

fish of the coast

Many people come to the south coast to fish, snorkel or dive. In this region you are likely to come across a great variety of fish including many that are rare in other areas. Of the 600 species of fish that live along the south coast of Australia over 80 have been identified in this local region. Whether you are here to look, or hunting for a catch, you may enjoy seeing Western Blue Groper and Queen Snapper or even the rare Large Tailed Cardinal Fish in the Ocean. Even more surprisingly you could encounter one of the less common sub tropical fish that live here including the Western King Wrasse and Woodward's Pomfret. Broadly speaking you can expect to find fish of temperate Australian waters here. Beach fishermen regularly catch Australian Herring or Skippy and occasionally Groper from the beach, and from the inlets, with the right conditions, black bream. Perhaps the most notorious fish in Australian waters, also found off the South coast, is the Great White Shark. The Great White is a protected species in Australia.

other ocean treasures

This coastline is a particularly good source of other treasured sea food including the sea snail Abalone and the Southern Rock Lobster. The abalone sea snail is one of the most valuable near shore resources harvested off of the south coast. Three types of Abalone are harvested, Roes, Greenlip and Brownlip, all three are known to occur along this section of coastline. Abalone, which has to be harvested under licence and in season, is popular with both recreational and commercial divers. In Asia, the main commercial market for abalone, the humble sea snail is attributed with many special properties-see the display at the Southern Ocean Discovery Centre for more information.

fishing for a living

In addition to abalone, commercial Rock Lobster fishing is also important along the south coast. Offshore, fish caught commercially include leatherjackets, hapuka and grey-banded rock cod, boarfish and deepwater flathead. In deeper water spur dog shark and blue eyed trevalla, and closer inshore bight redfish, queen snapper and blue groper are harvested. Seasonally some fishing for scallops, and purse seine fishing for pilchard takes place.

beachcombing - shells

The range of shells that you might find on the beach, along with pieces of sponge, barnacles attached to driftwood, crab claws, a seadragon skeleton or the blue bottle also known as the Portuguese man of war, all give testament to the riches of the Australian Southern Ocean. A great range of scallop or fan shells can be found, elephant snail shells and violet shells to name a few. There is always the promise when visiting the beach of finding one of the rarer large baler shells, colourful cowrie or a paper nautilus-the egg case of an Argonaut a relative of the octopus. On your next visit to the beach keep your eyes peeled and take a record book-The Deck in Hopetoun sells an excellent beachcombing guide book.

seaweed & seagrass

Most of us come into contact with sea grass and seaweed following storms when it is washed up onto the shoreline. Those who snorkel or dive will have seen it in its natural beauty as it sways with the movement of the ocean. Following a storm if you take time to study the beach bounty you will see that the south coast hosts a wide range of different species of seaweed and sea grass.

Significantly seaweed is really a type of algae, which grows on the ocean bed but without real roots. In contrast sea grass is different to seaweed in that it is a true flowering plant, has roots and a grass like leaf. In the ocean seaweed and sea grasses provide an important home and food for fish and other marine life.



South coast corals

- There are 4 types of corals that can only be found on the south coast of Australia
- 5 tropical species of coral are found on the western south coast
- Of these 3 species (Genus turbinacia) cover large areas between Albany to the Recherché Archipelago near Esperance.

rare finds - loggerhead turtles tricks of nature!

Occasionally along the south coast loggerhead and leatherback turtles may be found. These turtles get picked up in the strong south-flowing Leeuwin current and carried hundreds of kilometres from their home territory- if found CALM rangers should be asked to help them get back home!

fitzgerald river national park

This park is framed by 250km of coastline. It has been said to be the most important protected area in south Western Australia, containing over 20% of the States known plant species. The Park is the only UNESCO model biosphere in Australia located on the coast. Of the identified plants around 70 are specific to this area and 250 species are geographically restricted or exist only in small populations of less than 1000 plants.

animals & birds

The Fitzgerald River National Park has the richest range of animals of any conservation area in the south west of Australia. 17 of the species found in the park are threatened or in need of special protection. The Park offers the best chance of long term survival for the Western Ground Parrot and the Dibbler, a small mammal. The native animals are relatively shy and many nocturnal, but you may get a glimpse. Binoculars will be useful to help identify some of the beautiful birds.

coastal scenery & inlets

The Park has a central wilderness zone which includes around 30% of the parks coastline between Quoin Head and Point Charles. Vehicles are not allowed in this area - however several exceptional but rugged walking tracks are available - for safety the CALM ranger should be notified if walkers trek into this area. The National Park offers outstanding scenery varying from protected to windswept beaches with stunning white sand, rugged cliffs, inlets and valleys. Inlets in the area include the Culham, Hamersley and The Fitzgerald Inlet System. These inlets host the Black Swan, Australian Pelican, White-faced Heron, Great Egret, Australian Shelduck and a range of other migratory, resident shoreline, coastal and waterbirds-a full list of birds is available from the Southern Ocean Discovery Centre.



