device will allow, join the waypoints to display solid lines/boundaries on the screen (that is, by entering the sanctuary zone waypoints as a 'route'). This will give you a clear visual representation of your vessel's position in relation to the nearest sanctuary or the National Park Zone (Commonwealth waters) boundary.
- 2. If the sanctuary or the National Park Zone (Commonwealth waters) coordinates are not entered into your GPS device, another way of ensuring you are not fishing in the wrong area is to compare your latitude and/or longitude to that of the nearest sanctuary or the National Park Zone (Commonwealth waters) boundary. For example, if you are fishing near the southern boundary of Bundegi Sanctuary Zone, ensure your GPS is showing your position with a latitude greater than 21° 52,4833' south, which is the latitude of the southern boundary.
- 3. Use the Marine Parks WA smartphone app which can be downloaded for free from the iTunes and Google Play stores.

## Zone guide

Sanctuary zones, the National Park Zone (Commonwealth waters) and conservation areas are 'look but don't take' zones. No extractive activities are permitted in these zones, which means no recreational or commercial fishing is allowed.

Special purpose (benthic protection) zones are also 'look but don't take' zones. However, recreational 'troll' fishing is allowed.

Special purpose (shore-based activities) zones are established alongside some sanctuary zones to allow shore-based recreational fishing (no other extractive activities are allowed).

Recreation zones are managed for nature conservation and recreation, including recreational fishing. See restrictions on spearfishing on page 16.

General use zones, multiple use zone and habitat protection zones are managed for nature conservation while allowing for sustainable commercial and recreational activities.

See the Recreation Activity Table on the insert map for specific information about the recreational activities that are permitted.

## **Marine Parks WA**

## **Smartphone app**

Connect to easy-to-access information for all 17 marine parks in WA – including where to go, what you can see and do, including where you can fish.

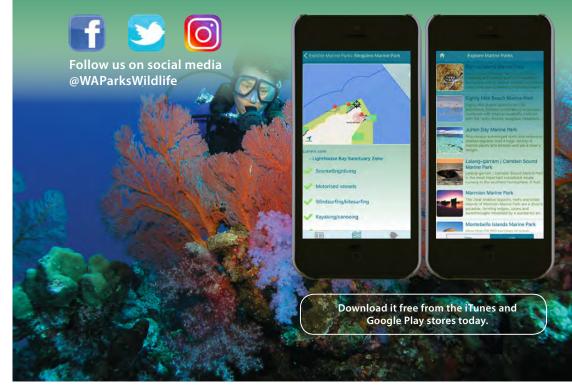




Discover Western Australia's marine parks with the new Marine Parks WA smartphone app.

The 'where am I?' function means you can see which marine park zone you are in and what activities you can of mobile phone range!





## Spearfishing along the Ningaloo Coast

## Spearfishing in Ningaloo Marine Park

Ningaloo Marine Park is a diver's paradise and offers tremendous scope for underwater activities such as spearfishing. Although spearfishing is a highly selective fishing method, it can have a major impact on resident reef fish being targeted in certain locations. To manage spearfishing in a sustainable way, specific regulations apply:

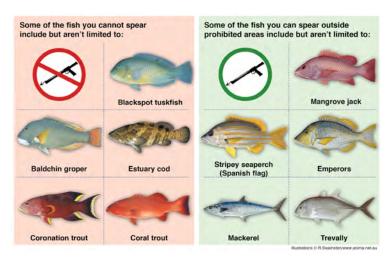
#### Within Ningaloo Marine Park state waters and Commonwealth waters you cannot spearfish:

- in sanctuary zones (see the map over page)
- in the National Park Zones (Commonwealth waters) (see the map over page)
- for rock lobster.

### Within Ningaloo Marine Park - State waters only - the following rules also apply. You cannot spearfish:

- between Tantabiddi Well (21°56.300'S) and Winderabandi Point (22°29.750'S)
- using compressed air (SCUBA or hookah)
- for wrasse, such as tuskfish and baldchin groper
- for rock cods/groper such as estuary cod, coral trout and coronation trout.

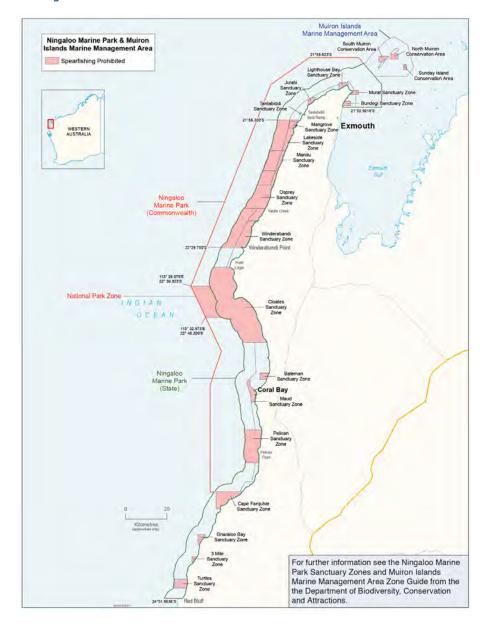
#### For more information, visit legislation.wa.gov.au



## Muiron Islands Marine Management Area

- No spearfishing in conservation areas.
- Spearfishing for wrasse and cods/groper and spearfishing using compressed air are permitted outside conservation areas

## Boundaries for spearfishing in Ningaloo Marine Park and Muiron Islands Marine Management Area



## Snorkelling along the Ningaloo Coast



## Coral reefs are spectacular and diverse living systems.

Above Coral gardens. Photo - Johnny Gaskell



Ningaloo Reef itself is made up of many small animals called coral polyps. The reef supports an enormous diversity of other marine plants and animals. Coral is delicate and once damaged may take many years to re-grow. Here is how you can help:

- Choose sand to stand kicking, handling or standing on the reef may kill or damage the coral polyps. If you need to rest, choose a sandy area to stand on.
- When touch means "Ouch!" observe and enjoy the reef, but avoid touching coral and other marine life. Some plants and animals sting or bite and touching may disturb them.

All sites require snorkelling experience. It is your responsibility to ensure you have the required level of experience. Never snorkel alone and if in doubt, don't go out.



Please remember that there are currents within the lagoon so snorkel to your ability and always assess the conditions before entering the water.

There are a number of sites that are good for snorkelling. Some are accessible from the shore and are listed on the following pages.

**Left** Photo – Jana McGeachy Soul and Sea Photography

## Snorkelling along the Ningaloo Coast

## Turquoise Bay snorkelling

Dangerous currents can occur. If there are strong currents, stay on or near the beach. For your safety, please read the signs installed at beach entry points.

Turquoise Bay is just as the name suggests a beautiful white sandy beach with turquoise blue water. It is located approximately 9km south of the Milyering Discovery Centre. It is the ideal location for swimming and snorkelling or just relaxing on the pristine sands.

Turquoise Bay is a very popular location for viewing corals and other marine life. However, care must be taken when swimming in strong currents. Strong currents are caused by a build-up of water in the lagoon behind the reef. Large waves and a high tide add to the volume of water in the lagoon increasing the amount of water escaping through the gaps in the reef. Strong currents can be experienced on the beach immediately west and south of the bay.

Inexperienced swimmers should not swim or snorkel in strong currents, especially if unaccompanied by an experienced person. If you are an inexperienced swimmer wishing to snorkel and are unable to find an experienced person to accompany you, seek the services of a licensed tour operator.

All snorkellers should assess the conditions from the beach. If you are unsure of the conditions, seek advice from someone with sound local knowledge. If unsure, it is better to be cautious and simply enjoy the beach or swim well inside the bay where there is less likelihood of encountering strong currents. Park rangers do not regularly patrol the beaches at Turquoise Bay.



Below Coral Bay. Photo - Johnny Gaskell



## **Snorkelling along the Ningaloo Coast**

## Lakeside snorkelling

This site offers stunning corals very close to shore but again – beware of any currents and stay within your abilities.

From the carpark, walk to the water's edge and then walk 500m south along the beach to where you see the Lakeside sanctuary markers. You will pass the sanctuary zone beach boundary marker and then see two sanctuary marker buoys in the water. Snorkel between the beach and water markers of the sanctuary zone. Refer to the map on page 21.

