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Department of Biodiversity,
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Visitor guide









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## Welcome to the Ningaloo Coast World Heritage area



## World Heritage areas are exceptional, unique and irreplaceable sources of life and inspiration.

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.

The Ningaloo Coast was inscribed on the World Heritage list in June 2011, in recognition of the following Outstanding Universal Values:

**Land and sea contrast** – the arid earth colours of Cape Range provide a stark and striking contrast to the liquid turquoise and vibrant underwater world of Ningaloo Reef.

**Diversity of habitat** – the rare mix of intact and diverse terrestrial, coastal and marine habitats form an incredible interconnected ecosystem.

Above Turquoise Bay. Below Green turtle.



**Cape Range** – the rugged, limestone range and deep canyons host a remarkable array of plants, birds, reptiles and other wildlife, a high proportion of which are found nowhere else in the world.

**Cape Range karst system** – under the Cape Range Peninsula lies a complex limestone karst system that is home to a high diversity of unique, weird and wonderful cave creatures.

**Ningaloo Reef** – one of the longest and most pristine fringing reefs in the world. The reef's extraordinary biodiversity includes more than 200 kinds of coral, more than 500 fish species, plus hundreds of other animal species including crustaceans, molluscs, echinoderms and sponges.

Whale sharks and marine megafauna — one of the world's largest, most reliable and best-managed whale shark aggregations is at Ningaloo Reef. In addition, other internationally important and rare marine megafauna are found here including whales, dolphins, manta rays, dugongs, sharks, turtles and large fish such as tuna and billfish.

**Turtle rookery** – the area hosts one of the most important turtle rookeries in the Indian Ocean for three threatened species, the loggerhead, hawksbill and green turtles.

The Ningaloo Coast World Heritage area covers 6045km² and stretches more than 300km along the coast. The area encompasses the Muiron Islands to the north, the Bundegi and Jurabi coastal parks at the tip of the Cape, Ningaloo Marine Park (which extends up to 22km offshore) and the adjoining Learmonth Air Weapons Range and Cape Range National Park, including Shothole and Charles Knife canyons on the eastern side. To the south of the air weapons range the World Heritage area hugs the coastline down to its southernmost point at Red Bluff.

World Heritage listing brings with it an obligation to ensure the World Heritage values of the area are conserved. The Ningaloo Coast World Heritage area is managed by various Federal, State and local government bodies in collaboration with scientists, local businesses, traditional owners and the community. Management is assessed by the international World Heritage Committee.

As individuals, we have a responsibility to be guardians of the Ningaloo Coast – and other World Heritage places – so future generations can experience the wonder, and to ensure biologically important habitats, plants and animals are protected.







Above Osprey Bay.

### Ningaloo Marine Park and Muiron Islands Marine Management Area

Ningaloo Marine Park and Muiron Islands Marine Management Area are located off the North West Cape and protect an area of 290,000ha. 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 (other than in sanctuary zones), observe marine life and relax on the beach.

Boat access via boat ramps - see 'Services and facilities', page 10.

Visitor fees do not apply to the marine park.





Left Point Cloates Lighthouse. Right Mandu Mandu necklace.

### Cultural heritage

The parks are not only of ecological value but also of cultural significance. Aboriginal people have had a cultural connection with Cape Range Peninsula spanning at least 30,000 years.

Many historical remains have been found along the coast of Ningaloo Marine Park including middens (mounds of shells and other remains), fish traps and burial grounds, and a shell necklace that is at least 30,000 years old and among the world's oldest pieces of jewellery. These all provide a fascinating insight into Aboriginal culture. The Jinigudjira and the Baiyungu people are recognised as the traditional owners of these lands.

The Ningaloo area also has an extensive maritime history, with many lighthouses and a whaling station at Norwegian Bay. The North West coast is one of the most dangerous coastlines in the world and is the graveyard of many a ship.

Pearling, fishing and pastoralism provided the economic mainstay of the region in the early 20th century. The beginning of the pastoral industry is marked by the establishment of Minilya Station in 1876 by J Brookman. The pastoral lease covered the whole of the Cape Range peninsula, and was gradually subdivided.

In 1889, Brookman sold 54,600ha of the Minilya leasehold on the northern and western side of the peninsula to Thomas Carter. This became Yardie Creek Station.

After further subdivision from 1907, followed by amalgamation in 1933, the Western Australian Government acquired the remainder of Yardie Creek Station in 1959, and it eventually formed the core of the Cape Range National Park, gazetted in 1964.



