# Yawuru

# marine and conservation parks



Visitor guide













Gala bagu warrgarnda jimbin Yawurungan buru. Warranyangany warrajala buru jayida.

Welcome to Yawuru country. Help look after our country.





Cover Walmanyjun, Cable Beach.

**This page, clockwise from top left** Man-galagun, Crab Creek. Ngunungurrugun, Coconut Wells Lagoon. Jabarragun, Reddell Beach. Wirrjinmirr, Willie Creek. *Photos – Matt Deakin* 

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## Yawuru joint management



#### Vision statement

"Yawuru people and partners working together with the wider community to restore, protect and sustainably maintain the cultural, natural, and recreational values of the Yawuru parks for the enjoyment and benefit of present and future generations of Yawuru people and the wider population."





**Above left** DBCA and Nyamba Buru Yawuru representatives. **Above right** DBCA Yawuru ranger. *Photo – Julia Rau* 

For thousands of years Yawuru people have lived along the foreshore and wetlands of Roebuck Bay and the Broome peninsula, across the savannah plains as far inland as the Walangarr (the Edgar Ranges) and along the fringes of the Great Sandy Desert. Yawuru country is land and sea moulded by the cycle of seasonal change, and it is a living cultural landscape with which Yawuru people have a dynamic and enduring relationship.

In Yawuru law everything comes from *Bugarrigarra*, the time when creative beings traversed the country, naming the landscape, defining the languages and setting down rules and customs. Created and given form by *Bugarrigarra*, country is the source of spirit, culture, language, and it is where spirits return when they die. From *Bugarrigarra* Yawuru people have responsibility to look after the country and to ensure that their traditions are passed on to future generations. Every time Yawuru people go out on country, hunting and fishing, they live culture – these activities are an expression of culture and enable Yawuru people to reconnect with country, spirit places, ancestors and *Bugarrigarra*.

Yawuru buru (country) extends from Wirrjinmirr (Willie Creek) north of Broome to *Bangarangara* in the south and east to Yidarr buru (Lake Eda). Yawuru buru comprises a variety of distinct habitats including *niyamarri* (sand dunes) along Cable Beach, to *gundurung* (mangroves) around Willie Creek and Roebuck Bay, to *warnangarri* (rocky country) around Minyirr (Gantheaume Point) and *Bangarangara* and pindan bundurr bundurr east of the flood plains of Gumaranganyjal (Roebuck Plains). Combined with a rich cultural history, these habitats contribute to Broome's iconic character.



## Yawuru joint management



In February 2010, the Department of Biodiversity, Conservation and Attractions (DBCA) came together with Traditional Owners from the Yawuru Registered Native Title Body Corporate (Yawuru RNTBC) and the Shire of Broome to formally enter into two Indigenous land use agreements (ILUAs). The agreements included the creation and joint management of the Yawuru Conservation Estate. Additional parks and ILUAs were created in 2016 and 2020.

The Yawuru marine and conservation parks cover approximately 100,000 hectares of land and water. The four Yawuru parks encompass four different management arrangements and tenures, but are managed in an integrated way by the Yawuru joint management team at DBCA together with joint management partners the Yawuru RNTBC and Shire of Broome:

- **Guniyan Binba Conservation Park**—the intertidal area of north Cable Beach and Willie Creek, including the Coconut Wells lagoon is jointly vested with Yawuru, the Shire of Broome and DBCA.
- Yawuru Minyirr Buru Conservation Park—various lands within the Broome townsite including Minyirr Park, the Reddell coastline and Minyirr (Gantheaume Point) is jointly vested with Yawuru and the Shire of Broome.
- Yawuru Nagulagun / Roebuck Bay Marine Park—the intertidal and subtidal areas of Roebuck Bay, outside of Port waters is jointly vested with Yawuru and DBCA.
- Yawuru Birragun Conservation Park—lands adjacent to Guniyan Binba Conservation
   Park and the marine park, including from Willie Creek, Buckley's plains, Dampier Creek, Crab
   Creek and south around Roebuck Bay beyond Yardugarra is jointly vested with Yawuru and
   DBCA.

The Yawuru parks provide for the aspirations of Yawuru people to continue looking after their lands and water sustainably for future generations. These aspirations are shared by DBCA and the Shire of Broome.

The Yawuru joint management team at DBCA's Parks and Wildlife Service manage the parks with occasional assistance from Yawuru Country Managers (Nyamba Buru Yawuru) and Shire rangers (Shire of Broome).

See page 11 for a map of the parks.

**Above** Roebuck Bay. Photo – Brodie Elsdon

#### Yawuru rangers

The Yawuru rangers are part of the Yawuru joint management team who manage the Yawuru parks.

We work out of the DBCA Parks and Wildlife Service Kimberley Regional office on Herbert Street, Broome.



Day to day we follow joint management plans and complete all sorts of work activities to look after the cultural, ecological and recreation values of all the Yawuru marine and conservation parks.

Some days we are working on the waters of Yawuru *nagulagun* (sea country). Some days we are working on the land and waters of the *birra* (land-side) conservation parks. Most days it's both. Every single day of the year we are doing something somewhere in the Yawuru parks.

Keep an eye out for us and give us a wave.

All Yawuru people have rights and responsibilities to look after country under both Australian and traditional Aboriginal law. Being a Yawuru ranger means this can be our job and our career, and we take that responsibility very seriously.



## Joint management partners





YAWURL

#### Nyamba Buru Yawuru

Yawuru people have occupied and managed to the lands and sea in and around Broome since the *Bugarrigarra*. Despite extraordinary change since European occupation.

Yawuru Native Title was recognized in 2006 over an area of 530,000 hectares. This area includes the land and sea intertidal zone along the south-west Kimberley coast from Wirrjinmirr (Willie Creek) in the north, and around Roebuck Bay to Bangarangara on the southern end of Thangoo Station. To the east, from the ridges of Garuwany near Nilabublica across to the old Dampier Downs Stations and then south past Dipingujarra in the Great Sandy Desert east of Thangoo Station.



**Above** Roebuck Plains Station event.

Nyamba Buru Yawuru (NBY) is a not-for-profit company owned by the Yawuru Native Title Holders to generate income and sustainably manage Yawuru's natural, social, and cultural capital. NBY is committed to a vision of an inclusive and sustainable economy.