## Oyster Stacks snorkelling

Oyster Stacks is unique with the lagoon being at one of the narrowest sections along the whole Ningaloo Coast. The outside reef is only 300m from the shore giving this area a concentration of corals and other marine life.

You should only snorkel at this site during high tide (minimum 1.2m) when there is sufficient water over the reef. Please check a tide chart before setting out.

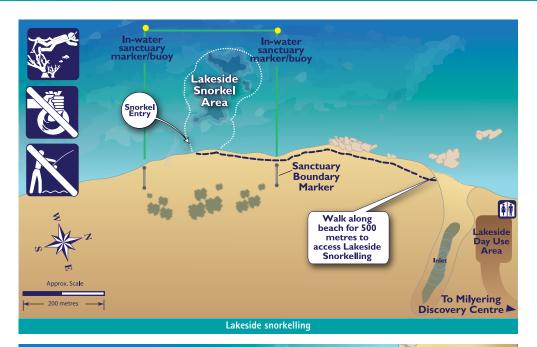
The shore adjacent to the snorkel site has rocks with sharp edges. Take care when entering and leaving the water. Refer to the map on page 21.

## Coral Bay snorkelling

Coral Bay also offers many great snorkelling opportunities. For information on sites please visit the Parks and Wildlife Service information hut or see one of the many tour operators who offer snorkelling as part of their tour.

Below Coral Bay. Photo - Johnny Gaskell







## Kayaking along the Ningaloo Coast



Photo - Exmouth Adventure Co



Kayak moorings have been installed at several sites in Ningaloo Marine Park to enable people to combine kayaking and snorkelling.

Paddle distance to each mooring and snorkel site depths varies between sites.

Moorings can be found at:

- Bundegi, Tantabiddi and Osprey sanctuary zones closer to Exmouth.
- Maud Sanctuary Zone in Coral Bay.

The moorings cater for a maximum of 10 kayaks at any one time.

Please note, all the kayak moorings are in sanctuary zones and fishing is not permitted at any of these sites.

KAYAKS ONLY

## Safety tips

- All sites require kayak and snorkelling experience. It is your responsibility to ensure you have the required level of experience. If in doubt, don't go out.
- Check the local weather conditions prior to setting out.
- Be aware of the currents and winds at the site you intend to visit.



- Kayak with a friend. It adds to the enjoyment and increases safety.
- Carry adequate water, food, sunscreen and sun protection. Some return journeys may take up to four hours so you will be exposed to the elements for a significant time.
- Ensure your kayak has a suitable attachment to secure it to the mooring, and that you can secure your gear (especially the paddle) while snorkelling.
- Ensure your kayak is seaworthy and has the required safety equipment. Most of these sites are more than 400m from shore. Required equipment includes life jacket, flares and a bailer (if not self-draining) – see the Department of Transport's Paddle Safe brochure.
- Tell someone where you are going and when you estimate you will return. Remember to let them know when you have returned safely.
- Once at the site, assess the currents before entering the water.
- It is recommended that you start by snorkelling into the current to make it easy to return to the mooring.

For more information contact the Milyering Discovery Centre or visit parks.dbca.wa.gov.au/park/Ningaloo for kayak trail maps.

## **Boating along the Ningaloo Coast**



## Boating is a great way to see and enjoy the Ningaloo Reef



Your cooperation while boating will assist in the long-term protection of the Ningaloo Reef.

#### Please remember:

- Slow down when approaching coral areas.
- Tilt the motor in shallow areas.
- Never cut across coral formations water depth changes with the tides and you may damage the coral.
- Anchor on sand, never coral.
- Check that your anchor is not dragging.
- Approach marine life carefully you must follow the interaction protocol and codes of conduct provided in this booklet when interacting with whales, whale sharks and turtles.
   Dugongs, dolphins and other marine animals must also be treated appropriately – contact the Parks and Wildlife Service for more details
- Boat launching facilities are available for use at Coral Bay, Tantabiddi, Bundegi and the Exmouth marina.
- There are also informal launch areas at a number of beaches, be aware many are on soft sand and not suitable for launching large boats.
- The discharge of waste is not allowed in sanctuary zones, recreation zones, general use zones, within 500m of the shore, or in lagoonal areas.

#### When boating in Coral Bay please note:

- If travelling north from the boating facility, follow the channel markers. For your own safety
  and for the protection of fragile coral gardens, please do not cut across the shallow coral
  areas.
- The waters directly off Paradise Beach and southern Bills Bay are designated primarily for swimming, snorkelling and other passive water activities. This area is restricted to authorised vessels only. No power or sailing vessels (including wind surfers and kite surfers) are permitted in this area without lawful authority from the Parks and Wildlife Service.

For more information regarding boating at Coral Bay please see the Department of Transport's Boating Guide for Coral Bay.

## **Boating along the Ningaloo Coast**

## Public moorings in Ningaloo Marine Park

Ningaloo Marine Park offers excellent opportunities for diving, snorkelling and fishing, attracting thousands of recreational boaters each year.

Unfortunately, boat anchors can damage the beautiful corals that make up Ningaloo Reef. Damaging coral is an offence under the *Conservation and Land Management Act 1984* and the *Biodiversity Conservation Act 2016*.

Public moorings have been installed at key diving and snorkelling sites in the marine park. These moorings can currently be used free of charge, as boaters are being encouraged to use the moorings rather than anchoring when diving or snorkelling at these sites.

Most of these public moorings are for daytime use only, however there are a few moorings available for overnight use (conditions and bookings apply).

The public moorings are colour coded according to five different size classes being identified to cater for different sized vessels. Wind-strength restrictions also apply.

Please contact the Parks and Wildlife Service Exmouth office for details about public moorings for boats or visit dbca.wa.gov.au.

Private moorings in the marine park are not permitted without lawful authority from the Parks and Wildlife Service.

## Remotely Piloted Aircraft (RPA) along the Ningaloo Coast

Do you want to fly your RPA for recreational purposes? This includes to obtain footage that you may post on social media, in personal or travel blogs, or even just pictures to send to family and friends. If so, please follow the five easy rules while using your RPA in Western Australia's national parks and other conservation reserves managed under the *Conservation and Land Management Act 1984* (CALM Act). Visit dbca.wa.gov.au/management/remotely-piloted-aircraft.



Above Remotely Piloted Aircraft (RPA) in flight.

## Whale sharks along the Ningaloo Coast



Above Whale shark (Rhincodon typus). Photo - Aimee Jan

Ningaloo Reef is one of only a few places in the world where whale sharks appear regularly in relatively large numbers in near-shore waters where they are easily accessible to observers. As is seen in other coastal aggregation sites, the majority of whale sharks at Ningaloo are male and range in size from 3-12m in length, averaging at 5m. A 12m whale shark may weigh as much as 11 tonnes and have a mouth more than a metre wide. Other than their size, distinguishing features include three prominent ridges along each side of their body and a distinct pattern of white spots and stripes, which is used to identify them.

Whale sharks have a possible life span of more than 100 years. They give birth to live young that hatch from an egg case while inside the mother's body. Sexual maturity may not occur until sharks are 8m in length, about 30 years old, which means most whale sharks at Ningaloo are iuveniles.

Whale sharks are filter feeders, feeding on plankton, including krill and copepods. They can either cruise along with their mouths wide open or actively suck water into their mouths. Water is passed through their gills and the plankton strained out.

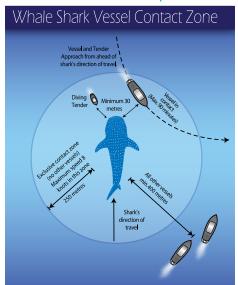
As with many other shark species, the whale shark grows slowly and matures late. This means that populations are slow to recover, making them extremely vulnerable to exploitation. In WA waters, whale sharks are protected under the Biodiversity and Conservation Act 2016 and are a threatened species declared to be vulnerable under the Federal Environment Protection and Biodiversity Conservation Act 1999.