Above Manta ray and fish. Photo - Axel Passeck

### Ningaloo Commonwealth Marine Reserve

The Ningaloo Commonwealth Marine Reserve borders the western edge of the State marine park covering 2435km² with water depths ranging from 30m to more than 500m. It incorporates a diversity of habitats including the continental slope and shelf, as well as pelagic habitats in the open ocean.

The reserve has international and national significance due to its diverse range of marine species and unique geomorphic features. It provides essential biological and ecological links that sustain the reef and its biodiversity, including the supply of nutrients to reef communities from deeper waters further offshore. The deeper water communities are dominated by sponges with soft corals and algae found living among them. The high numbers of species and unusual forms found in the diverse sponge garden habitats add to the reserve's importance. The open ocean supports large numbers of pelagic fish including trevally, tuna, mackerel, marlin and sailfish.

Humpback whales pass through twice a year on their annual migration between their calving grounds off the Kimberley and their feeding grounds in Antarctica. Blue and sperm whales have been observed in the offshore regions of the reserve as have minke, Bryde's, southern right and killer whales. Whale sharks and dolphins are also frequent visitors to the reserve.

What can I do there? Swim, fish, observe marine life.

Boat access via boat ramps see 'Services and facilities', page 10.

Visitor fees do not apply to the Commonwealth Marine Reserve.

### Planning your visit to Ningaloo Coast World Heritage area

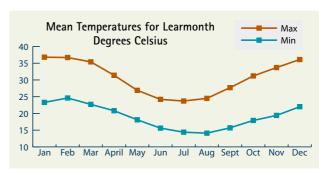


**Above** Entrance to the Milyering Discovery Centre.

Ningaloo Marine Park is about 1000km north of Perth. 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 is in the hot and arid tropics of northwest 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 and Coral Bay, some distance from the park.

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 15 (snorkelling), page 18 (kayaking), page 20 (boating), page 33 (four-wheel driving) and page 35 (walking).

### 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 Exmouth Visitor Centre for more information on (08) 9949 1176.

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

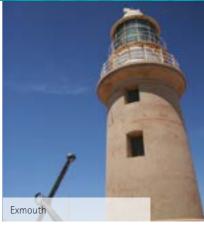
**Milyering Discovery Centre** in Cape Range National Park is open every day 9am to 3.45pm, except Christmas Day. There are displays, brochures and videos about the natural wonders of the Ningaloo Coast. Light refreshments and souvenirs are available from the shop. There is a public telephone (phone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

**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 is shopping, banking 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 Exmouth 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 Exmouth Visitor Centre for more information.







## Fishing and sanctuary zone awareness



Above Turquoise Bay within the Mandu Sanctuary Zone.



Ningaloo Reef 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 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 Fisheries' Recreational Fishing Guide. Information about the zones and various activities, including spearfishing, is included in this booklet.

Sanctuary zones 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 also provide areas for scientific research and monitoring. Sanctuary zones 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 are?

Sanctuary zone 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 is by using a global positioning system (GPS) device.





There are also on-site markers. All 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 (see image left). When the two posts are lined up they provide a visual reference for the direction of the sanctuary zone boundary. A yellow 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.

## Fishing and sanctuary zone awareness

### How do I use my GPS/chart-plotter to find the sanctuary zones?

Using the coordinates on the fold-out sanctuary zone map (see map insert), here are two methods you can use:

- 1. Enter the offshore sanctuary zone 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 zone boundary.
- 2. If the sanctuary zone 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 zone 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.

### Zone guide

**Sanctuary zones** are 'look but don't take' zones. No extractive activities are permitted in these zones, which means no recreational or commercial fishing is allowed. Mining activities are also prohibited.

**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 for finfish only (no other extractive activities are allowed).

Recreation zones are managed for nature conservation and recreation, including recreational fishing. See restrictions on spearfishing on page 13.

**General use zones** are managed for nature conservation while allowing for sustainable commercial and recreational activities.

See insert map for specific information about the recreational activities permitted in each zone type.