NBY's Environmental Services Unit has developed new ways of working together incorporating traditional ecological knowledge with western practices to achieve sustainable land and sea management.



#### **Shire of Broome**

The Shire of Broome local government area covers approximately 56,000 square kilometres of the west Kimberley, including a coastline of 900 kilometres and the world-famous Walmanyjun (Cable Beach). The shire delivers a wide range of services to the community including infrastructure investment and maintenance, waste management, environmental health, planning and Shire ranger services.

The shire has been an active joint management partner for Yawuru conservation parks with Yawuru Traditional Owners and DBCA for over a decade since agreements were completed in 2010.

The shire values the joint management partnership as a means to protect and promote the natural, recreational and cultural values treasured by the people of Broome. The shire values cooperation and collaboration between the various Yawuru conservation park stakeholders and their staff.

The joint management partnership is one of the key ways to meet the Shire of Broome's vision of a Future for Everyone.

**Above** Walmanyjun, Cable Beach. *Photo – Tourism WA*.

## **Customary activities**

### "I been on Country today and I will sleep good tonight"

Gajai Frank Sebastian. Yawuru Nagulagun / Roebuck Bay Joint Management Plan.

Access to country and the ability to carry out customary activities is an important part of Aboriginal culture and connection to the land and sea. Yawuru people are the Traditional Owners and custodians of the lands and waters of the Yawuru. The continuing right of Yawuru people to access their country and maintain customary practices is legally protected and provided for under joint management of the parks.



Above Junie Cattermole (Djiagween) with her catch.



**Above** DBCA Yawuru rangers. *Photo – Julia Rau* 

Customary activities permitted in Yawuru parks include hunting, fishing, gathering plants and other natural resources, and conducting ceremony. Lighting small fires, camping and bringing dogs onto Yawuru parks in association with customary activities are permitted by Yawuru people, although some restrictions apply. Yawuru Rangers can be contacted for clarity. Access to and use of Yawuru country is vital to the health and wellbeing of Yawuru people.

If you see Yawuru people practising customary activities in Yawuru parks, please respect their right to privacy.

#### **Culturally significant areas**

Yawuru parks are part of the living cultural landscape of Yawuru country. Some areas of high cultural significance are recognised in the marine park's zoning scheme. Marine park special purpose zones (cultural heritage) do not restrict access by the broader community. However, access to certain culturally sensitive areas within conservation parks is restricted to Yawuru people and authorised personnel. These are areas of special significance to Yawuru people including *Bugarrigarra* sites, law grounds, burial grounds, historic living areas and many archaeological sites.

Please show respect to Yawuru people by staying on designated paths, obeying signs, and respecting the inherent cultural values of marine park special purpose zones.

## Planning your visit



### Planning your visit to Yawuru marine and conservation parks

Broome is the heart of Yawuru *birra* and *nagula buru*, land-side and sea-side country. With a population of approximately 15,000, rising to 40,000 or more in the dry season, coastal sites are heavily used for boat launching, swimming, fishing, sports, sightseeing and other visitor and recreational activities.

Broome has a tropical climate, considered as semi-arid with a wet (November–April) and dry season (May–October). Average maximum temperature ranges from 28.9°C in the dry season to 34.3°C in the wet season. Broome locals experience subtler year-round seasonal variations, recognised as six seasons in the Yawuru calendar.

Tropical cyclones can be experienced between November and April. Please check weather reports before you travel.



**Extreme heat can be experienced when walking in Yawuru parks.** It is recommended you walk during cooler times of the day. Protect yourself from the sun by wearing sunscreen, a long-sleeved shirt and hat. Remember to always carry adequate water (minimum of 1 litre per person per hour).

The Kimberley coast experiences some of the biggest tides in the southern hemisphere. The difference between high and low tide can be up to 9–10 metres. Keep in mind the large and strong tidal movements. Please take time to study the tide charts during your visit to make the most of your time.



Estuarine (saltwater) crocodiles are present in the Kimberley. Please be aware and read warning signs.

Crocodiles are common, they move around, and are deadly so please BE CROCWISE!



**Irukandji and box jellyfish can cause serious injury.** Both jellyfish are more commonly reported in Broome and the Dampier Peninsula waters from November to June, but cases have been recorded for all months of the year. It is best to stay out of the water during wet season.

For more on how to be safe in Yawuru country see page 36.

**Above** Nagulanjulan, Simpsons Beach. *Photo – Matt Deakin* 

## **Conservation park information**

### Guniyan Binba, Yawuru Minyirr Buru and Yawuru Birragun conservation parks

What can I do there? Walk, sightsee, observe nature, fish

#### **Key recreation sites**

### 1. Walmanyjun (Cable Beach)

Turquoise waters and impeccable white sand. Here you can relax on the beach all day and watch the spectacular sunset over the Indian Ocean. Beach umbrellas and chairs are available for hire during the dry season (May-September).

## 2. Jabarragun (Reddell Beach) 🛣



the turquoise ocean. Beach access tracks are available here.

### 3. Nagulanjulan (Simpsons Beach)



Amazing colours and contrasts of the red pindan and blue water. Enjoy idyllic fishing on high tide. Access is via stairs from the carpark.

## 4. Minyirr (Gantheaume Point) 🖟



Walk along the designated paths for a fantastic view over the turquoise ocean.

## 5. Wirrjinmirr (Willie Creek)



Tidal creek surrounded by saltmarsh and the Nimalarragun wetland. Here you can go sightseeing, fish from the shore or visit the nearby Willie Creek Pearl Farm.

## 6. Nyalanyalagun (Dampier Creek)



Here you can view a great example of a mangrove ecosystem.

#### 7. Ngunungurrugun (Coconut Wells Lagoon)



A linear lagoon parallel to the shore that fills during spring tides.

### 8. Man-galagun (Crab Creek precinct)



A four-wheel drive is required to access this precinct as it contains dirt tracks only. Several day use sites are adjacent to Roebuck Bav.

### 9. Gurlbinwila beach 🐔 📚 🧩 🥵 access ramp









Launch your boat from the beach at high tide for fishing and sightseeing opportunities or fish from the shores.