With increasing numbers of people seeking the in-water thrill of interacting with whale sharks, reports of encounters are becoming more frequent and widespread. There is an interaction protocol for interactions with whale sharks that individuals and tour operators are required to follow when swimming or piloting a vessel in the vicinity of a whale shark. The interaction protocol is outlined in the Biodiversity Conservation Regulations, which means it applies to everyone.

The best way to see a whale shark is on a tour. Contact the Ningaloo Visitor Centre for more information.

## Whale sharks along the Ningaloo Coast

## Whale shark interaction protocol for vessels



An exclusive contact zone with a 250m radius applies around any whale shark. Only one vessel at a time may operate within this zone, for a maximum time of 90 minutes and at a speed of eight knots or less. The first vessel in that zone is deemed to be 'in contact'. The second vessel to arrive must keep a distance of 250m from the shark, and any other vessels must be 400m from the shark.

Vessel operators in the exclusive contact zone must not approach closer than 30m to a shark. When dropping swimmers into the water, vessel operators should approach from ahead of the shark's direction of travel, and must display both the whale shark (commercial vessels only) and dive flags when swimmers are in the water.

## Whale shark interaction protocol for swimmers



Swimmers in the contact zone must not:

- attempt to touch or ride on a whale shark
- restrict or alter the normal movement or behaviour of the whale shark
- approach closer than 3m from the head or body and 4m from the tail
- take flash photographs, use cameras on extension poles
- use motorised propulsion aids
- exceed 10 people in the water at any time.

If you come across a commercial vessel displaying a whale shark flag, it means they are interacting with a whale shark. They are allowed 60 minutes of swim time with the shark and your vessel must remain 400m away. After that, you can have your turn of swimming with the shark. If you find a whale shark of your own, you are entitled to 60 minutes also, and the commercial operator must remain 400m away during this time.

## Whales along the Ningaloo Coast

The Ningaloo Coast and the neighbouring Exmouth Gulf are visited by up to 20 species of cetacean.

These include the false killer whale (Pseudorca crassidens), short-finned pilot whale (Globicephala macrorhynchus), pygmy blue whale (Balaenoptera musculus brericanda), dwarf minke whale (Balaenoptera acutorostrata), Bryde's whale (Balaenoptera edeni), orca (Orcinus orca) and, most prolifically, the majestic humpback whale (Megaptera novaeangliae).

## Humpback whales

During the 19th and 20th centuries the humpback whale was hunted extensively in Australian waters, reducing its population to an estimated 3-5% of pre-whaling abundance.

Due to a ban on commercial whaling of humpback whales in the southern hemisphere in 1963 and strict environmental laws, humpback whale numbers steadily recovered and Western Australian population estimates have now reached pre-whaling figures. Their global status is currently listed as least concern under the International Union for the Conservation of Nature 'Red List' - an assessment of the extinction risk of species.

Humpback whales are the fifth largest of the great whales. Adult females grow to about 15m, and a mature humpback can weigh 40 tonnes. The humpback's scientific name is derived from Greek, mega meaning 'great' and pteron meaning 'a wing' - a reference to its large wing-like pectoral fins. Humpback whales are believed to have a life span of at least 40-50 years, reaching sexual maturity at 12-15 years.

Humpback whales are highly migratory, moving between summer polar feeding areas and winter tropical breeding and calving grounds. From June each year the west coast population can be seen migrating north through Ningaloo Marine Park to mate and calve in the subtropical waters off the Pilbara and Kimberley coast. The whales then return south and rest with their calves in the Exmouth Gulf and can be seen until early November each year. Their migratory patterns and behaviour often bring humpbacks into close proximity with humans providing opportunities to see these ocean giants. In many areas, commercial operators offer whale watching tours and for the past three years a swimming with humpback trial has been running through certain Commercial Tour Operators.



Above Peduncle slap. Photo - Aimee Jan



Above Breach. Photo - Aimee Jan



Above Headlunge. Photo - Johnny Gaskell



Above Pectoral slap. Photo - Lvn Irvine

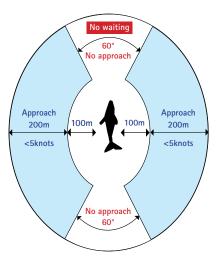


Above Tail slap. Photo - Aletta Bussenschutt

## Whales along the Ningaloo Coast

## Whale Watching Code of Conduct

- A vessel within 300m of a whale must not approach a whale from within an arc of 60 degrees of the whale's forward direction of travel or an arc of 60 degrees behind the whale (the opposite of the direction of travel).
- A vessel must not approach a whale within 100m.
- Where a whale approaches a vessel and the distance between the whale and the vessel becomes less than 100m (known as the 'contact zone'), the vessel master must place the motor/s in neutral or move the vessel, at less than five knots, away from the whale until the vessel is outside the contact zone.
- A vessel must not block the direction of travel of a whale
- A vessel must not cause a whale to alter its direction or speed of travel.
- A vessel must not disperse or separate a group of whales.



**Above** Rules for whale watching from a vessel in Western Australia

- Vessels must move out of a contact zone if whales are visibly disturbed (includes behaviour such as extended diving or evading vessels).
- Aircraft are not permitted to fly within 300m of a whale.
- Swimming with, feeding or touching whales is not permitted. Such actions may cause stress to the whale and are dangerous to people. If you are in the water and a whale approaches, you must maintain a minimum of 100m distance between yourself and the whale.
- A trial started in 2016 that enabled current commercial whale shark tour operators to conduct swim-with-humpback whale tours under strict rules. Please note this activity is being closely monitored by the department and recreational boaters must adhere to the current legislation that stipulate no swimming with whales. To join a tour to swim with humpback whales, contact the Ningaloo Visitor Centre on (08) 9949 3070.
- Please be aware that different legislation applies to interacting with humpback whales in Commonwealth waters

## Dolphins along the Ningaloo Coast

Dolphins are one of the most loved and charismatic marine animals. The common bottlenose dolphin (Tursiops truncatus), Indo-pacific bottlenose dolphin (Tursiops aduncus), Australian humpback dolphin (Sousa sahulensis), Risso's dolphin (Grampus griseus), and spinner dolphin (Stenella longirostris) are just some of the species that can be seen along the Ningaloo Coast.

## Bottlenose dolphins

The common bottlenose dolphin (Tursiops truncatus) is largely found in offshore waters, while the coastal Indo-Pacific bottlenose dolphin (Tursiops aduncus) is usually seen in coastal waters. Bottlenose dolphins are sleek and streamlined, have a prominent dorsal fin and can vary in size, shape and colour depending on where they are found. In general, they have a dark grey back and light grey belly. The larger common bottlenose dolphin can grow to 2-4m in length and weigh 220-500kg. The smaller Indo-Pacific bottlenose dolphin reaches a maximum length of 2.7m and weigh up to 230kg.

## Australian humpback dolphins

The Australian humpback dolphins can be seen along the Ningaloo Coast and around the Exmouth Gulf Islands, favouring shallow water depths. The most obvious features of this dolphin are the long thin beak, small triangular dorsal fin and distinctive hump under the dorsal fin. The maximum length is less than 3m. Its colour varies by age, with juveniles tending to be darker than adults. The undersides are pale and the dorsal fin may be white in older animals and males. The tail is relatively large. Entanglement in fishing equipment, boat strikes, habitat destruction and degradation, pollution and disease are some of the pressures dolphins face.



Above Indo-Pacific bottlenose dolphins (Tursiops aduncus) and Australian humpback dolphins (Sousa sahulensis) can be seen in mixed pods along the Ningaloo Coast. Photo – Tim Hunt, CEBEL, Flinders University



Above Australian humpback dolphins.



Above Indo-Pacific dolphins.

#### Remember to keep the environment clean, take your rubbish home and dispose of it properly.

When swimming please keep at least 50m away from dolphins at all times. If a dolphin approaches you and is within 50m please move away so you are at least 50m from the dolphin.

## Turtles along the Ningaloo Coast



## The Ningaloo Coast World Heritage Area offers an exciting opportunity for visitors to see marine turtles in their natural environment

Above Green turtle (Chelonia mydas) cruising along the coast.







There are many beaches within the Ningaloo Coast World Heritage Area where you can view marine turtles in their natural environment. During the summer months marine turtles can be seen mating in the shallows and coming ashore to lay eggs. In the months to follow, turtle hatchlings emerge from beneath the sand to start their life journey. Year round, turtles are often seen foraging for food in the lagoon and sleeping among the corals.