**Right** Fishing is allowed in the recreation zone. *Photo – Tourism WA* 



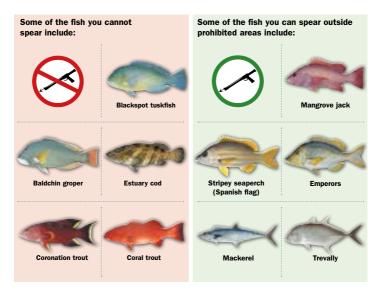
## Spearfishing

### 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.

Within Ningaloo Marine Park you cannot spearfish:

- in sanctuary zones (see over page)
- between Tantabiddi Well and Winderabandi Point
- using compressed air (SCUBA or hookah)
- for rock lobster
- for wrasse (family Labridae), such as tuskfish and baldchin groper
- for cods/groper (family Serranidae), such as coral trout and coronation trout.



### Muiron Islands

Much like sanctuary zones, all fishing, including spearfishing, is prohibited in conservation areas in the Muiron Islands Marine Management Area. The prohibition on spearfishing for wrasses and cods/groper, and the prohibition on spearfishing while using compressed air, do not apply to the remaining waters in the Muiron Islands Marine Management Area.

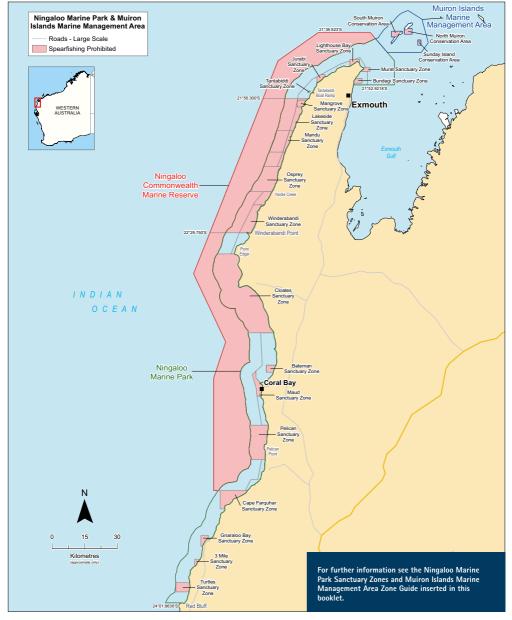
Please respect these rules and 'fish for the future'. Refer to the Department of Fisheries website (www.fish.wa.gov.au) for more information on bag and size limits.

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.

## **Spearfishing**

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



## Snorkelling





Not only is the reef itself made up of many small animals – coral polyps – but the reef also 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.

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

### Lakeside snorkelling

Park at the day parking site, walk to the water's edge and then walk 500m south along the beach to where you see the Lakeside sanctuary markers.

### Oyster Stacks snorkelling

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.

### 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.

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 level add to the volume of water in the lagoon increasing the amount of water escaping through the gaps in the reef. Strong currents are usually confined to the beach immediately west and south of the bay.

## **Snorkelling**

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 at Turquoise Bay 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.

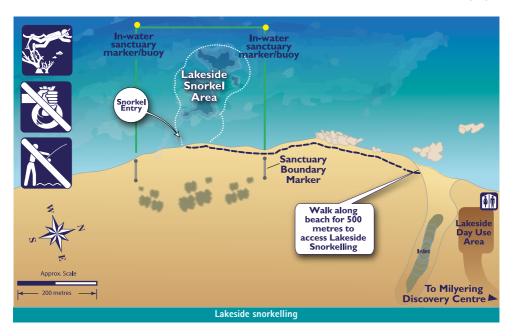
### Coral Bay snorkelling

Coral Bay also offers many great snorkelling opportunities at places such as Five Finger Reef, Bill's Bay, Oyster Bridge and the Lagoon. For more information on these sites please visit the Department of Parks and Wildlife information hut or see one of the many tour operators who offer snorkelling as part of their tour.

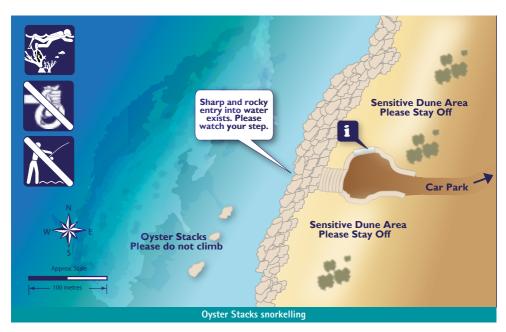




Above Oyster Stacks beach access and signage.



## Snorkelling





Below Coral Bay. Photo - Johnny Gaskell



## Kayaking



Above Visitors kayaking.



Kayak moorings, black buoy with white label, have been installed at several sites in Ningaloo Marine Park to enable people to combine kayaking and snorkelling in their exploration of the park. Some

offer an extended paddle to shallow snorkel sites while others have a shorter paddle to deeper snorkel sites.