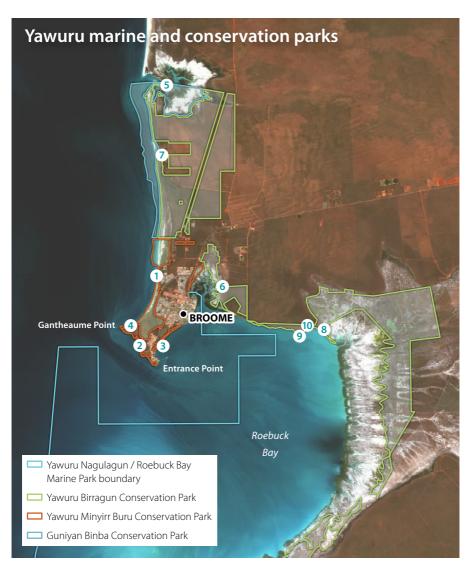
#### 10. Broome Bird Observatory 🔁 🗯 🚍 (BBO)







Roebuck Bay has the greatest diversity of migratory and resident shorebirds species. The BBO has a discovery centre and offers accommodation, camping and tours. For more information visit broomebirdobservatory.com











## **Conservation park information**



#### Minyirr Park walk trails

Minyirr Park is of great cultural significance to Yawuru people and sits between Gubinge Road and the sea. The Minyirr Trail runs between Minyirr Park Base Camp and the Broome Surf Lifesaving Club, intersecting seven *nagula* (saltwater) trails at various distances. It covers *bundurr bundurr* (pindan) country and *niyamarri* (sand dune) country and cuts through pockets of monsoonal vine thickets, rich with seasonal bush foods important to Yawuru people.

#### Walk trail classification



All trails are rated class 3 and are suitable for most ages and fitness levels. Hiking experience is recommended as trails may have short steep hill sections, rough surfaces and natural steps. There is no water along the trail system. Wear sturdy footwear, follow the trail markers and remain on the trail, for your own safety.

#### **Cycling**



Limited cycling is permitted on Minyirr Park walking trails. Riding at speed is not permitted. Riding on or crossing sand dunes is not permitted. Cyclists must give way to and maintain respectful distance from pedestrians, including walkers, dog walkers and runners.

**Above** Yawuru Minyirr Buru Conservation Park. *Photo –Matt Deakin* 

### Dogs in Yawuru conservation parks



Dog walking is a popular activity that occurs across the Yawuru conservation parks, particularly within Minyirr Park due to its close proximity to Broome. The Shire of Broome manages dogs in public places and provides open spaces for exercising

dogs at Cable Beach, Reddell Beach and Entrance Point. If your dog is not in a specified exercise area it must be on a leash at all times – this includes in Minyirr Park. Please remember to always pick up after your dog. "Poo pouches" are available at many locations around Broome or from the Shire of Broome office. Visit **broome.wa.gov.au** for more information.

### **Camping and firewood**





There are no designated camping areas within the Yawuru parks due to the close proximity to Broome. Camping is available at Broome caravan parks or the Broome Bird Observatory. Visit **visitbroome.com.au** for more

information. Firewood collection is not permitted in the parks.

#### Vehicles in the Yawuru parks





Unlicensed vehicles (including off-road motorbikes, all-terrain vehicles (ATVs), and off-road

buggies) are not permitted in the Yawuru parks. All vehicles must be road registered and operated by a licenced driver. Beach driving in Yawuru parks is only permitted on Cable Beach from the access ramp through north of the rocks and must be below the high tide mark – speed restrictions and seasonal and periodic closures apply. Driving in the sand dunes is not permitted. Ensure you are well prepared and have adequate experience for beach driving to navigate soft sand and tidal ranges. Vehicles operating outside of existing roads and gazetted areas adversely impact on the environmental, cultural and recreational values of Yawuru parks. Some tracks are restricted to authorised vehicles only.

### Illegal dumping

Illegal dumping of general and green waste not only impacts wildlife but is also a public safety concern. People caught illegally dumping face serious fines. Please report any illegal dumping in Yawuru parks to Parks and Wildlife Service, Broome on (08) 9195 5500 or on DWER's pollution watch hotline 1300 784 782 (24 hours) or via pollutionwatch@dwer.wa.gov.au



**Above** Walmanyjun, Cable Beach. *Photo – Tourism WA* 



**Above** DBCA Yawuru ranger. *Photo – Julia Rau* 

## **Conservation park information**

Above Bilby. Photo - Bruce Greatwich



Above Brolga.



Above Bush turkey. Photo - Bruce Greatwich

#### Wildlife

#### Bilby (Macrotis lagotis) - Vulnerable

#### Yawuru name: nalaumirdi

*Nalgumirdi* is a medium-sized marsupial that is best known for its rabbit-like ears. It has a long. silky blue-grey fur and a long crested tail with a white tip. *Nalqumirdi* are solitary, nocturnal animals, spending daylight hours in their deep, spiral shaped burrows and emerging at night to forage for plant roots, bulbs, fungi, grass seeds, termites, ants, beetles, insect larvae and spiders.

#### Brolga (Grus rubicunda)

#### Yawuru name: qudurrwarany

The *qudurrwarany* is a large grey crane, with a featherless red head and grey crown. Their legs are grey and there is a black dewlap (piece of skin) under their chin. They are known for their spectacular dance displays by both sexes during breeding season. Gudurrwarany are omnivores and eat bulbs and edible roots, insects, molluscs. crustaceans, frogs and lizards. They gather in large numbers on Gumaranganyjal (Roebuck Plains) and mate on the grassy plains during Laja (October-November)

#### Australian Bustard (Ardeotis australis)

#### Yawuru name: barrgara

Barrgara is a large ground bird living in grassland, woodland and open country across Australia. Barrgara are grey-brown with speckled dark markings, and a pale neck. There are bold black and white markings on its wing. They feed on abundant insects in Marrul (April). In Wirlburu (May-June) they lay their eggs.

## Yellow-spotted Monitor (Varanus panoptes)

#### Yawuru name: jalangardi

Jalangardi has large, dark spots thats appear in rows along its back. Jalangardi is a robust ground-dwelling monitor occupying a variety of habitats, including coastal beaches, floodplains, grasslands and woodlands. Jalangardi are hunted in Marrul (April) when they are fat!