Visit the Jurabi Turtle Centre and discover the turtle species found along the coast. The Parks and Wildlife Service conduct evening Turtle Eco-education tours between December and March each year. These tours are ideal for people wanting to view nesting turtles and turtle hatchlings in their natural environment. Contact the Ningaloo Visitor Centre for bookings on 9949 3070.

Participating in a guided Turtle Eco-education tour increases the chance of finding female turtles and observing female turtles laying eggs. Viewing nesting turtles and hatchlings with a guide minimises your chance of disturbing turtles.

To help protect marine turtles during crucial life stages please follow the Turtle Watching Code of Conduct.

**Above top to bottom** Female turtle resting in the shallows. *Photo – Maggie Wright* Turtle nest. Photo - Colin Valentine, Green turtle hatchlings. Photo - Grant Griffin

## Turtle Watching Code of Conduct

#### MATING TURTLES

Between September and December turtles mate in shallow waters along the Ningaloo Coast. During this time turtles are extremely vulnerable to both natural and human impacts.

- KEEP YOUR DISTANCE in and out of the water. Going near resting female turtles may force them back into the water before they have rested.
- STAY LOW out of her line of sight.
- GO SLOW in turtle habitats and always drive your vessel with care to avoid injuring turtles.
- Do not take motorised or sailing craft into mating areas. Paddle craft and kite surfers should also take care in areas where turtles are mating.

#### **NESTING TURTLES**

Female turtles come ashore to lay eggs between October and March along the Ningaloo Coast. When on the beach, nesting female turtles are extremely sensitive to light and movement. Turtles disturbed during nesting will abandon their nest and return to the water.

- NO GLOW use the moonlight to light your way instead of artificial light. Female turtles are easily disturbed by light and movement.
- MOVE SLOW and STAY LOW out of her line of sight, this will increase your chance of seeing her lay eggs.

#### **TURTLE HATCHLINGS**

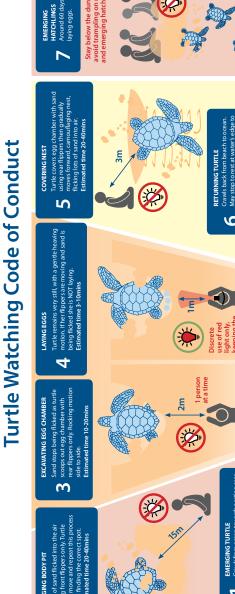
Roughly 60 days after egg laying turtle hatchlings will begin to emerge from the nest. Very few turtle hatchlings survive to reach adulthood.

- NO GLOW artificial light disorientates hatchlings (torches and flash photography). Use the moonlight to light your way. Minimise light from torches and vehicles when in carparks near turtle nesting beaches.
- LET THEM FLOW allow hatchlings to make their own way to the ocean. They take a magnetic imprint of the beach which allows them to return to their birthplace when they reach adulthood. Don't get between hatchlings and the ocean, stay still and allow a clear path to the ocean.
- STAY BELOW THE DUNES to avoid trampling on nests and emerging hatchlings. Walk along the water's edge to minimise disturbing hatchlings.

#### KEEP DOGS OFF TURTLE NESTING BEACHES

- Toxic 1080 baits are used along turtle nesting beaches in the fight against foxes and feral cats.
- Baits are toxic to domestic animals.
- Dogs can disturb nesting turtles and harm or cause stress to vulnerable hatchlings.

#### DON'T DRIVE ON TURTLE NESTING BEACHES









## Fish of the Ningaloo Coast

#### Clark's anemonefish (Amphiprion clarkii)

A colourful fish, with vivid black, white and yellow stripes. There are normally two white bands, one behind the eye and one at the rear. The tail fin may be white or yellow, but is always lighter than the rest of the body. Clark's anemonefish is omnivorous and its diet is based on zooplankton and algae. The adult inhabits lagoons and outer reef slopes.

#### **Convict surgeonfish** (Acanthurus triostegus)

Six vertical black stripes on the sides, one on the head that passes through the yellow eye, four on the body and one at the base of the caudal fin. Males will assume courtship colours when breeding. Juveniles lack the barring found in adults. Convict surgeonfish are found in shallow, wave-affected areas in and around coral reefs. They feed primarily on algae and are classified as grazers.

## Beaked leatherjacket (Oxymonacanthus longirostris)

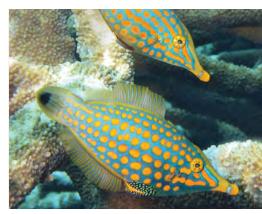
A small slender green fish with rows of yellow spots and dashes along the sides and a small black blotch on the tail, the beaked leatherjacket occurs on coral reefs of the Indo-West Pacific. The beaked leatherjacket has a long snout with a small upturned mouth which it uses to eat coral polyps.



Above Clark's anemonefish



Above Convict surgeonfish. Photo - Tony Howard



**Above** Beaked leatherjacket. *Photo – Johnny Gaskell* 

## Fish of the Ningaloo Coast

## Blue angelfish (Pomacanthus semicirculatus)

Found in the tropical Indo-Pacific, east Africa and the Red Sea. Adults and juveniles have very different appearances. Adults have diagonal yellow and purplish-blue stripes on the body, and a curved black bar covering the eye. Juvenile emperor angelfish are dark blue-black with a white ring on the rear of the body. This is surrounded by circles of blue and white.

#### Blue spotted ray (Neotrygon kuhlii)

Colourful stingrays with large bright blue spots on an oval, elongated disc and blue side-stripes along their tails. Their snout is rounded and angular and the disc has broadly rounded outer corners. They have a short tapering tail that is less than twice their body length. They are bottom-dwelling creatures that can be found living alone or in small groups around coral reefs in the Indo-West Pacific region. Rarely are they seen in deep waters. Prey includes small fish, worms, shrimp, molluses and crabs.

## Blue-green chromis (Chromis viridis)

A small fish characterised by its uniform iridescent pale green coloration that may have a blue tint to it in some specimens. Found throughout the tropical Indo-Pacific region. Blue-green chromis favour sheltered environments like the subtidal reef flats and lagoons. They can be found in large schools over thickets of branching corals into which they can dive if threatened and in which they stay at night.

## Yellow boxfish (Ostracion cubicus)

The species occurs in tropical and temperate marine waters of the Indo-West Pacific. It inhabits coral and rocky reefs, and is found at depths of 1m to 40m. Yellow boxfish are often solitary and occur on deeper coastal slopes, lagoons and areas where there are crevices and ledges for shelter. They feed on a range of organisms such as molluscs, crustaceans, fishes, sand-dwelling worms and algae.



Above Blue angelfish. Photo – Johnny Gaskell



Above Blue spotted ray. Photo – Johnny Gaskell



Above Blue-green chromis. Photo - Johnny Gaskell



Above Yellow boxfish. Photo - Johnny Gaskell

## Camping in Cape Range National Park



Above Mandu Mandu. Photo - Donald Tsang

Within the Ningaloo Coast World Heritage Area and adjacent to Ningaloo Marine Park, lies Cape Range National Park. Dominated by a rugged limestone range, the remains of an ancient sea floor thrust upwards by movements of the Earth's crust descends to sea level along the coast, where arid coastal plains and sand dunes predominate.

The terrestrial landscape is rich in a diverse array of wildlife including kangaroos, echidnas, emus, monitor lizards, smaller mammals and other reptiles. More than 160 bird species have been recorded in the area.

What can I do there? Walk, camp, observe nature, picnic, take photographs and much more.

Access roads to individual sites comprise both sealed and unsealed roads. Most of these access roads are suitable for two-wheel-drive vehicles. However, road conditions deteriorate rapidly when it rains and access may become restricted.

To protect wildlife, the speed limit is 80km and night driving should be avoided.

**Visitor fees** can be paid at the national park entry stations, Milyering Discovery Centre or the Parks and Wildlife Service office in Exmouth. If you are planning to visit more than once, or intend to visit other national parks in the State, please ask about Park Passes.

