

# Port River Dolphin Trail



Experience the  
Dolphins up close!

# Introduction

Port Adelaide is a seaport city, well known for its maritime heritage. Only a 20 minute drive from Adelaide's city centre, it's also one of Adelaide's most popular tourist destinations, with many attractions to offer its visitors.

Wild dolphins are one of those attractions and they can be discovered in the wealth of natural environments throughout the area. The estuary provides a home to one of Adelaide's best-loved creatures, the Bottlenose Dolphin!

A trail has been developed to provide you with a rare opportunity to unobtrusively watch the dolphins from the shore.

Six interpretive signs have been positioned along the waterfront, each providing details about that location and the dolphins that can be found there.

Although dolphins don't appear on request, these locations are some of the most common areas in which dolphins are seen.

The trail provides an opportunity to discover the diversity of the Port region and explore what it has to offer along its coast, island, marina, river and beaches.

# Viewing Dolphins

The banks of the Port River are a perfect location from which to view the dolphins, or try from the beach or jetty. A pair of binoculars maybe useful.

As with bird watching, a notebook is a handy tool in which to record features of the dolphins you are viewing and can help distinguish them from each other.

Dolphins are playful and friendly creatures, but do not be tempted to enter their personal space or disrupt their natural behaviour.

There are many other treasures to discover on this trail, including the extensive bird life, so why not start now and see the amazing natural assets of the Port Adelaide region. Whether you visit all or only some of the locations, you are sure to discover another side to the Port and hopefully, its dolphins! Discover the dolphins by land or water.

## By Car

Take your time and leisurely drive to some or all of the six different "Hot Spots" throughout the region. The map in this brochure will guide you on your tour and provide details about each destination.

You will visit places such as:

- Port Adelaide, the state's first heritage area.
- Garden Island, surrounded by mangroves and extensive birdlife.
- Largs Bay, a coastal destination with a heritage listed jetty on which to stroll.
- North Haven Marina, a place to sit back and dine, whilst overlooking a busy marina.
- Snowdens Beach, a beach on the river where you can sit and watch the big ships pass by.
- Moorhouse Road, a riverside location with a fresh fish and produce market on Sunday mornings.



## By Water

Stuck for a ride? Doesn't mean you miss out.

Experience the natural wonders of the Port River and Gulf St. Vincent by booking a river cruise, charter boat or tall ship cruise. The dolphins love to swim alongside these vessels! Sunday's are Port River cruise day. Both the MV Port Princess and the Port River Cruises offer popular short cruises three times a day every Sunday. On other days bookings are essential. These cruises depart from the Port's inner harbour near the lighthouse.

The more adventurous can hop on a tall ship such as the One and All or Falie, or charter a boat and travel out to sea. Out there you can discover other varieties of dolphins. Bookings are essential.

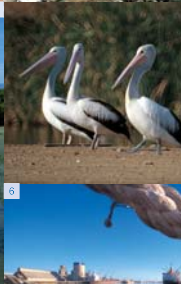
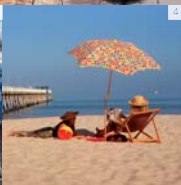
Alternatively, paddling a kayak through the mangroves can provide a different and close up perspective.

When in a boat, never attempt a head-on approach. Move slowly and do not get closer than 50 metres. If the dolphins approach you for a closer look, do not touch, feed or disturb them, quiet observance will encourage them to stay longer!

Dolphins can frequently be seen from on-water vessels. Hopefully this will be your lucky day to see a dolphin up close.

## Sponsor a Dolphin

You can sponsor a Port River dolphin and help support research for these remarkable mammals. To find out more check out the sponsorship brochures at the Port Adelaide Visitor Information Centre or contact the Whale & Dolphin Conservation Society on the Adoption Hotline 1300 360 442 or adopt on-line at [www.wdcs.org.au](http://www.wdcs.org.au)



# Dolphin Trail

## 1 Port Adelaide

This is a great place to start the trail, in the heart of Port Adelaide and its heritage precinct. Sign 1 is located on the docks at Lipson Square. Here you can look across the Port River and hope to see Billie and her friends. We also see industry and heritage combined to make an eclectic mix of man-made environments.

Information on the signs will expand your knowledge on the dolphins found locally.

The Port is a great daytrip destination offering so much to do and see. Nearby is the Port Adelaide Visitor Information Centre, where you can find all that you require for a day on the dolphin trail.