#### Echidna (Tachyglossus aculeatus)

#### Yawuru name: jiribuga

Jiribuga is a small spiney anteater which can survive a variety of habitats. Covered with long, brown-black and golden spines. Under the spines, the echidna's body is covered with fur. Its long, tubular and toothless snout is naked. The tongue is long and sticky and is around 18 cm long. Jiribuga are one of only two Australian mammals that lay eggs. The baby hatches after 10 days and is carried around by the mother for two months in a pouch-like skin fold. The baby is called a 'puggle'.

#### Flying foxes

## Black Flying-fox (*Pteropus alecto*) Little Red Flying-fox (*Pteropus scapulatus*)

#### Yawuru name: Black Flying-fox – *nimanburr*, Little Red Flying-fox – *ngalminyaminya*

There are two species of flying-fox in Broome, the larger *nimanburr* (Black Flying-fox) and smaller *ngalminyaminya* (Little Red Flying-fox). Both species roost in the *gundurung* (mangroves) of Roebuck Bay. They then spread out in all directions in search of food each night, feeding on eucalyptus blossom, native fruit trees and introduced fruit trees. Bats are vital for the maintenance of biodiversity as they pollinate through flower to flower contact and disperse seeds through their guano (bat droppings).



Above Yellow-spotted Monitor.



**Above** Echidna. *Photo – John Lawson* 



Above Black Flying foxes.

## **Conservation park information**

#### Fire, weeds and ferals

Fire management, weed management and feral animal management are a key focus of Aboriginal and non-Aboriginal rangers across the Kimberley and across northern and southern Australia. Yawuru parks and rangers are no different. The Yawuru joint management team is also active in visitor management, research and monitoring, cultural knowledge projects, and various flora and fauna projects, amongst other joint management plan activities. Our work is diverse, rewarding and constant! For more information on Aboriginal rangers, protected area management, or to report any concerns with fire, weeds, or feral animals in Yawuru parks, please contact Parks and Wildlife Service, Broome office on (08) 9195 5500.



Above Cane toad on grass.

#### Cane toads

Cane toads crossed the Western Australia / Northern Territory border in 2009. Since then, they have been steadily making their way west at an average rate of 50 kilometers a year. Cane toads are a declared pest and pose a serious threat to native wildlife due to their toxicity when consumed. DBCA is committed to reducing the impact on native wildlife through investing in several programs to mitigate the impact of cane toads.

For more information visit dbca.wa.gov.au/parks-and-wildlife-service/threat-management



### **Dinosaur foot prints**

The Broome sandstone is of high heritage value. It contains numerous fossils, including those of extinct plants and the greatest variety of dinosaur foot prints of any area in the world.

These foot prints, along with other fossils in Broome sandstone, are protected and were recognised for their outstanding heritage value when the west Kimberley was added to the National Heritage List in 2011.

Most of the tracks are in the intertidal zone accessible at low tide. The Dampier Peninsula tracks belonged to four types of dinosaurs – sauropods, theropods, ornithopods, and thyreophorans. Tracks of ornithopods and thyreophorans also occur on the Peninsula.

Dinosaur tracks can be viewed at various locations around Broome on low tide including within Yawuru parks. For more information visit **dinosaurcoast.org.au** 



**Above** Dinosaur foot print. *Photo – Damian Kelly.* 

#### **Threatened Ecological Community (TEC)**

Rare groups of plants, animals and other organisms interacting in a unique habitat. These communities are protected under the State and Commonwealth law. Refer to **dbca.wa.gov.au/wildlife-and-ecosystems/threatened-ecological-communities** for more information.



#### Monsoon Vine Thickets

#### Mayingan manja balu (Vine thickets) - Endangered (TEC)

The vine thickets of Broome and the Dampier Peninsula are a very distinctive type of rainforest and comprise some of the oldest and most important trees in the Broome area. This community of *mayingan manja balu* is registered as a TEC. It occurs as discrete areas of dense vegetation and can occur as a stand of a few trees or as larger patches. Several tree and tall shrub species are common to many occurrences. Trees include marool or blackberry tree (*Terminalia petiolaris*), currant or coffee fruit (*Grewia breviflora*), *goonj* (*Celtis strychnoides*), ebony wood (*Diospyros humilis*), *nangi* (*Sersalisia sericea*), broad-leaved cherry (*Exocarpos latifolius*), *walara* (*Mimusops elengi*), bauhinia or jigal tree (*Bauhinia cunninghamii*) and *Gyrocarpus americanus* subsp. helicopter tree (*pachyphyllus*). *Mayingan manja balu* are listed as endangered under the *Environmental Protection and Biodiversity Conservation Act 1999*.

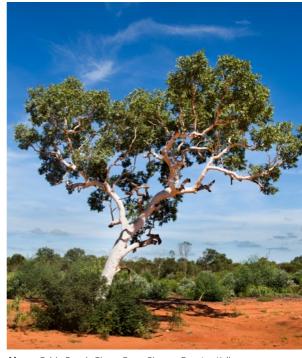
## Priority Ecological Communities (PEC)

Rare ecological communities with insufficient information available to be considered a TEC.

## Cable Beach Ghost Gum (Corymbia paractia)

#### Yawuru name: gunurru

There are several white-trunked eucalypt species in the Broome area, but *Gunurru* is special as it's endemic to the Broome area. Flower-buds form during *Laja* (October–November) and white flowers are produced during early *Man-gala* (December–March). *Gunurru* provides shelter for many animals. Historically it has provided great wood for coolamons and coals. In 2014, less than 260 hectares of the Ghost Gum community was thought to remain. *Gunurru* is a Priority One Ecological Community (PEC).



**Above** Cable Beach Ghost Gum. *Photo – Damian Kelly* 

## **Conservation park information**



Above Gubinge tree



Above Gubinge fruit. Photo - Kimberley Wild Gubinge



Above Minyjuru fruit.

#### **Flora**

#### Gubinge (Terminalia ferdinandiana)

#### Yawuru name: yaminyarri

Yaminyarri is a spreading tree than can grow to 14m with its pale green leaves, yellow/white flowers and green fruit. The mayi (bush fruit) of the yaminyarri is edible and contains a high amount of vitamin C driving local and national demand for commercial harvests.