For current visitor and camping fees visit parkstay.dbca.wa.gov.au.

## Camp within metres of the pristine beaches of the Ningaloo Reef

**Above** Aerial view of Kurajong campground. *Photo – Dominic Ruefenacht* 

## Camping



Cape Range National Park offers camping in close proximity to the Ningaloo Reef.

Please note: camping is only permitted in designated campsites between Boat

Harbour site and Ned's Campsite. See the Ningaloo Coast World Heritage Area fold-out
map inside this booklet for all of the camping locations.

## Booking a campsite

**Online bookings** - it is essential that you have booked your campsite for Cape Range National Park online prior to your arrival. Booking is year round and can be booked up to six months in advance. Visit parkstay.dbca.wa.gov.au.

Camping fees are additional to park entry fees.

All campgrounds have basic toilet facilities and rubbish bins. There is no water in Cape Range National Park. Before leaving Exmouth, please make sure you have enough water for drinking and washing for the duration of your visit to the park.

**Check-in at 11am** on the day of arrival and **check-out at 10am** on the day of departure. Please ensure you leave your campsite clean and tidy for the next campers. Please note generators are not permitted in some campgrounds.

Camping is only permitted in designated campsites.

## Camping in Cape Range National Park

Above Osprey Bay Campground.

## Keep in mind when camping

Fish offal is to be buried at least 30cm deep in the sand or placed in an appropriate disposal container where available.

Generators are not permitted in Ned's Camp, North Mandu, South Osprey Bay, Kurrajong and North Kurrajong.

Campfires are not permitted in Cape Range National Park. This includes the use of heat beads. The use of portable gas stoves are permited.

Dogs or any other domestic pets are not permitted in Cape Range National Park.

Toilets within Cape Range National Park use bio additives to help break down wastes. Please do not put any chemicals, including portable toilet wastes or detergents, in the toilets as this will kill helpful bacteria. Dump points for chemical toilets are located at Milyering Discovery Centre and Yardie Creek carparks.

Wildlife (including fish) are NOT to be fed or supplied water as this can cause them to become aggressive and dependent on an unnatural food source.



Above Euro (Macropus robustus erubescens)

## Walking in Cape Range National Park



Above Exploring Cape Range National Park. Photo - Tony Howard

## Safe walking tips



Extreme heat can be encountered when walking in Cape Range National Park. Between November and March temperatures can often exceed 50°C. Walking during the cooler months and during cooler times of the day is strongly recommended.

- Carry and drink adequate water (minimum of 4L per person), and wear sunscreen, long sleeves and a hat. There is no water and very little shade in the park.
- Wear sturdy footwear, follow the trail markers and remain on the trail, for your own safety.
- Stand well back from cliff edges. Undercutting by erosion can lead to weak sections that may collapse under your weight.
- Before you leave, tell a responsible friend or family member where you plan to walk and when you expect to return. Remember to let them know when you've returned safely.

## Trail grades



Class 1 Walks catering for people with reduced mobility or those who are wheelchair-assisted. No experience necessary.



Class 2 Well-marked walks catering for a range of visitors. No experience necessary.



Class 3 Walks requiring a moderate level of fitness and may include unstable surfaces.



Class 4 Walks requiring a moderate to high level of fitness. Tracks are often rough and users need to be self-reliant.

## Walking in Cape Range National Park



**Above** Mangrove Bay bird hide. *Photo – Tony Howard* 



## Mangrove Bay Bird Hide Walk

Class 1, 100m return – allow 10 minutes



Where 8km (10 minute drive) north of Milyering Discovery Centre.

Facilities Carpark, boardwalk, bird hide.

Follow the track from the right-hand side of the carpark to access a boardwalk that winds through the mangroves to the bird hide. Here you can observe resident and migratory birds in a coastal mangrove wetland. Remember to walk quietly if you want to see the birds that frequent the area. Interpretive signs in the bird hide will help you to identify some of the regulars. Visit the Milyering Discovery Centre for a bird list.

**WARNING!** Visitors should take precautions to avoid mosquito bites. Long, loose clothing and personal insect repellent is helpful.



Above Mandu Mandu. Photo - Donald Tsang



#### Mandu Mandu Walk





Where 14km (15 minute drive) south of Milyering Discovery Centre.

Facilities Carpark.

This is a moderately difficult trail that winds its way along the rocky creek bed, deep into the gorge. A steep path takes you up to the gorge rim where, on your return, you can enjoy the views over Ningaloo Reef and the surrounding country. On your walk, keep your eyes peeled for black-flanked rock wallabies.

There are steep gradients and rough, uneven surfaces along this trail.

## Walking in Cape Range National Park

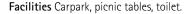


#### Yardie Nature Walk

Class 1, 1.2km return – allow 40 minutes



Where 39km (40 minute drive) south of Milyering Discovery Centre.







This Class 1 walk has a hardened trail surface and gentle slope that allows people with limited mobility and those assisted in a wheelchair or pram. From the Yardie Creek carpark, follow the trail past the toilet block and picnic tables, south toward Yardie Creek. This is a gentle, well defined path that winds along the edge of Yardie Creek with views of the gorge, creek mouth and Ningaloo Reef. Look carefully at the rock ledges on the opposite side of the gorge where you may spot some black-flanked rock wallabies. Along the walk you may see fish jumping, emus feeding, euros basking or a variety of birds. Take time to immerse yourself in the contrasting colours of the landscape and wander until you see the Yardie Gorge Trail trailhead sign marking the end of Yardie Nature Walk and the start of the more difficult Yardie Gorge Trail.



## Yardie Gorge Trail

Class 4, 750m return – allow 1 hour

Where To access the Yardie Gorge Trail look for the trailhead sign at the end of Yardie Nature Walk (600m). Allow two hours to complete both trails.

This moderately difficult trail begins with the Yardie Nature Walk before taking you high above Yardie Creek up the Gorge Trail with views over Ningaloo Reef. Marvel at the birds nesting on the rugged gorge walls and the precariously placed vegetation growing from small crevices in the gorge. Please ensure you do not walk any further than the end of the walk trail as this area is a sensitive habitat for threatened flora and fauna. To protect bird nesting and rock wallaby habitat, the southern side of Yardie Creek is a sanctuary area.

Below Yardie Creek. Photo - Rachel Nicolas



## Walking in Cape Range National Park



Above Shothole Canyon. Photo - David Eastwell



## Shothole Canyon Walk

Class 4, 100m return – allow 15 minutes



Where The Shothole Canyon Road turn-off is 17km (15 minute drive) south of Exmouth along Exmouth-Manilya Road. Follow the gravel road for another 12km (suitable for four-wheel-drive vehicles only).



Facilities Carpark, picnic tables, toilet.



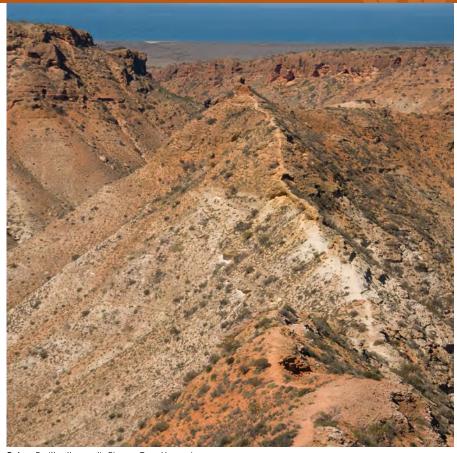
This is a short walk up steps to a lookout with spectacular views down the canyon. Retrace your steps to the carpark.

**WARNING!** The stairs are extremely steep and narrow. The gravel surface can be very slippery underfoot. Proceed with extreme caution.

The name of this canyon is derived from the shot holes left in the terrain following the explosive charges set for seismic studies during oil exploration work in the early 1950s.

Ningaloo Coast World Heritage Area 42 Ningaloo Coast World Heritage Area 43

## Beach walking along the Ningaloo Coast



Below Badjirrajirra trail. Photo - Tony Howard



## Badjirrajirra Walk

Class 4, 6km return – allow 3 hours



Where The Charles Knife Road turn-off is 22km (20 minute drive) south of Exmouth, along Exmouth-Manilya Road. Follow this road (part gravel) for 11km to the Thomas Carter lookout turn-off. The carpark and start of the walk trail is 1km from the turn-off. This section is not suitable for two-wheel-drive vehicles.