Moorings can be found at:

- Bundegi, Tantabiddi and Osprey sanctuary zones in the north
- Maud Sanctuary Zone in Coral Bay in the south.

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.

### 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.

## Kayaking



Below Coral at Ningaloo. Photo - Alex Bell

- 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 further information contact the Milyering Discovery Centre.



## **Boating**



Boating is a great way to see and enjoy Ningaloo Marine Park.

## Your cooperation while boating will assist in the long-term protection of the marine environment.



#### 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 creatures carefully you must follow the 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 Parks and Wildlife 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, nor 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 Parks and Wildlife.

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

## **Boating**

### Public moorings in Ningaloo Marine Park

The outstanding natural values of Ningaloo Marine Park offer 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 Wildlife Act 1950.

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.

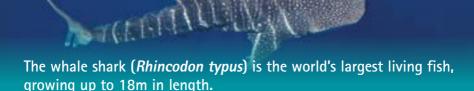
Please contact the Parks and Wildlife Exmouth office for details about public moorings for boats or visit www.dpaw.wa.gov.au.

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

**Below** A boat moored on a public mooring.



### Whale sharks



Above Whale shark. Photo - Cameron Skirving

Whale sharks encountered at Ningaloo are mostly between 3m and 12m. A 12m whale shark may weigh as much as 11 tonnes and have a mouth more than a metre wide. Other than their size, whale sharks' distinguishing features are three prominent ridges along each side of their body and a distinct pattern of white spots and stripes. They have a possible life span of more than 100 years. Whale sharks give birth to live young that hatch from an egg case while inside the mother's body.

At Ningaloo, the majority of whale sharks are male and the average length is about 5m. Sexual maturity may not occur until sharks are 8m in length, about 30 years old, which means most whale sharks at Ningaloo are juvenile males.

Whale sharks are found in all tropical and warm temperate seas. 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.

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 State *Wildlife Conservation Act 1950* and are a threatened species declared to be vulnerable under the Federal *Environment Protection and Biodiversity Conservation Act 1999*.

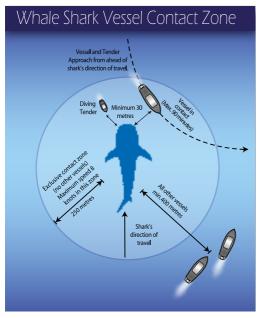
With increasing numbers of people seeking the in-water thrill of interacting with whale sharks, reports of encounters are becoming more frequent and widespread. There is a code of conduct for interactions with whale sharks that individuals and tour operators are required to follow when swimming or piloting a vessel in the vicinity of a whale shark. The code is issued as a Close Season Notice under the Wildlife Conservation Act, which means it applies to everyone.

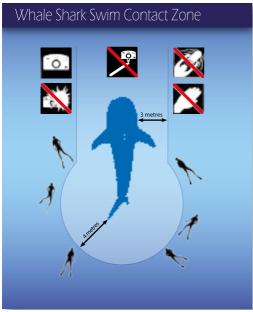
The best way to see a whale shark is on a tour. Contact the Exmouth Visitor Centre for more information.

### Whale shark interaction code 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

### Whale sharks





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 code for swimmers

Swimmers in the contact zone must not:

- attempt to touch or ride on a whale shark
- restrict 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

If you come across a commercial vessel displaying this 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 and dolphins



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

Above Young humpback whale. Photo - Amanda Campbell Below Adult whale. Photo - Johnny Gaskell

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

During the 19th and 20th centuries the humpback whale was hunted extensively in Australian waters, reducing its population to an estimated three to five per cent of pre-whaling abundance. They became protected in 1963 and, by 2001, the west coast population, which migrates along WA's coast, was estimated to have recovered to 60 per cent below pre-whaling abundance. Fortunately, their abundance is increasing each year. Their status is currently listed as vulnerable 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. Humpback whales are believed to have a life span of at least 40 to 50 years, reaching sexual maturity at 12

to 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 sub-tropical waters off the 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.



## Whales and dolphins

### 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
- Whale Vessel Contact Zone No Walting 300m F calf presimt No Approach
- 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.
- 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 are 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, vou must maintain a minimum of 30m

distance between yourself and the whale.

 A trial is commencing in 2016 that will enable current commercial whale shark tour operators to conduct swimwith-humpback whale tours under a strict set of guidelines. Please note this activity is being closely monitored by the department and recreational boaters must adhere to the current guidelines that stipulate no swimming with whales. To join a tour to swim with humpback whales, contact the Exmouth Visitor Centre on (08) 9949 1176.