Picking fruit for commercial sale is not permitted in Yawuru parks.

These rules must be followed to ensure sustainable commercial harvest of the mayi outside Yawuru parks::

- Protect our yaminyarri trees by not damaging limbs or stripping the tree of all its fruit.
- Fruit can't be sold without a licence You can apply for a licence by emailing wildlifelicensing@dbca.wa.gov.au.
- Written permission from the land holder and / or native title holders is required for your licence application. A maximum penalty of \$50,000 applies for taking protected flora without a licence.
- Do not pick fruit for commercial purposes from Yawuru parks, which includes most of the bush surrounding the Broome townsite, north of the rocks to Willie Creek and the Crab Creek area.

#### Wild prune tree (Sersalisia sericea)

#### Yawuru name: minyjuru

Minyjuru has little yellow-green bubu (flowers) and edible, dark purple sweet mayi (bush fruit). The mayi is sweetest when dried and tastes like prunes. Beehives of the stingless Australian native bees can often be found in the trunks of Minyjuru. The large branches provide shelter for many animals



### Yawuru Nagulagun / Roebuck Bay Marine Park

Yawuru Nagulagun / Roebuck Bay Marine Park is located east and south of Broome throughout Roebuck Bay, not including port waters. The marine park covers an area of approximately 78,800ha from Minyirr (Gantheaume Point) in the north to Miriny (Cape Villaret) in the south, and includes subtidal and intertidal areas to the high-water mark. It contains some of the most productive tropical intertidal flats in the world, making it very important for Yawuru fishing, hunting and gathering seafood. It is one of the most important staging sites for migratory *gamirda-gamirda* (shorebirds) globally. Seagrass and macroalgae communities provide food for protected species such as the *nganarr* (dugong) and flatback turtle. Marine mammals such as the Australian snubfin dolphin and Australian humpback dolphin frequent the waters of the bay. All marine mammals and turtle species in Western Australian waters are protected under State and Commonwealth law.

What can I do there? Boating, fishing and observing marine life

Boat access via beach access ramps Entrance Point, Town Beach, Catalinas and Gurlbinwila

### **Fishing**

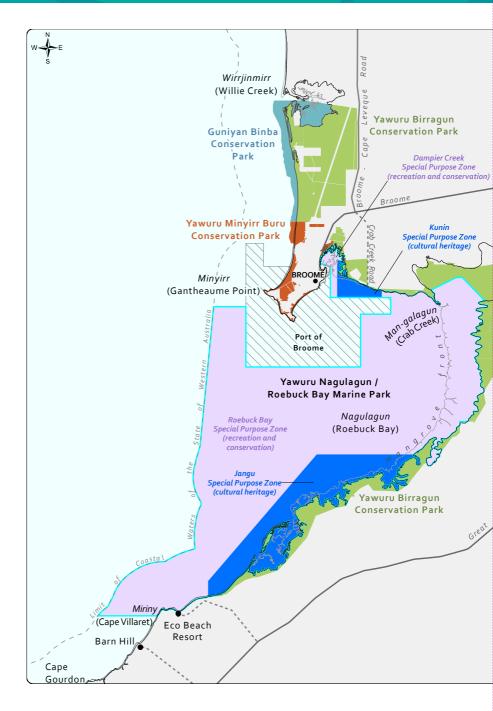




The marine park is popular for recreational and customary fishing, targeting various marine fish species. The key areas include Man-galagun (Crab Creek) and Dampier Creek in the north and Yardugarra Creek and

Yinananmana-gada (Jacks Creek) in the south. Recreational fishing is managed by the Department of Primary Industries and Regional Development. A licence is required to fish from a boat or use a throw (cast) net. Please refer to **fish.wa.gov.au** for bag and size limits.

Above Dolphin research in Roebuck Bay.





### Marine park zoning

Marine park zoning schemes provide conservation of marine biodiversity, increased recognition and protection of culturally significant areas and customary practices, and the management of human use in the marine park. The parks zoning scheme is currently general use, comprising two special purpose zones (cultural heritage) covering approximately 11,850ha (or 15% of the marine park) and two special purpose zones (recreation and conservation) covering approximately 66,990ha (or 85% of the marine park).

#### Special purpose zones (cultural heritage)

Protects and recognise areas of high cultural significance to Yawuru people and to protect ecological values. These zones are not restricted to the general public, however there are access restrictions to the adjacent terrestrial areas in the Yawuru Birragun Conservation Park.

### Special purpose zones (recreation and conservation)

Protects the ecological, recreational and cultural values of Roebuck Bay.



Above Snubfin dolphin. Photo - Ellen D'Cruz



Above Dugong. Photo - DBCA

#### Snubfin dolphins (*Orcaella heinsohni*)

Snubfin dolphins were formally described as a species in 2005 and are known to be endemic to Northern Australia and Papua New Guinea. In Western Australia, snubfins are mainly found in the Kimberley. In Roebuck Bay, the population size of snubfin dolphins is estimated at around 100 individuals, making it the largest known population in the Kimberley region. They are dark on top, a lighter shade of brown around the middle and their belly is white. They have a rounded forehead with no beak, unlike most other dolphin species in Australia. During their life they get scars, nicks and notches on their dorsal fin which can be used as natural tags to tell individuals apart. The FinBook Roebuck Bay has been created to record and monitor these individuals. Visit **riverguardians.com** to access the book

#### Dugongs (Dugong dugon)

#### Yawuru name: nganarr

Nganarr occur throughout the subtropical and tropical Indo-West Pacific, with most of the population distributed across northern Australia. Nganarr is a large, grey brown mammal with a flattened fluked tail, no dorsal fin, paddle like flippers and distinctive head shape. The broad flat muzzle and mouth are angled down to enable ease of grazing along the seabed. Eyes and ears are small reflecting the animal's lack of reliance on these senses. They are regularly seen in the marine park and are culturally significant to Yawuru people.