Facilities Carpark and picnic tables on the way to the lookout.



A moderately difficult loop trail traversing the top of Cape Range. The trail winds its way through rocky gullies, small gorges and open spinifex bushland. The walk also offers views of Shothole Canyon and Exmouth Gulf.

There are steep gradients and rough uneven surfaces along this trail.



**Above** Beach walking. *Photo - Kelsey McGowan* 

There are some great opportunities to walk along some beautiful beaches along the Ningaloo Coast. Quite often you will see marine creatures such as shovel nose rays patrolling the shallows or ospreys diving out of the sky to catch an unsuspecting fish.



Please remember, collecting shells from Ningaloo Marine Park is not permitted. All parts of the reef play an important ecosystem role – you may be removing



Above Red Bluff. Photo – Dongkwon Won

## Coral Bay

Caravan parks in Coral Bay provide services and facilities for camping. There is a range of other accommodation, including chalets and a hotel/motel. Public telephones, fuel, food and other supplies are also available.

There is no free or coastal camping in the Coral Bay area. Camping is not permitted on the beaches or dunes – there are no designated beach camping areas in or around Coral Bay.

The nearest coastal camping areas to Coral Bay are:

- to the south: Warroora, Gnaraloo and Quobba stations
- to the north: Bruboodjoo Point (on Cardabia Station)
- further to the north: Ningaloo Station.

Special rules apply at each of these camping areas. Contact the station office, homestead or onsite caretakers for details.

Please note that dogs are allowed on Paradise Beach only, and must be kept on a lead. Dog owners must also dispose of dog droppings properly. Dogs are not allowed on any other beaches of the marine park in the Coral Bay area.

Please be aware that 1080 poison baits are used along some sections of the Ningaloo Coast to control foxes and feral cats - please contact the Parks and Wildlife Service for more information.

## Southern Ningaloo Coast

Quobba and Gnaraloo Stations provide camping, chalet and other accommodation facilities adjacent to the Ningaloo Coast.

Special rules apply at each of these camping areas. Contact the station or campsite office for bookings and further information.

### Get off the beaten track

Above Staying on track, Waroora Station. Photo – Johnny Gaskell

## Four-wheel driving



For your safety and the protection of the environment, beaches in Cape Range National Park, Jurabi Coastal Park and Ningaloo Marine Park are closed to vehicles. There are designated access points for boat launching and kayaks at certain areas. Please observe and adhere to signs.

• Be aware of the hazards associated with driving on beaches, such as soft sand, washouts and drop offs, as well as tides and waves. Some of the beaches in the area have very soft sand and during high tides waves can wash up to the vegetation line, making these beaches impassable.

Please note: Yardie Creek can become impassable due to tides and weather events. Please check with the Milyering Discovery Centre for up-to-date conditions.

- On soft sand your tyre pressure should be reduced to between 15 and 20 psi. Lowered tyre pressure gives extra traction and a more comfortable ride as well as helping to protect tracks for other users. Driving on soft sand is for experienced four-wheel drivers only. Remember to re-inflate your tyres to the manufacturer's recommended pressure before travelling on hard surfaces.
- Vehicle tracks present particular hazards and risks. Stay on the main tracks to protect the vegetation. Passing or overtaking other vehicles can be dangerous. Be aware of blind corners and hill crests. Slow down and look out for other vehicles, including guad bikes.
- Visitors planning to drive in the Ningaloo Coast area should be very cautious after sunset when large numbers of kangaroos and other animals make driving hazardous. If driving at night is unavoidable, please look after your own safety and conserve wildlife by driving slowly and carefully at all times.
- Whenever driving in remote areas, take necessary precautions such as carrying sufficient drinking water, vehicle spares, recovery equipment and communication equipment. Always advise a responsible person of your trip details, including an estimated time of return, and remember to let them know when you have completed your trip.

## Wildlife of the Ningaloo Coast



Above Four-wheel drive bogged in Yardie Creek.

#### Off-road vehicles

Off-road vehicle use (this includes off-road motorbikes, all-terrain vehicles (ATVs), and dune buggies) is permitted only in areas designated for this purpose.

There are no designated off-road vehicle areas in Cape Range National Park or around Exmouth. The environments of the Ningaloo Coast are delicate and easily degraded, especially the coastal dune systems.

Only registered vehicles (recreational and commercial) are permitted on designated beaches along Ningaloo Marine Park with lawful authority from the Parks and Wildlife Service.

Many of the tracks along the coast are on private leases (pastoral stations), unallocated Crown Land, or marine park tenure, and are not officially gazetted as off-road areas.

Riders are responsible for their own safety, and must operate quad bikes with the approval of land managers, and with consideration for the environment and the safety of others at all times.

Riders are reminded there are certain legal requirements regarding the registration and licensing of quad bikes as well as where they can be used. Please contact the Department of Transport for more information.

Above Black-flanked rock wallaby. Photo – Dongkwon Won

#### Black-flanked rock wallaby (Petrogale lateralis lateralis)

The black-flanked rock wallaby is a shy and wary animal that lives in the cracks and crevices throughout Cape Range Peninsula. They shelter in caves during the heat of the day to conserve water and avoid contact with predators such as cats and foxes. They feed mainly by browsing on the leaves of certain plants and their fruits, and derive their water mostly from their food.

Many of the gorges in Cape Range National Park provide suitable habitat for black-flanked rock wallabies. Here they live along the steep-sided gorge walls, craggy rock faces that are often also home to the tough native fig. Mandu Mandu and Yardie Creek Gorge are excellent places to see these animals. Their agility is impressive and they use their long tails for steering and balance as they move swiftly through the rugged terrain.

These wallabies reach sexual maturity between one and two years and breeding can be continuous after this time, but varies in response to seasonal rainfall. A feature of their reproduction is embryonic diapause, where the developing embryo becomes dormant until conditions are right for it to continue development. Although they pair for life, the females will mate with other males but always return to their original mate.

The black-flanked rock wallaby is a threatened species due to predation by introduced species mainly the fox and, at times, the feral cat. The wallaby is described as being within the 'critical weight range' for foxes - meaning they are particularly vulnerable to predation by this pest species. Degradation and competition for habitat and food by feral goats is also a major threat to black-flanked rock wallabies in Cape Range National Park.

## Wildlife of the Ningaloo Coast

Above Euro. Photo - Dongkwon Won

#### Euro (Macropus robustus erubescens)

The euro is found all over WA except the lower south, usually in hills and ranges. These stocky kangaroos like steep rocky places with lots of shelter from extreme temperatures. Their diet is mainly grasses and shrubs. Euros have very solid shoulders and forearms, shorter hind legs and large, expressive ears. A male euro can get to 50kg in weight while the females are rarely more than half that. Male euros can be 1.2m (4ft tall).



Red kangaroo (Macropus rufus)

The red kangaroo's colouring matches the red soil of the outback giving natural camouflage from dingoes and eagles.

They are Australia's largest marsupial. Red kangaroos are herbivores and graze at dawn and dusk on a wide variety of grasses and herbaceous plants. When water is available they will drink, however if they obtain sufficient green food, the red kangaroo does not need to drink.





Above Short-beaked echidna. Photo - Kaitlyn Fewings

## Short-beaked echidna (Tachyglossus aculeatus)

The short-beaked echidna is the only species of echidna in Australia. Echdinas can live in a variety of habitats including forests, woodlands, heath grasslands and arid environments. They are an egg-laying mammal (monotreme) and lays one egg at a time. The eggs hatch after about 10 days and the young emerge blind and hairless. Clinging to hairs inside the mother's pouch, the young echidna suckles for two or three months. Once it develops spines and becomes too prickly, the mother removes it from her pouch and builds a burrow for it. It continues to suckle for the next six months.

## Wildlife of the Ningaloo Coast



Above Perentie.

#### Perentie (Varanus giganteus)

The perentie, or bungarra, belongs to the family of Varanidae, which is closely related to the world's largest lizard, the komodo dragon (Varanus komodoensis). This is one of five species that can be found in the North West Cape.