### **Turtles**



Ningaloo Coast World Heritage area offers an exciting opportunity for visitors to see marine turtles in their natural environment.

**Above left** Turtle. **Below** Hatchlings. *Photo - Meghan Segers* 

Of the world's seven species of marine turtles, three nest on mainland beaches adjacent to Ningaloo Reef during the summer months (November to March) – green (Chelonia mydas), loggerhead (Caretta caretta) and hawksbill (Eretmochelys imbricata).

The Jurabi Turtle Centre provides interpretive and educational displays on turtle biology and ecology, turtle viewing advice and ready access to turtle nesting beaches. The centre is 13km from Exmouth townsite, between Hunters and Mauritius beaches, and is a collaborative project between the Shire of Exmouth and the Department of Parks and Wildlife.

### Turtle watcher's code of conduct

**No glow** – refrain from using torches to search for turtles. This discourages turtles from emerging and may make nesting turtles return to the water. Avoid flash photography at all times.

Move slow – turtles can detect sudden movements so move slowly at all times when on the beach.

Stay low - walk on the beach close to the water's edge. Stay low and out of sight of nesting turtles

Walk or sit on the beach in a tight group. The recommended group size for self-guided visitors is five people. Avoid excess noise.

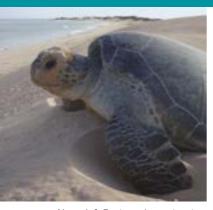
If you see a marine turtle nearby, 'STOP' where you are, 'DROP' slowly to a sitting position and stay as still as a 'ROCK'. Wait until she has moved up the beach to begin digging.

If you can see sand being flicked into the air, stay at least 15m away.

When sand flicking has stopped, you may approach the nesting turtle. Wait until she is laying before crawling up behind her.



### **Turtles**



**Above left** Turtle resting on beach. *Photo – Tristan Simpson* 

Do not move closer than 1m behind her. She will be quite still when laying her eggs. If sand is spraying or she is using her flippers, she is not laying. Always position yourself behind the turtle and stay low (sit, crouch or lie on the sand). If you are getting covered in sand as she digs you are too close! Be patient. She may take time to rest or even abandon the nest if she hits an obstacle or the sand is too dry.

Let her return to the ocean unimpeded. Stay behind her at all times, no closer than 2m. Remember it is illegal to touch marine turtles.

**Campfires** are banned on nesting beaches – light can deter nesting turtles and disorientate hatchlings.

**Do not litter** on nesting beaches or anywhere within Ningaloo Marine Park.

Please depart all beaches by 11pm to allow a period of undisturbed nesting to occur.

Stage of nesting	ldentification of stage	Time taken (minutes)	Vulnerability to disturbance	Discreet torch use	Distance from turtle keeping a low profile
1. Emerging	Crawls from the ocean towards the dunes	5–20	HIGH	No	Stay still – at least 15m away
2. Digging the body pit	Uses her front flippers to throw large quantities of sand behind her	20-40	HIGH	No	Stay still – at least 15m away
<b>3.</b> Excavating the egg chamber	Uses her rear flippers only, creating a rocking motion as she digs	10-20	MEDIUM	No	Three people at a time only, at least 1m behind the turtle
<b>4.</b> Laying eggs	Remains very still with a gentle heaving motion	3–10	LOW	OK from behind, red light is preferred	Stay at least 1m behind the turtle
5. Covering and camouflaging the nest	Covers the nest and compacts the sand with her rear flippers only, then gradually moves forward throwing large quantities of sand behind her	20-40	LOW	No	Stay still – at least 2m behind the turtle
<b>6.</b> Returning	Crawls from the dunes to the ocean	5–15	LOW	No	Remain 2m behind the turtle

## Fish of the Ningaloo Coast



Above Clark's anemonefish

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

Clark's anemonefish is a colourful fish, with vivid black, white and yellow stripes. There are normally two white bands, one behind the eve and one at the rear. The tail fin may be white or vellow, 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) The convict surgeonfish has 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.





## Fish of the Ningaloo Coast

**Blue angelfish** (*Pomacanthus semicirculatus*) The blue angelfish is found in the tropical Indo-Pacific, east Africa and the Red Sea. Adults and iuveniles 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) Blue spotted rays are 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 bottomdwelling creatures that can be found living alone or in small groups around coral reefs 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) The blue-green chromis is 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 sub tidal 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 dwell 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 molluses, crustaceans, fishes, sand-dwelling worms and algae.