#### **Turtles**

Of the seven marine turtle species found globally, five species are known residents and migrants to the marine park: the flatback (*Natator depressus*); green (*Chelonia mydas*); loggerhead (*Caretta caretta*); olive ridley (*Lepidochelys olivacea*); and hawksbill (*Eretmochelys imbricata*). *Gurlibil* (green turtles) are culturally significant to Yawuru people. Turtles nest on beaches within Yawuru parks.



**Above** Cable Beach Community Turtle Monitoring Program.



#### **Nesting turtles**

Female turtles come ashore to lay eggs between October and March in the southern Kimberley. Walmanyjun (Cable Beach) and Eco Beach are significant local nesting sites for flatback turtles. The Cable Beach Community Turtle Monitoring Program has been underway since 2006. Vehicle access to the beach is restricted during nesting season.

#### Viewing nesting turtles

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. It is important to follow the guidelines below when viewing nesting turtles to reduce disturbance;

- **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. It is important to follow the guidelines below when viewing hatching turtles to reduce distrubance;

- **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.

Please keep your dog on a leash or at home when visiting beaches in nesting season.





Above Adult flatback turtle. Above right Flatback turtle laying eggs.

#### Stay below the dunes to avoid trampling on nests and emerging hatchlings. HATCHLINGS Around 60 days after laying eggs. HIGH EMERGING Turtle covers egg chamber with sand using rear flippers then gradually moves forward, camouflaging nest, flicking lots Crawls back from beach to ocean. Estimated time 20-40mins Estimated time 20-40mins 3m RETURNING TURTLE **COVERING NEST** of sand into air. 15m Keep your distance. 5 9 Turtle remains very still, with a gentle heaving motion. If her flippers are moving and sand is LOW being flicked she is NOT laying. Estimated time 3-10mins keeping the light partially covered. DISTURBANCE LAYING EGGS use of red iaht only Discrete **RISK OF** MEDIUM 4 2m with rear flippers only. Rocking **EXCAVATING EGG CHAMBER** Sand stops being flicked as Estimated time 10-20mins H motion side to side. Crawls from ocean towards nesting area. Estimated time 5-20mins 3 eep your may move and repeat this process EMERGINGTURTLE Lots of sand flicked into the air using front flippers only. Turtle until finding the correct spot. Estimated time 20-40mins DIGGING BODY PIT

NO GLOW: Nesting turtles and hatchlings are easily disturbed by lights, use the moon to light your way. MOVE SLOW: To avoid disturbing turtles, walk along the water's edge.

STAY LOW: Out of sight of nesting turtles – sit, crouch or lie in the sand.

LET THEM FLOW: Let hatchlings make their own way to the ocean, they take an imprint of that beach so they can return to the same area when they are ready to mate and lay eggs. Try not to get between hatchlings and the water's edge.

on turtle nesting No dogs nesting beaches

photography

No flash

at any time

Don't drive on turtle nesting

#### **Shorebirds**

The shores of the marine park provide an important refuge for many *gamirda-gamirda* (shorebirds) and seabird species. The bay regularly hosts more than 100,000 shorebirds, with the highest numbers between late October and early March.

Many migratory *gamirda-gamirda* species breed in the northern hemisphere as far north as China and the Russian Arctic. They call Roebuck Bay home for much of the year as a foraging and staging site on the East Asian–Australasian Flyway during the long northern winter. About 14 species are regularly present over the Kimberley wet season. In contrast, the resident shorebirds stay all year round, feeding, resting and nesting along the coast. Much of the area, including the intertidal flats, mangroves and subtidal fringe, was declared a **Ramsar Wetland of International Significance in 1990**.

Gamirda-gamirda predominantly feed in the bay's intertidal and shoreline areas, particularly around Bush Point and the bay's northern shores east of town. Feeding, resting and nesting are three very important activities in the life of a shorebird or seabird. Disturbance to gamirda-gamirda 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.

Many *gamirda-gamirda* are threatened species and disturbance can carry heavy penalties under State and Commonwealth law.

You can help *gamirda-gamirda* by keeping your distance, staying below the high tide line to avoid disturbing nests, keeping dogs on leashes and avoiding four-wheel driving on beaches.

#### Do not use drones near shorebirds.

The Broome Bird Observatory (BBO), surrounded by the Yawuru marine and conservation parks, was established in 1987. The BBO is a key project partner of the Yawuru parks.



**Above** Eastern Curlew. *Photo – Olivia Garcey* 

## Common shorebird (Gamirda-gamirda) species

Eastern Curlew (Numenius madagascariensis)
- EPBC Act Critically Endangered

#### Body length 63cm

The Eastern Curlew is the largest shorebird that visits Australia, with a very long down-curved bill. The female's bill is usually longer than the male's and averages 185mm in length. It is a bulky, dark-streaked brown wader, with a long neck and legs.

## Great Knot (*Calidris tenuirostris*) - EPBC Act Critically Endangered

#### **Body Length 27cm**

Medium-sized shorebird with a straight, slender bill and a heavily streaked head and neck. They are usually seen in non-breeding plumage: grey upperparts with pale scalloping and a white rump, and white underparts with heavy streaking on the neck, grading to spots on the breast.



#### Body length 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.



#### **Body Length 42cm**

Gangly wader with a long bicolored bill. Nonbreeding plumage is overall gray-brown with white belly; compare to Black-tailed Godwit.

## 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.



Above Great Knot.



**Above** Greater Sand Plover.



Above Bar-tailed Godwit.



Above Pied Oystercatcher. Photo - Ben Vasic.

#### **Benthic invertebrates**

Intertidal sand and mudflats are a major habitat and significant component of both the Yawuru Nagulagun / Roebuck Bay Marine Park and Guniyan Binba Conservation Park. The intertidal flats of Roebuck Bay are among the widest in Western Australia, extending up to 13km offshore, and form the largest habitat in the marine park. They support one of the world's highest high diversity of invertebrates, including crabs, other crustaceans, bivalves, gastropods and marine worms. These communities provide an important food source for migratory and resident *gamirda-gamirda* (shorebirds) as well as roosting habitat at low tide.

#### **Finfish**

Yawuru Nagulagun / Roebuck Bay Marine Park and Guniyan Binba Conservation Park contain a diversity of finfish species that provide an important ecological function as well as opportunities for customary and recreational fishing.