## 2 Garden Island

The second interpretive sign is located near the boardwalk at the eastern end of Garden Island, which reflects the intimate relationship between this city and its surrounding natural environment. Here we see a mangrove ecosystem and bird life existing in conjunction with industry.

These mangroves are part of the most extensive forest of Grey Mangroves (*Avicennia marina*) in Australia. Why are the mangroves so important? Read the sign and discover.

On your way to Garden Island you will pass the Ships' Graveyard, a landfill site, a power station and a wetland habitat, highlighting the diversity of the region. You will be surprised with what you find at the end of the road.

Garden Island is a popular recreational spot for fishing, boating and kayaking. Here you may see dolphins frolicking with fishing boats or enjoying the solitude of an aquatic reserve. This stop offers good BBQ facilities and a place that the whole family can enjoy.

To find out more about the Ships' Graveyard, pick up a brochure from the Port Adelaide Visitor Information Centre.



## 3 Moorhouse Road

Although limited in facilities, this location provides great dolphin viewing opportunities. Dolphins are frequently spotted here feeding and at play. This is ideal for a quick stop or on Sundays you can combine your visit with a trip to the morning markets. Buy some fresh fish and produce, and hopefully see the visiting dolphins.

What do dolphins eat? Find out on the trail!

## 4 Largs Bay

Largs Bay is a short, 10 minute drive along the coast from Port Adelaide. This is where you will find the fourth interpretive sign positioned near the jetty. It is a great spot for the whole family to enjoy, spend a day on the beach, swimming and looking out for dolphins. This location is popular to dolphins due to the sea grasses. Do you know why? Look at the sign and find out before venturing out over the water.

Due to the open gulf waters offering a different marine habitat, you may see the Common or Bottlenose Dolphin here.



## 5 North Haven Marina

Take a short 5 minute drive along the coast from Largs Bay to North Haven, the interpretive sign is located at the Gulf Point Centre in the marina. The North Haven Marina has become a well-known spot for viewing dolphins as they feed and play amongst the boats. With many human obstacles, the marina can be a dangerous place for dolphins, however, many dolphins have found this to be a safe haven that provides protection from rough seas. The marina is a relaxing place where you can stop for refreshments or a meal.

Whilst dining you might see dolphins frolicking by the nearby rocks.



## 6 Snowden's Beach

Snowden's Beach is sign-posted to a boat ramp and the Port River Sailing Club. This is where you will find the final interpretive sign. This stop provides a comfortable place to sit, wait and watch for dolphins. The industrial sites across the river may make you reflect on the impact of our community and industry on the dolphins. Grab the opportunity to take some happy snaps, maybe even of a resident dolphin! Snowden's Beach is a popular fishing location and recreational facility, which also provides a great view of the big ships entering and leaving the Port. Why do dolphins like the big ships?



### Features & Facilities

- Port Adelaide Visitor Information Centre
- Toilets
- Disabled Toilets
- Dining
- River Cruises
- Attractions and Tours
- Boardwalk
- Ships' Graveyards (en-route)
- Picnic and BBQ Area
- Swimming Beach
- Bike and Walking Path
- Playground
- Charter Boats (Bookings Essential)
- Bird Watching

# Dolphins

Dolphins can be found virtually all over the world. Approximately 13 species of dolphins are found in the waters surrounding Australia, the Bottlenose Dolphin being the most common.



Bottlenose Dolphin



Common Dolphin

“There are about 40 species of dolphins throughout the world.”

Bottlenose Dolphins are often found inshore in the warmer, shallow coastal waters. Dolphins generally live in salt water, however some have adapted to fresh water.

Adelaide is unique in that it is one of the few cities in the world to have dolphins living so close to the city. Take a 20 minute drive to Port Adelaide and discover the Port River dolphins. There are about 30 Bottlenose Dolphins recorded to be living in the Port River.

The Common Dolphin is another species found locally that can be seen out at sea in the deeper, oceanic waters. These dolphins are often found riding the bow waves of boats such as the One and All and the Falie.

Dolphins are amongst the most intelligent species in the world and are friendly, social animals.

Dolphins are commonly mistaken to be fish, but are actually warm blooded mammals like humans. They are classified as part of the Order of Cetacea. These include whales and dolphins, but not other marine mammals such as seals. Over millions of years they have adapted to the marine environment. Scientists believe that dolphins evolved from land mammals to become marine mammals.

It is believed that there are at least 80 species of cetaceans in the world today, including whales.