SOUTHERN OCEAN DISCOVERY CENTRE
THE DECK, HOPETOON

The Fitzgerald River National Park is home to:

- Over 1,830 species of plants
- Over 190 bird species
- Over 20 species of native mammal
- 42 species of reptile
- 12 species of frog
- 4 species of inland fish

It is the largest reserve that has numbers of a range of small mammals including :

- Tammar Wallaby
- Red Tailed Wamberger
- Woylie
- Western Bristlebird
- Western Whipbird

Other animals of this area include:

- Western Grey Kangaroo
- Brushtail Possum
- Southern Brown Bandicoot
- Honey Possum
- Echidna
- Dugite and Tiger Snake
- Moaning Frog and Turtle Frog

Birds to look for:

- Whistling Kite
- Nankeen Kestrel
- Osprey
- Peregrine Falcon
- White Bellied Sea Eagle
- Malleefowl
- Emu
- Port Lincoln Parrot
- Western Rosella
- Hooded Plover
- Splendid Fairy-Wren
- Elegant Parrot
- Grey Fantail
- Red Wattlebird
- Wandering Albatross
- New Holland Honeyeater
- Cape Barren Goose

The Southern Ocean Discovery Centre

HOPETOON • WESTERN AUSTRALIA



introduction

Australia's Southern Ocean holds a measure of wonder for everyone. You only need to see the glassy swell roll in on an idyllic calm sunny day, or witness a storm along the coastline to want to know more about this spectacular arena and the plants and animals that thrive in it. The Southern Ocean Discovery Centre in Hopetoun offers visitors a perfect vantage point to take in the ocean's natural splendour. Hopetoun is special in being located between two bays and so reaches out into this pristine ocean. It provides a welcome and well serviced resting point which links the stunning coastline between Esperance and Albany, popular both for its natural beauty and as an ocean playground.



climate

The Southern Ocean plays a major role in determining the mild climate of the south coast of Western Australia (WA). In summer, daytime temperatures typically range between 25-30 degrees Celsius and an easterly sea breeze prevails. The breeze is created by the contrast between inland heat and the relatively cool Southern Ocean. Summer wind strengths range from a gentle breeze to 20-30 knots. Towards the end of summer the sea breeze declines and the winds shift northwards allowing westerly winds to prevail. Commonly in autumn and spring excellent weather with calm seas and light winds can be enjoyed. Rain predominantly falls in winter, around Hopetoun an average 500mm of rain falls per year.

tides

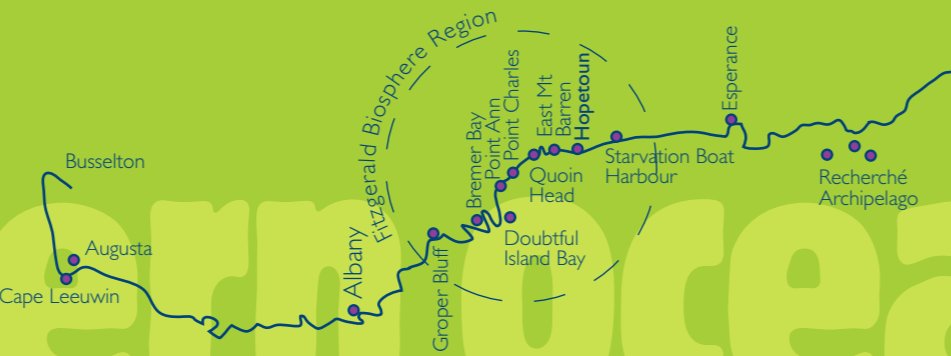
Small once or twice daily tides of half a metre to a metre are normal along the south coast. These tides only create weak currents. A consistent swell from the south westerly direction is strengthened by the wind with an overall eastward drift.

the leeuwin "Lioness" of currents

The action of the Leeuwin was confirmed, only in the 1970's through satellite technology. Leeuwin, which means lioness, was named after a Dutch merchant ship which explored the south coast in 1622. The Leeuwin is a warm ocean current which moves eastward along the south coast. It is the reason for the waters of the continental shelf of WA being warmer in winter than corresponding regions in Southern Africa and Chile in summer! On the western side of the Great Australian Bight waters warm ahead of the arrival of the Leeuwin current in late autumn.

The Leeuwin Current

- Is a major influence on the southern coastline
- Runs to 300m deep
- Follows a narrow band along the WA coast
- Has offshoots of up to 50km
- Flow rate is 1/2-3 knots
- Is a warm current



geography & geology

Geologically the south coast of WA is part of the Flindersian Province, which runs from south Western Australia to southern New South Wales. The coastline of the Fitzgerald Biosphere Region, from Starvation Boat Harbour, east of Hopetoun; to Groper Bluff, west of Bremer Bay, features a unique sequence of ancient dramatic and contrasting geology. This progresses from limestone shores and reefs from Starvation Boat Harbour to East Mt Barren. Then schist and quartzite cliffs of the metasedimentary Barren ranges from East Mt Barren to Point Ann. Followed by a series of wide bays and sandy beaches, in areas protected from the south westerly swell, examples of this are Charles Bay, Point Ann and Doubtful Island Bay. Finally from Doubtful Islands to Groper Bluff, there are granitic headlands with steep wave-swept slopes, small moon-shaped bays and boulder fields, in these areas you can also find offshore reefs with steep walls.

biodiversity

The south coast has high levels of biodiversity, with much of the marine life of the south coast being unique - not found anywhere else in the world. This is partly due to the exceptional length of this coast and its geological isolation. Along this part of the WA coastline the range of large and unusual fish, marine mammals, birds of prey, marine and migratory birds never fails to delight visitors. Almost half of the known Australian seabirds can be found along the regions coastline.