Of particular significance to Yawuru people are *gurlban* (mullet), *yingarliwa* (bluebone), *walga walga* (blue nose salmon), *birrala* (threadfin salmon) and *murruwaran* (queenfish).

Recreational fishing is managed by the Department of Primary Industries and Regional Development. Please refer to **fish.wa.gov.au** for bag and size limits.



Above Mullet.



Above Bluebone.

#### Mullet (Mugilidae)

#### Yawuru name: gurlban

Gurlban are distinguished by the presence of two separate dorsal fins, small triangular mouths in which they feed on detritus. Gurlban are known to be 'fat' during the Barrgana (June–August) when the south-easterly winds blow, the nights are cold and Gumanyba (the Seven Sisters star cluster) shines brightly.

#### Bluebone (Choerodon schoenleinii)

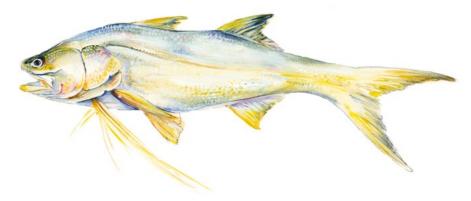
#### Yawuru name: yingarliwa

Yingarliwa is a large bluish-green tuskfish with a small prominent black spot at the base of last dorsal-fin spine. Feeds on hard-shelled prey including crustaceans, molluscs and sea urchins. Barnany nyurdany warli (reef fish) such as yingarliwa begin to get 'fat' during Wirlburu (September) and are ready to harvest through Laja (late September–November) and Man-gala ('the wet', December–March).

## Bluenose salmon (*Eleutheronema tetradactylum*) and Threadfin salmon (*Polydactylus macrochir*)

#### Yawuru name: bluenose - walga-walga, threadfin - birrala

Walga-walga are known as 'four finger' salmon as they have four short pectoral filaments. Birrala are a larger species and have five, yellow pectoral filaments. Both feed on moving prey such as worms, prawns and crabs hiding in the mud and sand by picking up vibrations from their filaments. Both are known to be 'fat' during the Barrgana (June–August).



Above Threadfin salmon. Illustration – Gem Taylor Art

#### Queenfish (Scomberoides)

#### Yawuru name: murruwaran

*Murruwaran* are bluish-green to bluish-grey becoming silvery white below, with 5–8 vertically elongate or dark oval spots along the side. *Murruwaran* are known to be 'fat' during *Barrgana* (June–August).





#### **Seagrass**

A variety of marine plants are found in the marine park which provide important habitat, food and refuge areas for many species. Seagrass and macroalgae communities provide energy and nutrients for *qurlibil* (green turtles) and *nganarr* (dugong).

Seagrass forms extensive meadows in the lower intertidal areas of the marine park, dominated by oval leaved paddleweed (Halophila ovalis) and narrow-leaf seagrass (Halodule uninervis). Subtidal seagrass thrives where sufficient sunlight reaches the seafloor.

A community seagrass monitoring program has been running since 2007 by Environs Kimberley. This program complements other marine park seagrass projects and provides an eye-opening opportunity for locals and visitors to contribute to important marine science. For more information see 'Getting involved' on page 38.

#### **Mangroves**

Gundurung (mangrove communities) provide critical habitat for many important marine and terrestrial wildlife species and are a major food source for marine animals. *Gundurung* are common over much of the eastern and northern shores of Roebuck Bay, especially at Dampier Creek and Man-galagun (Crab Creek), as well as at Wirrjinmirr (Willie Creek) north of Broome. Eleven Gundurung species have been identified in Yawuru parks.

Gundurung hold cultural significance for the Yawuru people, providing mayi (food), shelter and wood supplies.





#### Estuarine (saltwater) crocodiles (crocodylus porosus)

#### Yawuru name: linygurra

Linygurra (commonly known as 'salties') are most likely to be encountered in tidal rivers and estuaries, billabongs and on the floodplains of the Kimberley. They can also be found in the open sea. Despite what the name suggests, linygurra are not found exclusively in saltwater. They can be found any waterway in WA's North West. Linygurra have been known to grow up to seven metres and is a dangerous predator. Linygurra have a varied diet, but it feeds mainly on fish, waterbirds and occasionally large land mammals, such as wallabies. Their large size, broad snout and arrangement of bony scales on the top of their head and neck allows easy identification in the wild.



Crocodile Control Zone

Estuarine (saltwater) crocodiles are dangerous, and attacks can be fatal. Be Crocwise when recreating around the water in the Kimberley.

Broome has a crocodile control zone which runs from just north of Coconut Wells (excluding Willie Creek) to Fall Point (eastern side of Dampier Creek). Please report crocodiles in this area by providing the following information to Parks and Wildlife Service, Broome office (08) 9195 5500:

Your name and phone number, location, time of day, type of crocodile, travel direction, what the crocodile was doing, estimated size and if there are any people in the water nearby. If it is possible and safe to do so, please take a photo to include with the above information.

Broome beaches will be closed if a crocodile is reported in the control zone and signs will be displayed to show beach closures.

www.dbca.wa.gov.au/crocodiles



#### **Whales**

#### Humpback whales (Megaptera novaeangliae)

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 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.

Humpback whales are highly migratory, moving between summer polar feeding areas and winter tropical breeding and calving grounds. Broome is a significant location on the humpback whale's migration journey as they travel to their calving grounds of Camden Sound. Whales can be spotted from boats or the shoreline of Yawuru parks from Entrance Point north to Willie Creek from July to September.

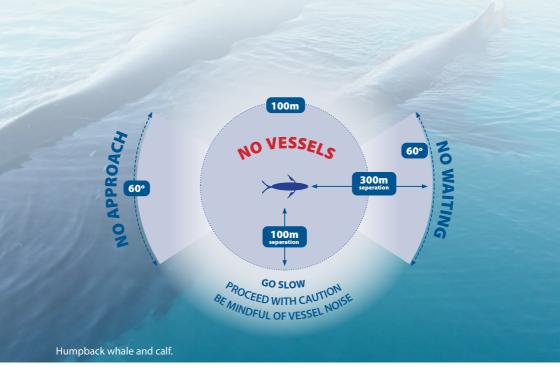
If you see an entangled whale or any marine mammal in distress please call the Parks and Wildlife Service, Broome office on (08) 9195 5500 or the Wildcare helpline on (08) 9474 9055.