# Bottlenose Dolphins



## Physical Characteristics

Dolphins are very strong swimmers. They have a sleek, streamlined body designed for the pursuit of prey.

Powered by powerful back muscles, shaped like a torpedo and propelled by an up and down movement of the tail, a Bottlenose Dolphin can reach speeds of up to 30 kilometres per hour. Due to their shape they can often be mistaken for sharks.

On average, full-grown males are slightly longer and heavier than the females. The dolphin's slender shape and reduced limb size decreases the amount of surface area exposed to the external environment, helping to conserve body heat. A thick layer of blubber just below the skin also aids in insulation and maintains body temperature, as well as streamlining the body and providing a rich energy source.

Most dolphins grow to around 4 metres long, although locally they grow only to about 2.5 metres long and weigh around 160 kilograms as adults. They live for up to 40 years.

The largest dolphin is the killer whale, which can grow up to 10 metres long and weighs up to 5 tonnes. Like whales, dolphins breathe through a blowhole on the top of their heads.

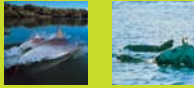
Dolphins can dive to depths of more than 500 metres, however they must surface for air every few minutes.

The dolphin constantly sheds skin, which is believed to be why they accumulate few barnacles or external parasites.

Pectoral flippers on either side of the body are used for steering and with the help of the fluked tail, to stop. Blood circulation in the pectoral flippers adjusts to help maintain body temperature, increasing circulation in veins near the surface of the flipper to shed excess body heat.

“Bottlenose Dolphins are the most common species of dolphin found living in the shallow coastal waters of South Australia.”

# Port River Dolphins



Three species of dolphin are found in South Australia: the Indo-Pacific Bottlenose Dolphin (*Tursiops aduncus*), found in coastal waters such as the Port River; the Common Bottlenose Dolphin (*Tursiops truncatus*), which lives along oceanic coasts and in deep water off South Australia; and the Short-beaked Common Dolphin (*Delphinus delphis*), which may be seen in the gulfs but usually inhabits deeper water there.

In Port Adelaide there are approximately 30 Indo-Pacific Bottlenose Dolphins that are frequently observed in the Port River, with more than 300 being recorded as visitors (various species, mostly Bottlenose Dolphins).

Extensive research is being undertaken by the Australian Dolphin Research Foundation (ADRF) on the behavior and life-cycle of the coastal dolphins, in particular in Port Adelaide, and the adverse effects of human interference on their natural habitat.

Each dolphin studied by the ADRF has been identified and named. These local dolphins have individual personalities, and you may see them along this interpretive trail. From the land you can unobtrusively view dolphins like Billie, Sparkle, Captain Hook and many more, living and playing in their natural surroundings.

## Did you know?

• The Adelaide Dolphin Sanctuary is the first sanctuary of its kind to be established in an urban environment. It was opened on Saturday 4 June 2005, the eve of World Environment Day, and is located in the Port River in Port Adelaide.

For further information about the Adelaide Dolphin Sanctuary, check out: [www.environment.sa.gov.au/coasts/dolphin.html](http://www.environment.sa.gov.au/coasts/dolphin.html)

• Project Dolphin Safe responds to wildlife emergencies. If you see a dolphin in distress, call the emergency number immediately 0411 057 551.

Dolphins have a well-developed, acute sense of hearing with the ability to hear sounds within the frequency range of 1-150 kHz (almost 10 times that of humans).

The lower jaw is where sound reception mainly takes place. A fat filled cavity conducts sound waves through the jaw to the middle ear bones and on to the hearing centres in the brain.

Dolphins have excellent vision above and below the water. An oily secretion helps protect a dolphin's eyes from the elements underwater.

## Social Behaviour

Most Bottlenose Dolphins are highly sociable and often can be observed as part of a pod (group). These pods of up to 10 dolphins hunt, play and help protect each other. Pods are unrelated within the group, although mothers may stay with their offspring for up to eight years.

Adult males generally do not appear around female dolphins unless mating. The males form separate bachelor groups of up to two or three, forming bonds that may last a lifetime. A dolphin's pectoral flippers are also believed to be used to stroke each other, increasing the social bond between one another.

## Reproduction

Dolphins, like humans are able to mate all year round. Sexual maturity varies among Bottlenose Dolphins, but on average females become sexually mature when they reach about 2.3 metres long at about 5-12 years old. Males reach sexual maturity when they are 2.4-2.6 metres long and about 10-12 years old.