## Cape Range National Park



Cape Range National Park is dominated by a rugged limestone range, the remains of an ancient sea floor thrust upwards by movements of the Earth's crust. The range descends to sea level along the coast, where arid coastal plains and sand dunes predominate.

This diverse landscape is rich in wildlife. Kangaroos, echidnas, emus and monitor lizards are common, as are smaller mammals and other reptiles. More than 160 bird species have been recorded in the area

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

Park access The northern entry point – about 36km from Exmouth – provides the main access to Cape Range National Park. This road is sealed through to Yardie Creek in the south. Entry from the south is via Ningaloo Station and requires a four-wheel drive to cross Yardie Creek, which is subject to intermittent saltwater flooding. Contact the Milyering Discovery Centre or Exmouth Visitor Centre for information about conditions

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** These can be paid at the park entry stations (cash only), Milyering Discovery Centre or the Parks and Wildlife office in Exmouth. If you are planning to visit the park 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.dpaw.wa.gov.au.



## Camping



Above Camping at Osprey Bay camp site.

### Cape Range National Park



Between Boat Harbour and Ned's Camp, there are a number of designated camping areas on the stunningly beautiful Ningaloo coast. Please note camping is only permitted in designated camp sites. See the Cape Range National Park fold-out map inside this booklet for the locations of camping

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.

No campfires are allowed in the park – gas barbecues only.

Check-in and check-out 10am on the day of arrival or departure. Please ensure you leave your camp site clean and tidy for the next campers. Please note generators are not permitted in some campgrounds. For details go to parkstay.dpaw.wa.gov.au.

**Camping fees** are additional to park entry fees (for how to book and pay see below, for current fees visit parkstay.dpaw.wa.gov.au).

### Booking a camp site and paying camping fees

**Peak season** (April to October) online bookings are required for all campgrounds.

Online booking and fees visit parkstay.dpaw.wa.gov.au.

Off-peak (November to March) camping sites are allocated on a first come, first served basis. Bookings cannot be made. Camping fees can be paid at the Milyering Discovery Centre (cash and Eftpos) or at the entry stations (cash only).

Day-use sites Some sites in the park are for day use only, with camping not permitted. Many of these sites have picnic facilities and toilets. See fold-out map inside this booklet for details.

## Camping



Right Osprey Bay camp site shelter.

### Keep in mind when camping

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

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

**Campfires** Do not light campfires in Cape Range National Park. This includes the use of heat beads. Gas cookers only are permitted.

**Toilets** Park toilets provided 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. Wastes from chemical toilets should be removed from the park and disposed of according to the manufacturer's instructions. Contact Exmouth Visitor Centre for disposal points.

Wildlife Do not feed the wildlife (including fish) as this can cause them to become aggressive and dependent on an unnatural food source.

### Coral Bay

There are two caravan parks in Coral Bay that provide services and facilities for camping. The small township also has 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 – please contact Parks and Wildlife for further information.

## Vehicles in the World Heritage area



Above Four-wheel driving in Cape Range National Park.

### Four-wheel driving



As a rule, all beaches in Cape Range National Park and Ningaloo Marine Park are closed to vehicles. Some designated beaches may be opened for vehicle access under certain conditions. Please observe and adhere to signs.

For your safety and the protection of the environment:

- 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
- 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.
- Although four-wheel drives can be driven on Bateman Bay Beach in Coral Bay, north from Maud Landing is closed from 15 October to 30 April each year to protect nesting sea turtles.

## Vehicles in the World Heritage area



Below Four-wheel drive bogged in Yardie Creek. Photo - Parks and Wildlife

### Off-road vehicles

Off-road vehicles include off-road motorbikes, all-terrain vehicles (ATVs), and dune buggies.

Off-road vehicle use 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 Ningaloo Coast are delicate and easily degraded, especially the coastal dune systems.

Contact the Shire of Exmouth or Exmouth Police for more information.

### Quad bikes

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

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 further information.

Below Sandy Bay.



## 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 45°C. Walking during the cooler months or during cooler times of the day is strongly recommended.

- Carry adequate water (3L 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 white markers and remain on the trail, for your own safety.
- Stand well back from the 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 wheelchairassisted. 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.

## Mangrove Bay Bird Hide Walk



### 100m return - allow 10 minutes

Where 8km (10 minute drive) north of Milyering Discovery Centre on Yardie Creek Road.