Above Humpback whale.

#### Rules for watching whales from a boat

- 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, the vessel master must move the vessel, at a speed less than five knots, away from the whale until the 100m separation distance has been re-established.
- 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.
- Vessels must move out of a contact zone if whales are visibly disturbed (includes behaviour such as extended diving or evading vessels).
- · Aircraft including drones 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.



## **Safety information**

Please enjoy your time in the Yawuru parks and remember that your safety is our concern but your responsibility.

#### **Be Crocwise**



Crocodiles are common in WA's North West.

Crocodiles move around and have been known to frequent creek systems and beaches in and around Yawuru parks.

Crocodiles are deadly and attacks can be fatal.

Be Crocwise. Don't become complacent.

#### Heat risk



Extreme heat can be experienced when walking in the Kimberley. Temperatures can exceed 40°C. It is recommended you walk during the cooler times of

the day. Protect yourself from the sun by wearing sunscreen, a long-sleeved shirt and hat. Carry enough water, minimum 1 litre per person per hour. Avoid dehydration by drinking small amounts regularly.



1 litre per person, per hour

### Vulnerable and exposed cliff edges



When visiting coastal areas of Yawuru parks and surrounds please don't stand on cliff edges as they are fragile, slippery and crumbling can occur.

Please do not jump off the rocks into the ocean as there are large, submerged objects that could cause serious injury or fatality.



#### **Snakes**



A variety of snakes reside in Yawuru parks, including Minyirr Park. It is important that you keep an eye

out whilst walking along Minyirr Park trails. Ensure your dog is on a lead to protect native animals and park users. Snakes are an important part of the natural environment and there are many species throughout the Kimberley. If you come across a snake while walking in the bush, STOP and wait for the snake to move away from you.



**Above** King Brown (*Pseudechis australis*).



#### emergencyplus.com.au

emergencyplus

Download the free Emergency+ app before your visit. Use the app in an emergency to call for assistance. If there is no mobile phone coverage you WILL NOT be able to call 000 but the app will provide you with your GPS location.

DBCA Yawuru rangers. Photo – Julia Rau

## **Getting involved**



**Above** Friends of Minyirr Park.

Various accessible research, monitoring and public participation programs are underway in Yawuru parks. Visitors and locals alike are encouraged to seek out opportunities to contribute to park management including via the Broome Community Seagrass Monitoring Program (via Environs Kimberley), Cable Beach Community Turtle Monitoring Program, Friends of Minyirr Park, and shorebird activities with the Broome Bird Observatory.

Members of the public are encouraged to report sightings of snubfin dolphins through the Marine Sightings app and there is a FinBook Roebuck Bay available to identify individual snubfin dolphins in the area. Visit **riverguardians.com** to access the finbook.

#### If you are a local resident...

The Yawuru marine and conservation parks provide special places for Broome residents to visit all year round – by car, by boat, and on foot. For some Broome people, Yawuru parks may be at the end of the street or even over the back fence. Yawuru rangers and the joint management team are keen to hear from you. Contact Parks and Wildlife Service, Broome office on (08) 9195 5500.



## Caring for the parks

Help conserve and protect Yawuru parks to keep them beautiful for years to come.

Plan ahead and prepare: Your enjoyment and safety are our concern but your responsibility.

**Travel on durable surfaces:** Keep to the track to reduce erosion and weed spread.

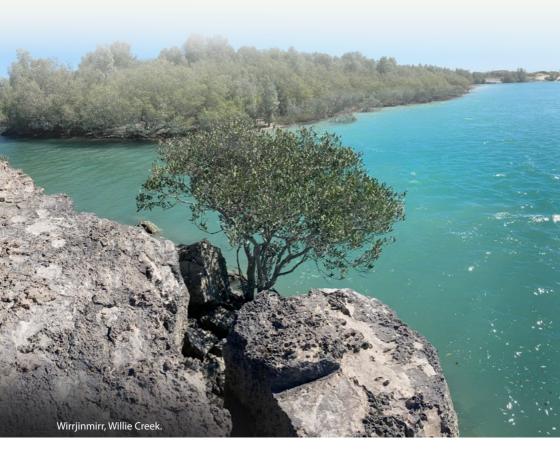
**Respect wildlife:** Do not disturb or take any animals, plants, shells or rocks. Watch out for wildlife crossing the road.

**No camping or lighting fires:** Avoid the risk of bushfire. Camp only in appropriate accommodation available in town or at the BBO.

**Dispose of waste properly:** Please use the bins provided or take your rubbish with you.

**Leave what you find:** Leave things as you find them for all to enjoy.

**Be considerate of your hosts and other visitors:** You are visiting Yawuru country. Please travel safely and respect *Yawuru birra* and *nagula buru*, land-side and sea-side country.



#### DBCA Parks and Wildlife Service, Broome office

111 Herbert Street, Broome WA Ph: (08) 9195 5500 **dbca.wa.gov.au** 

#### Nyamba Buru Yawuru

55 Reid Rd, Cable Beach Ph: (08) 9192 9600 yawuru.org.au

#### Shire of Broome

Cnr Weld and Hass St, Broome Ph: (08) 9191 3456 **broome.wa.gov.au** 

#### Broome Volunteer Sea Rescue Group (Inc)

Ph: 0447 912 820

broomesearescue.org.au

#### **Broome Bird Observatory**

Crab Creek Rd, Broome 6725 Ph: (08) 9193 5600 **broomebirdobservatory.com** 

#### Native Animal Rescue: Broome

Ph: 0407 773 258 nativeanimalrescue.org.au

#### **Bureau of Meteorology**

Ph: 1800 754 389 bom.gov.au/wa/forecasts

## Department of Primary Industries and Regional Development, Broome office

401 Port Drive, Broome WA Ph: (08) 9193 8600 **fish.wa.gov.au** 

Visit **exploreparks.dbca.wa.gov.au** for more information about the parks specified within this guide.



Information current at April 2024. This information is available in alternative formats on request.

Photos – All photos are credited to DBCA unless otherwise specified.