Bottlenose Dolphins may breed throughout the year, but they usually give birth to their calves in late summer. A female may be pregnant for up to 12 months and a calf may suckle for as long as 18 months, remaining with the mother for many years. Local females usually produce offspring once every three to four years, generally having their first calf at 10 years of age.

# Identifying Individual Dolphins

Sparkle

Billie

Rob Roy

Scarlett

Spunky

Captain Hook

Being able to identify individual dolphins is an important starting point for most animal behaviour research. In dolphins this is actually quite difficult!

The most widely used method of recognising individual Bottlenose Dolphins is by markings on their dorsal fin. This technique makes use of the fact that over time many dolphins develop nicks, cuts or more significant damage to the fine trailing edge of their dorsal fins.

In some dolphins these markings can be seen easily with the naked eye at a considerable distance, but in most cases positive identification can be made only by carefully examining photographs of each dolphin. Some dolphins have prominent scars, which can also be used for identification.

In both cases the identification features can change over time and this can lead to major confusion. A few dolphins have dorsal fins that have a very unusual shape. This is a reliable and enduring cue to use, but needs a lot of experience.

A major problem of using natural markings for identification is that not all dolphins actually have such markings. In the Port River area, we estimate that only about two thirds of the dolphins we see in any year, have marks we can use for reliable identification. The likelihood of dolphins having marks increases with age, but even some fully mature dolphins are not marked in this way.

A natural bond is formed between female dolphins and those pregnant or with calves. These groupings are called "maternity pods". Female dolphins tend to assist each other in the birthing process, baby-sitting, and rearing of young. Adult male dolphins play no role in the rearing of the young. Dolphins tend to be born tall first and are able to swim and breathe within minutes of birth, and they are usually about 1 metre in length and dark in colour. Baby dolphins suckle from their mothers as often as every 30 minutes.

## Feeding

Fish are the dolphins main food. Adult Bottlenose Dolphins eat approximately 4-5% of their body weight in food per day and have a variety of methods for hunting.

In open waters a pod of dolphins will herd a school of fish using their tail flukes to stun them, or round them up against a sand bar or man-made barrier to trap them. This is called corraling. Dolphins may also chase and stun individual fish by emitting a powerful sound wave that disables the fish long enough to get it in their powerful jaws.

Dolphins do not chew and usually swallow their prey whole, head first. They are however, born with around 100 small sharp teeth which assist in grasping the prey. Feeding often occurs in groups of dolphins, who work together as a team and take it in turns to feed.

## Echolocation - Hunting

The way in which all dolphins hunt is similar. Using echolocation the prey is located then stunned with intense sound emitted from the dolphin's melon (the rounded region of a dolphin's forehead). Echolocation enables dolphins to "see" their prey by interpreting echoes bounced off objects in the environment.

A series of clicks pass through the melon (which consists of fat that helps focus the sound waves into a projected beam). These sound waves pass through the water at a speed of about 1.5 km/sec, which is 4.5 times faster than sound through air. Objects in the path of the sound waves reflect them back to the dolphin in the form of an echo. Bottlenose Dolphins are able to recognise the echo-signature returned by preferred prey species.

## Habitat

Bottlenose Dolphins inhabit temperate and tropical waters throughout the world and are found mainly in the pelagic zone of the ocean as well as harbours, lagoons, bays, gulfs and estuaries. Seasonal movements of the dolphins may be due to variations in water temperature and migration of food sources such as fish.

Human activities are threatening the survival of dolphins by increased encroachment on their natural habitat. Pollution, stormwater and rubbish represent a major threat, as they destroy fish populations and wipe out food supplies.

The Port River, which is home to a number of Bottlenose Dolphins, has been a dumping ground for industrial and household waste.

Seagrasses found in the open areas of Adelaide metropolitan beaches are an important breeding area for fish but unfortunately this habitat has deteriorated because of domestic and industrial pollutants discharged into the marine environment.

## Threats

Dolphins main natural enemies include sharks and killer whales (Orcas). Human beings are also a major enemy for dolphins. By following the Port River Dolphin Trail you will learn how to prevent the destruction of the dolphin habitat.

# Tours by Water

Cruises and Tours

**MY Port Princess**  
**Port Adelaide River Cruises**  
 Cruises depart from Queens Wharf Marina, near the Lighthouse, Port Adelaide  
 Tel/Fax: (08) 8243 2757 Mobile: 0418 817 837  
 Website: [www.portprincess.com.au](http://www.portprincess.com.au)  
 Cruise times: Sundays & Public Holidays.  
 Phone for bookings & cruise times.