Facilities Car park, boardwalk, bird hide.

**Route** Follow the track from the right-hand side of the car park. The track leads to a boardwalk that winds through the mangroves to the bird hide.

At the bird hide you can observe resident and migratory birds in a coastal mangrove swamp. Remember to walk quietly if you want to see the birds that frequent the area. Signs in the bird hide will help you to identify some of the regulars. Visit the Milyering Discovery Centre for a bird list.

WARNING! At dawn, dusk and after periods of high rainfall visitors should take precautions to avoid mosquito bites. Long, loose clothing and personal insect repellent is helpful.

Below Mangrove Bay bird hide. Bottom Yardie Creek. Photo - Tony Howard





### Mandu Mandu Walk



### 3km return - allow 2 hours

Where 14km (15 minute drive) south of Milyering Discovery Centre and 25km (25 minute drive) north of Yardie Creek on Yardie Creek Road.

#### Facilities Car park.

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.

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



### Yardie Nature Walk



### 1.2km return - allow 40 minutes

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

**Facilities** Picnic tables, car park, toilet (camping facilities nearby).

From the Yardie Creek car park, follow the track past the information shelter to the Yardie Gorge Trail trailhead sign, which marks the end of the nature walk and the start of the trail.

This is a gentle, welldefined 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 or emus feeding and encounter euros and a variety of birds. Take time to immerse yourself in the contrasting colours of the landscape.



## Yardie Gorge Trail



### 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 takes you high above Yardie Creek with views over Ningaloo Reef. Marvel at the birds nesting on the rugged gorge walls. Please ensure you do not walk any further than the end of the walk trail, 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.

There are steep gradients and rough uneven surfaces along the Yardie Gorge Trail.

## Shothole Canyon Walk



#### 100m return - allow 15 minutes

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

Facilities Toilets, picnic tables.

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

**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.

#### Below Shothole Canyon.



## Badjirrajirra Walk



#### 8km return - allow 3hrs

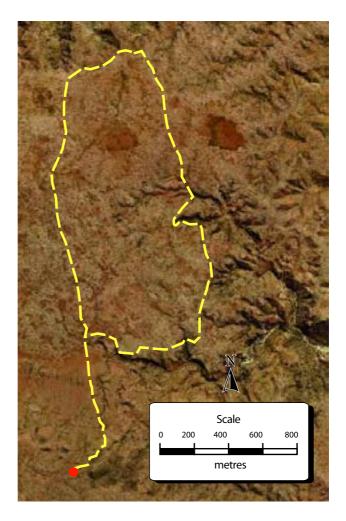
Where The Charles Knife Rd turn-off is 22km (20 minute drive) south of Exmouth, along Murat Road. Follow this road (part gravel) for 11km to the Thomas Carter lookout turn-off. The car park, and start of the walk trail, is 1km from the turn-off. Drivers of two-wheel-drive vehicles should proceed with caution along this section.

Facilities Car park and picnic tables on the way to the lookout.

 $\label{eq:continuous} A \ \text{moderately difficult loop trail traversing the top of Cape Range}. \ The \ trail \ winds \ its \ way \ through$ 

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.



# Animals of Cape Range National Park



Above Seabirds. Below Black-flanked rock wallaby.



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

The black-flanked rock wallaby is a shy and wary animal, feeding at night in open areas. They mainly live on steep and boulder-strewn slopes where they are able to shelter in caves during the heat of the day to conserve water and avoid contact with predators such as foxes. They don't need to drink and they feed mainly by browsing on the leaves of certain plants and their fruits.

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. Yardie Creek Gorge is an excellent place to see these special animals.

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 black-flanked rock wallabies pair for life, the females will mate with other males but always return to their original mate. Their agility is impressive and they use their long tails for steering and balance as they move swiftly through the rugged terrain in which they live.

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.

# Animals of Cape Range National Park

### **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 four feet 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

## Short-beaked echidna (Tachyglossus aculeatus)

The short-beaked echidna is the only species of echidna in Australia. It lives in forests and woodlands, heath, grasslands and arid environments. It is an egg-laying mammal (or 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. Source - Australian Museum.







# Animals of Cape Range National Park

### 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 is an egg-laying reptile. It 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.



# Common birds of Cape Range National Park

### Australian bustard (Ardeotis australis)

**Body length** males 105-120cm, females 75-85cm

**Description** 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.



Body length 29-34cm

**Description** adults – distinctly black and white with glossy black head and neck; immature – upper parts dark brown to blackish brown where adults are black.