Perenties are daytime animals that emerge from their shelters after sunrise to bask near the entrance, until their body temperature rises to an average of mid 30°s. They go hunting during the day, returning before sunset. In winter they sometimes do not emerge at all and during summer can retreat to their shelters during the middle of the day.

The perentie can be recognised by its large cream-yellow spots, with large claws which enable it to extract food from the ground and climb trees if disturbed. They have a well-developed sense of smell as a predatory and scavenging animal. They will also eat insects, other reptiles, birds, small mammals and carrion. The perentie can grow up to 2m long.

#### Dingo (Canis lupus dingo)

The dingo is Australia's largest wild mammalian predator. Archaeological evidence indicates that dingoes have been in Australia for at least 3,500 years. They can come in a variety of colours from black to tan, although tan is the most common. Most dingoes will also have white points - white toes, feet or socks, a white tail tip and white chest patch. As an apex predator, dingoes are an important part of the local ecosystem. It is thought they may have a positive ecological role in controlling rabbits and other herbivores such as feral goats, as well as suppressing or displacing feral cats and foxes. While dingoes will hunt prey for food they will often be seen scavenging on carcasses along roads. They may also approach people and campgrounds in search of food.



Above Dingo. Photo - Grant Griffin

## Common birds of the Ningaloo Coast

# **Be Dingo Aware**



It is important not to encourage dingo interactions with humans as habituation may lead to aggressive behaviour, and aggressive animals may be destroyed. For their welfare and your safety, please be Dingo Safe:

- Never offer food or water to dingoes, even indirectly.
- Do not approach dingoes or attempt to lure them closer watch guietly from a distance or stay in your car.
- Secure food, food scraps, rubbish, fish and bait.
- Supervise children, including small teenagers.
- Bury fish scraps at least 30cm deep.
- If going for a walk, you may like to carry a stick, pop up umbrella or something noisy to scare dingoes away.

Seeing a dingo on your travels is normally an enjoyable and memorable experience. However, if at any stage you feel threatened:

- Stay calm.
- Stand to your full height and face the dingo.
- If you are with others, stand back to back.
- If you have children, gather them to you and remain calm.
- Keep your arms close to your body.
- Maintain eye contact.
- Confidently and loudly call for help.
- Calmly back away to a safe area, preferably a vehicle, or until the dingo gets bored and moves away.
- DO NOT RUN (running will incite a chase response).
- **DO NOT** wave your arms or feet at them.
- **DO NOT** overreact or move suddenly as this will excite the dingo.

For more information or to report a dingo encounter (including people doing the wrong thing), please visit the Milyering Discovery Centre or contact the Exmouth office on 9947 8000.

#### Emu (Dromaius novaehollandiae)

#### **Body length** up to 2m tall

A very large bird with long legs, dark grey-brown feet and long, thick plumage that appears shaggy and is mostly dark brown to grey-brown. The skin of the head and throat is blue. Emus are commonly seen around Exmouth town site and Cape Range National Park. Males incubate and rear chicks, looking after them until the next breeding season.



Above Emu.

#### Australian bustard (Ardeotis australis)

Body length males 105-120cm, females 75-85cm Top of head black with a face and neck that is mostly white but faintly flecked with greyish brown. The rest of the upper parts are mostly dark brown, with

fine pale brown marks. The wing coverts (sets of feathers that cover other feathers, assisting smooth airflow) are blotched blackish brown and white. There's a narrow indistinct black band on the breast and the rest of the underparts are mostly white. When disturbed, this species will often freeze with its beak pointing up. It has long broad wings and is impressive when it flies.



Above Australian bustard

#### Pied butcherbird (Cracticus nigrogularis)

#### Body length 29-34cm

Adult birds are distinctly black and white with a glossy black head and neck. Immature bird's upper parts are dark brown to blackish brown where adults are black. They have a beautiful undulating call.



Above Pied butcherbird

## Common birds of the Ningaloo Coast



Above Eastern osprey. Photo - Felicity Kelly

#### Osprey (Pandion haliaetus)

Body length 50-65cm

A moderately large raptor found close to marine environments. It has long narrow wings, strong feet and the suggestion of a crest. The head and neck are white, streaked with blackish brown. There's a blackish streak through the eye and ear coverts to the side of neck. The back, wings and tail are dark brown and the under parts mostly white. The species is distinguishable from the white-breasted sea eagle by its lesser size and much narrower wings. The osprey has an 'M'-shaped wing profile compared to the sea eagles' upswept wing profile.

#### Zebra finch (Taeniopygia guttata)

Body length 10cm

Body length 60-70cm

Grey body with a waxy red bill. The zebra finch travels in groups, and its white-barred tail is conspicuous on fleeing and alighting in shrubs. The species has a distinct peeping call.

A medium-sized heron with two colour morphs

neck, comparatively short thick legs and a long

- one all white, the second dark grey. It has a long

#### Above Zebra finch.



Above Eastern reef egret.

Nankeen (Australian) kestrel (Falco cenchroides)

Common birds of the Ningaloo Coast

A small light-coloured falcon with pointed wings and chestnut brown shoulders. The nankeen kestrel is often seen hovering along roadsides with fanlike

tail spread.

Body length 30-35cm



Above Nankeen (Australian) kestrel.

#### Western bowerbird (Chlamydera guttata)

Body length 25-31cm

Dark brown on back with rich golden spots. A pink nape crest may be seen. The western bowerbird will imitate other bird calls and human voices.



Above Western bowerbird.

#### Eastern reef egret (Ardea (Egretta) sacra) White-winged fairy-wren (Malurus leucopterus)

Body length 11.5-14.5cm

Male (breeding) – a distinctive dark blue with white wings and a deep blue tail; female/immature – dull grey-brown above, whitish below; lacks red eye-ring; male (eclipse) – like female with a dark bill. The call is a distinctive 'thin' musical trilling.



Above White-winged fairy-wren.

thick bill.

## Common birds of the Ningaloo Coast

#### Rainbow bee-eater (Merops ornatus)

Body length 20-25cm

The rainbow bee-eater is usually seen in pairs or small flocks with green, blue, chestnut and yellow plumage.

They feed on insects such as bees and wasps, dragonflies, beetles, butterflies and moths. They live in slightly timbered areas, near water and nest in burrows on the ground.

Their breeding season extends from August to January and they live for approximately 24 months in the wild.



## Sharing the shores of the Ningaloo Coast



Above Shorebirds resting along the Ningaloo Coast.

The shores of the Ningaloo Coast provide important refuge for many shorebird and seabird species. Migratory shorebirds fly some 13,000km to reach the shore of the Ningaloo Coast, to feed and rest while escaping the harsh winters in the northern hemisphere. In contrast, the resident shorebirds stay all year round, feeding, resting and nesting along the coast.

Seabirds such as terns can be seen in flocks numbering in their thousands. Both resident shorebirds and seabirds lay camouflaged eggs in shallow scrapes in the sand. Birds may nest as solitary pairs or large colonies.

Feeding, resting and nesting are three very important activities in the life of a shorebird or seabird. If disturbed it can be harmful and impact on their survival. Reactions to disturbance can include a watchful eye and alert posture, loud calls, moving away and taking flight, all of which use precious energy.

You can help these birds by keeping your distance, stay below the high tide line to avoid disturbing nests, keep dogs on leashes and avoid four-wheel driving on beaches.



## Red-capped plover (Charadrius ruficapillus)

Body length 14-16cm

A small resident shorebird that nests above the high tide mark on sandy beaches. Commonly seen along the beaches of the Ningaloo coast. Nests from May to September.

Left Red-capped plover.

## Sharing the shores of the Ningaloo Coast

Above Pied ovstercatcher.

## Pied oystercatcher (Haematopus longirostris)

Body length 46-48cm

A large resident shorebird black with a white under belly. Nests in scrapes in the sand between July and September. Pied oystercatchers will make a loud sharp high-pitched alarm call if a nest is being approached.



Lesser sand plover (Charadrius mongolus)

Body length 18-21 cm

A small grey migratory shorebird with a thick black bill and grey legs. Can be seen from August to May along sandy beaches, sand spits and mudflats close to mangroves. Listed as Endangered.