**Port River Dolphin Cruises**  
 Cruises depart from Berth 2, Queens Wharf, in front of the Lighthouse, Port Adelaide  
 Tel: (08) 8447 2366 Mobile: 0418 833 068  
 Website: [www.portriverdolphincruises.com.au](http://www.portriverdolphincruises.com.au)  
 Cruise times: Sundays & Public Holidays.  
 Phone for bookings & cruise times.  
 Disabled Access Toilet

**South Australian Maritime Museum Cruises**  
 Archie Bodsworth (historic pulce launch)  
 Departs from Queens Wharf Marina, near the Lighthouse, Port Adelaide  
 Yelta (steam tugboat)

Departs from Berth 2, Queens Wharf, in front of the Lighthouse, Port Adelaide  
 Office: South Australian Maritime Museum  
 126 Lipson Street, Port Adelaide  
 Tel: (08) 8207 6255  
 Website: [www.history.sa.gov.au](http://www.history.sa.gov.au)  
 Open Ring office - 10am to 5pm on weekdays for bookings and timetable details.

Tail Ship Charters

**Falie Charters**  
 Departs from Wharf 10, Inner Harbor, off Ocean Steamers Road, Port Adelaide

**One & All**  
 Departs from Wharf 3, Inner Harbor, near the Lighthouse, Port Adelaide  
 Office: 27 North Parade, Port Adelaide.  
 Monday to Friday from 9am to 5pm.  
 Ring for cruise details.  
 Tel: (08) 8341 2004  
 Website: [www.satallships.com](http://www.satallships.com)

Boat Charters

**Blue Ice Charters**  
 North Haven Marina, Alex Road, North Haven  
 Tel: 0412 631 586 or 0401 337 894  
 Website: [www.blueicecharters.com.au](http://www.blueicecharters.com.au)

**Gulf-Port Fishing Charters**  
 North Haven Marina, Alex Road, North Haven  
 Tel/Fax: (08) 8356 7560  
 Website: [www.gulfportfishing.citysearch.com.au](http://www.gulfportfishing.citysearch.com.au)

**The School of Fish**  
 North Haven Marina, Alex Road, North Haven  
 Tel: (08) 8250 9592  
 Website: [www.thechoolfish.com](http://www.thechoolfish.com)

Kayaking

**Blue Water Sea Kayaking**  
 \* Free pick-up service from Port Adelaide Visitor Information Centre \*  
 Tours depart from Garden Island Boat Ramp  
 Tel: (08) 8259 8812  
 Website: [www.adventure-kayak.com.au](http://www.adventure-kayak.com.au)  
 Bookings essential



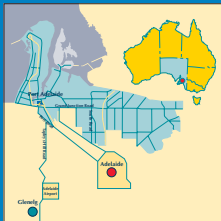
The accredited Port Adelaide Visitor Information Centre will provide you with further information and help plan your dolphin viewing day, by land or water.

# Fast Facts

- Although dolphins look like fish, they are actually mammals.
- Dolphins have a brain about the same size as a human being.
- Dolphins can breath only through their blow hole and not their mouth.
- Dolphins are related to the whale.
- Dolphins produce a sound which resembles a whistle.
- Dolphins have no sense of smell, they use a sonar system for navigation and hunting.
- Dolphins, like humans, have a sense of taste.
- Dolphins have a three-chambered stomach, like cows. They do not chew and instead break down food in their stomach.
- Keeping dolphins in captivity is banned in South Australia and Victoria.
- Dolphins need your help to survive. Help stop human waste going into their home.

## Dolphins! The Port River Pod

Permanent Exhibition: Colour graphics, fun interactive displays and film.  
SA Maritime Museum  
126 Lipson Street, Port Adelaide  
Tel: 8207 6255



## Port Adelaide Visitor Information Centre

66 Commercial Road, Port Adelaide SA 5015

Open 7 days a week from 9am to 5pm  
(closed Christmas Day)

Telephone (08) 8405 6560

Facsimile (08) 8447 4112

Email [visitorinfo@portenf.sa.gov.au](mailto:visitorinfo@portenf.sa.gov.au)

Website [www.portenf.sa.gov.au](http://www.portenf.sa.gov.au)

Information in this brochure is correct at the time of printing, and provided in good faith. No responsibility is taken for any services listed, inaccuracies, changes, errors, omissions or any misconceptions.

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