**Call** a beautiful undulating whistling song.

### **Osprey** (Pandion haliaetus)

Body length 50-65cm

**Description** 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 is white, streaked with blackish brown. There's a blackish streak through 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.







## Common birds of Cape Range National Park











### **Zebra finch** (Taeniopygia guttata)

Body length 10cm

**Description** 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.

### **Eastern reef egret** (Ardea (Egretta) sacra)

Body length 60-70cm

**Description** a medium-sized heron with two colour morphs - one all white, the second dark grey. It has a long neck, comparatively short thick legs and a long thick bill.

## Nankeen (Australian) kestrel (Falco cenchroides)

Body length 30-35cm

**Description** 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.

### Western bowerbird (Chlamydera guttata)

Body length 25-31cm

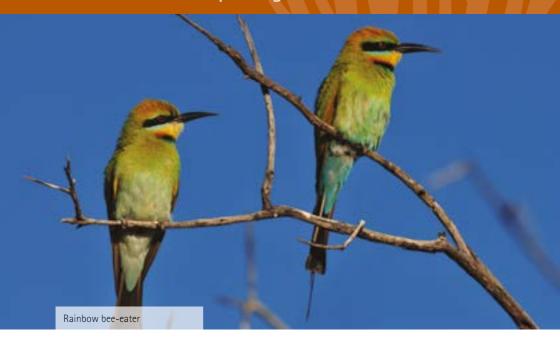
**Description** dark brown on back with rich golden spots. A pink nape crest may be seen. The western bowerbird will imitate other bird calls and human voices

## White-winged fairy-wren (Malurus *leucopterus*)

Body length 11.5-14.5cm

**Description** male (breeding) – a distinctive dark blue with white wings and a deep blue tail; female/ immature - dull grey-brown above, whitish below; lacks red eve-ring: male (eclipse) - like female with a dark hill. The call is a distinctive 'thin' musical. trillina.

## Common birds of Cape Range National Park



### Rainbow bee-eater (Merops ornatus)

Body length 20-25cm long

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

The rainbow bee-eater resembles some kingfishers.

## Emu (Dromaius novaehollandiae)

Body length up to 2m tall

**Description** a very large bird with long legs, dark greybrown 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.





## More information

Parks and Wildlife staff 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 department's Exmouth or Perth offices.

#### Parks and Wildlife Exmouth District Office

22 Nimitz Street (PO Box 201) Exmouth WA 6707

Phone: (08) 9947 8000

Email: exmouth@dpaw.wa.gov.au

### Milyering Discovery Centre

Cape Range National Park Phone: (08) 9949 2808

Email: milyering@dpaw.wa.gov.au

#### Parks and Wildlife Headquarters

Locked Bag 104

Bentley Delivery Centre WA 6983

Phone: (08) 9334 0333 Website: www.dpaw.wa.gov.au

#### Department of Fisheries

10 Maley Street, Exmouth WA 6707

Phone: (08) 9949 2755

Email: headoffice@fish.wa.gov.au Website: www.fish.wa.gov.au

#### **Department of Transport**

21 Maidstone Crescent, Exmouth WA 6707

Phone: (08) 9947 8200

Email: exmouthlicensing@transport.wa.gov.au

Website www.transport.wa.gov.au

#### **Emergency contacts**

Australia-wide emergency phone number: 000

Parks and Wildlife Exmouth District Phone: (08) 9947 8000

Pilbara Regional Head Office Phone: (08) 9182 2000 Milyering Discovery Centre Phone: (08) 9949 2808

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

Photos - All photos are credited to Parks and Wildlife unless otherwise specified.

#### Shire of Exmouth

22 Maidstone Crescent, Exmouth WA 6707

Phone: (08) 9949 3000

Email: records@exmouth.wa.gov.au Website: www.exmouth.wa.gov.au

#### **Exmouth Visitor Centre**

PO Box 149, Exmouth WA 6707

Phone: (08) 9949 1176

Email: reservations@exmouthwa.com.au Website: www.visitningaloo.com.au

#### **Carnarvon Visitor Centre**

21 Robinson St, Carnarvon WA 6701

Phone: (08) 9941 1146

Email: info@carnarvon.org.au Website: www.carnarvon.org.au

### Commonwealth Marine Reserves Branch

Email: marinereserves@environment.gov.au

Phone: 1800 069 352