Above Ruddy turnstone.

## Ruddy turnstone (Arenaria interpres)

**Grey-tailed tattler** (*Tringa brevipes*)

Body length 22-24cm

Body length 25cm

A medium-sized migratory shorebird named after its feeding behaviour of flipping over stones, shells, seaweed and other objects. Distinct black markings on the chest and bright orange legs.

A medium migratory shorebird with a long slender

beaches and reefs, and intertidal mudflats usually

black bill and yellow legs. Often seen on rocks,

associated with mangroves and seagrass.



Above Grey-tailed tattler.

Body length 22-27cm

Fairy tern (Sternula nereis nereis)

A small tern with a yellow/orange bill. Bright yellow legs. Nests on beaches and is easily disturbed by human activities such as walking dogs, jetskis, windsurfers and four-wheel driving.

Sharing the shores of the Ningaloo Coast



Above Fairy tern.

#### Caspian tern (Hydroprogne caspia)

Body length 53-60cm

A large tern with a bright red bill. Can be seen all year round on sheltered sandy and muddy shores. Feeds on fish as well as the eggs and young of other birds.



Above Caspian tern

### Crested tern (Thalasseus bergii)

Body length 42-50cm

A large-sized tern with a bright yellow bill and a black crested cap. Can be seen all year round on exposed beaches. Feeds on fish and has been known to eat turtle hatchlings.



Above Crested tern.

#### Lesser crested tern (Sterna bengalensis)

Body length 38-43cm

A medium-sized tern with an orange bill. The black cap is less crested than that of the crested tern. Often seen with the crested tern.



Above Lesser crested tern.

## Plants of the Ningaloo Coast



Above Yardie morning glory. Photo - John English

#### Yardie morning glory (Ipomoea yardiensis)

#### Baiyungu name: Wayurlu

Endemic to the North West Cape. Named after Yardie Creek as it is only found on the western side of the North West Cape.

Can be seen May to July in Cape Range National Park.

Height: Upright shrub 1-2m.

**Leaves**: Silvery grey, felty, oval shaped. Flowers: Pink or purple, wide funnel shape.

#### Ashby's banksia (Banksia ashbyi)

## Baiyungu name: Thaganhungu

The only banksia species to occur in the Pilbara -Exmouth is the most northern extension.

Named after collector and horticulturalist Edwin Ashby in the 1930s.

Can be seen February to May or July to December on the red dunes just before the Lighthouse Caravan Park and at Yardie Creek, Cape Range National Park.

**Height:** Shrub 1-8m

**Leaves:** Long, dark green with serrated edges.

Flowers: Yellow/orange upright.





## Plants of the Ningaloo Coast



Above Cape Range grevillea.

#### Cape Range grevillea (Grevillea varifolia subsp. varifolia)

#### Baiyungu name: Jarrarbi

Endemic to the North West Cape. Varifolia means 'with varying foliage'.

Can be seen April to October around Neds Bore, Cape Range National Park.

**Height:** Spreading shrub up to 1.5m.

Leaves: Unusual silvery grey, spoon-shaped ending in three points.

Flowers: Red, long, downward facing spike. Looks similar to half a bottlebrush.

#### Sturt's desert pea (Swainsona formosa)

## Baiyungu name: Jalyurdura

Iconic plant of the Pilbara. The natural variation in this area is for the flower to start off pale in colour with a green centre which changes colour with age, ending up a blood red. Formosa means 'beautiful and handsome'

Can be seen June to October all around the town of Exmouth and along the road at the top end of Cape Range National Park.

**Height:** Prostrate plant up to 50cm.

Leaves: Grey green and hairy.

Flowers: Clustered at the top of a flower spike,

red with a swollen pale centre.

Below Sturt's desert pea.



## Plants of the Ningaloo Coast

## Green birdflower (Crotalaria cunninghamii) Baiyungu name: Mulhurn

Unique green bird-shaped flower. Named for Allan Cunningham, botanist on King's expedition to the north-west coast between 1812-1822.

Can be seen March to December as you enter Cape Range National Park.

Height: Shrub up to 4m.

**Leaves:** Velvety grey/green oval-shaped. Flowers: Green, bird shaped with a touch of

brown on the wing tips.



Above Green birdflower.

## Umbrella Stackhouse (Stackhousia umbellata) Baiyungu name: Ngajarri

Endemic to the North West Cape. You don't usually see this plant (just flowers) as it loves to grow among spinifex.

'Umbel' is Latin, meaning 'umbrella' and refers to the shape of the flowerhead.

Can be seen June to August along the second part of the Mandu Mandu Walk Trail.

**Height:** Spreading perennial herb up to 70cm. Leaves: Minute, scale-like along the stem. Flowers: Yellow, small and pretty with

umbrella-shaped head.



Above Umbrella stackhouse.

## Plants of the Ningaloo Coast

## Cape Range kurrajong (Brachychiton obtusilobus) Baiyungu name: Garrajong

Endemic to the North West Cape. Obtusilobus means obtuse pods - this is from their beautiful star-shaped seed pods.

Can be seen August to September dotted along the range on the west coast. They stand out from the surrounding shrubs because of their striking leaf colour.

**Height:** Tree up to 3.5-6m. Leaves: Lime green with 5 points.

Flowers: Small, cream.



Above Cape Range kurrajong.

## Common rock fig (Ficus brachypoda) Baiyungu name: Winyjirr

'Brachys' 'podus' is Greek meaning 'short stem' referring to the fruit with very short stem.

Can be seen April to October on the walls of Mandu Mandu Gorge.

Height: Spreading shrub or tree up to 8m. **Leaves:** Thick, long oval shape with raised vein.

Flowers: Small and white.



Above Common rock fig.

## More information

Staff from the Parks and Wildlife Service at the Department of Biodiversity, Conservation and Attractions (DBCA) are pleased to share their knowledge and offer helpful suggestions about places to go and things to do and see.

More information is available from the Parks and Wildlife Service Exmouth or Perth offices

#### Parks and Wildlife Service

Exmouth Office

20 Nimitz Street (PO Box 201)

Exmouth WA 6707 Ph: (08) 9947 8000

Email: exmouth@dbca.wa.gov.au

#### Milyering Discovery Centre

Cape Range National Park

Ph: (08) 9949 2808

Email: milyering@dbca.wa.gov.au

#### Department of Biodiversity, Conservation and Attractions Headquarters

Locked Bag 104

Bentlev Delivery Centre WA 6983

Ph: (08) 9219 9000 Web: dbca.wa.gov.au

#### Department of Primary Industries and Regional Development

10 Maley Street, Exmouth WA 6707

Ph: (08) 9949 2755

Email: enquiries@dpird.wa.gov.au

Web: dpird.wa.gov.au

#### **Department of Transport**

21 Maidstone Crescent, Exmouth WA 6707

Ph: (08) 9947 8200

Email: exmouthlicensing@transport.wa.gov.au

Web: transport.wa.gov.au

#### Shire of Exmouth

Murat Road, Exmouth WA 6707

Ph: (08) 9949 3000

Email: records@exmouth.wa.gov.au

Web: exmouth.wa.gov.au

#### Ningaloo Visitor Centre

PO Box 149, Exmouth WA 6707

Ph: (08) 9949 3070

Email: reservations@exmouthwa.com.au

Web: visitningaloo.com.au

#### Carnaryon Visitor Centre

21 Robinson St. Carnaryon WA 6701

Ph: (08) 9941 1146

Email: info@carnarvon.org.au

Web: carnarvon.org.au

#### Parks Australia

Marine Parks Branch

Email: marineparks@environment.gov.au

Ph: 1800 069 352

#### **Emergency contacts**

Australia-wide emergency phone number: 000

Parks and Wildlife Service Exmouth Office Ph: (08) 9947 8000

Pilbara Region Karratha Office Ph: (08) 9182 2000 Milyering Discovery Centre Ph: (08) 9949 2808

Exmouth Police Ph: (08) 9947 8700 Exmouth Hospital Ph: (08) 9949 3666

> Information current at October 2019. This information is available in alternative formats on request. Photos - All photos are credited to DBCA unless otherwise specified.