The ocean of the south coast of Australia hosts...

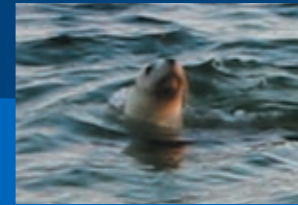
- Over 600 species of fish
- A great variety of molluscs
- 110 species of echinoderms these include sea stars, brittle stars, sea urchins, feather stars and sea cucumbers
- A selection of crabs and crustaceans
- Around 190 species of sea squirts also known as ascidians
- Seadragon and the beautiful leafy seadragon
- Over 1000 species of seaweed or macroalgae
- 22 species of seagrasses and more!

seals & sea lions

Seals and sea lions have made a fantastic comeback in numbers along the southern Australian coastline in recent years. Hopetoun is located between known breeding colonies of both these fascinating marine mammals, with Australian Sea Lions regularly taking it easy on Seal Island just off the Groyne, at the heart of Hopetoun, for much of the year. The lovely weather of Spring and Autumn are ideal times to view these animals in the wild, from the convenience of The Deck, and the comfort and safety of dry land!

the Australian sea lion

Australian Sea Lions are only found along the Australian coast and breed between the Houtman Abrolhos in WA to the Pages in South Australia. Despite increases in numbers in recent years, they are still considered rare - near threatened. There are 66 known breeding sites off the Australian coast of which 28 are in WA. The Australian sea lion can be recognized by its dog like head and larger size when being compared to the New Zealand Fur Seal. There is a wealth of information on identifying Australian Sea Lion in the Southern Ocean Discovery Centre Display, at The Deck in Hopetoun.



Australian Sea Lion

statistics:

Numbers (approx)

- 11,000 total
- 5,000 in WA
- Weight (female) 60-105kg
- Weight (male) up to 300kg

New Zealand Fur Seal

statistics:

Numbers (approx)

- 35,000 in Australian waters
- 8,000 in WA
- Weight (female) 35-50kg
- Weight (male) 120-180kg

the New Zealand fur seal

These seals are smaller than the Australian Sea Lion and can be recognised by their neat pointed nose, they are in fact also known as the long nosed fur seal. New Zealand Fur Seals tend to prefer islands situated in deeper offshore waters such as the Islands of the Recherche Archipelago. 16 of the 30 known Australian breeding colonies of the New Zealand Fur Seal are found in WA. Fur seals feed in the open ocean and can at times be seen at the breeding colonies during the breeding season. Fur seals are known by divers for their playful and exuberant nature when in the water.



rarer seals

If you are very lucky, there is a chance of seeing a Leopard or Elephant seal along the southern Australian coast or on one of the off shore islands, but these are only seen here occasionally if they venture north from their Antarctic home. Male elephant seals, truly an elephant of the sea, can weigh up to 3000kg, so you will certainly not miss one if it is in view!

dolphins

Two types of dolphin can be found along the south coast of WA, the Common Dolphin and the Bottle Nosed Dolphin. Both types can regularly be seen from the shoreline and from boats along the south coast. The relatively undisturbed waters around Hopetoun mean that sightings near to the town beaches are a common cause of excitement among adults and children alike.



whales - the whale trail

The southern coastline of WA is on the migration route for Southern Right Whales and Humpback Whales from autumn to spring. The coastline between Hopetoun and Bremer Bay offers exceptional opportunities for whale viewing with numbers having increased in recent years. Southern Right Whales, once hunted to near to extinction, are now staging a recovery, being seen more often along this coastline.

Feeding in colder waters and migrating north to breed, between 100 and 200 animals have been recorded each year visiting the south coast of WA. Because females use sheltered bays as birthing suites and nurseries, cows may often be seen very close to shore. The coastline between Point Ann to Quoin Head in the Fitzgerald River National Park has been recognized by some experts as the most important area for seasonal gatherings of Southern Right Whales along the entire south coast. Sightings of Humpback Whales in this area are also becoming increasingly common. Both animals are large, Southern Right Whales can weigh up to 80 tonnes, Humpback Whales up to 45 tonnes!

Whale viewing points around Hopetoun include:

- East Mt Barren lookout
- Four Mile Beach
- Barrens Beach
- East Mylies Beach
- Quoin Head (4wd access only)
- For keen hikers the area between Quoin Head and Point Charles (no vehicle access, see section on Fitzgerald River National Park)

From Bremer Bay:

- Fitzgerald Beach (4wd access only)
- Point Ann lookout