



# 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 Lighthouse Square. Here you can look across the Port River and hope to see Wave 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 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 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, the dolphins are offered a different marine habitat.



## 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

## Fast Facts

- Although dolphins look like fish, they are actually mammals.
- Keeping dolphins in captivity and feeding wild dolphins is banned in South Australia and Victoria.
- Dolphins can breathe 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 and feeding wild dolphins is banned in South Australia and Victoria.
- Dolphins need your help to survive. Help stop human waste from going into their home.

### Adopt-a-Dolphin

Whale & Dolphin Conservation (WDC) offers the popular Adopt-a-Dolphin program based around the fantastic Port River dolphin population. Adopters will receive a certificate, regular updates with photos, a newsletter and more. If you would like to be on the mailing list to receive more details about the program, email [info.au@whales.org](mailto:info.au@whales.org)



### Latest Sightings Website

You can visit website [www.adsactiongroup.com](http://www.adsactiongroup.com) and go to the Latest Sightings section to add your own dolphin sightings on the Adelaide Dolphin Sanctuary map and leave a comment.

### 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

## Viewing Dolphins

**How to get to Port Adelaide**

**By Public Transport**

**Bus**  
Adelaide to Port Adelaide direct route from North Terrace, opposite the Adelaide Railway Station: Bus 150 to Osborne - alight in Port Adelaide at bus stop A

**Train**  
from Adelaide: Outer Harbor Line to Port Adelaide

**By Car**  
from Adelaide via Port Road (Route A7)  
From Glenelg via Tapleys Hill Road (Route A15) or Military Road  
From northern suburbs via Port River Expressway (Route A9)

### 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 • Email: [visitorinfo@portenf.sa.gov.au](mailto:visitorinfo@portenf.sa.gov.au)  
Website: [www.portenf.sa.gov.au/tourism](http://www.portenf.sa.gov.au/tourism)



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## Port River Dolphin Trail



### Experience the Dolphins up close!

Photograph by: Martin Jelic, Trevor Fox, Ben Seary, Nicole Vincent, Micaela Woodley, Mike Bosley and Marianne Boorman.

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 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 unpredictably 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.

**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 at Fort Adelaide

For further information about the Adelaide Dolphin Sanctuary, check out:

- Search Adelaide Dolphin Sanctuary website at [www.environment.sa.gov.au](http://www.environment.sa.gov.au)
- Emergencies: 0427 556 676

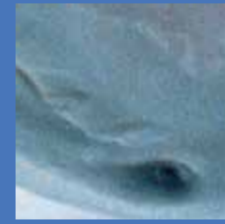
**By Water**

Stuck for a ride? Doesn't mean you miss out. Experience the natural wonder of the Port River and Gulf St Vincent by booking a river cruise or charter boat cruise. The dolphins love to swim alongside these vessels! Sunday's are the dolphins' most popular days. Both the Port River Explorer Cruises and Dolphin Explorer Cruises offer popular short cruises every Sunday. On other days bookings are essential. These cruises depart from the Port's inner harbour near the lighthouse.

The more adventurous can charter a boat and travel out to sea. Out there you can discover other species of dolphins. Alternatively, paddling a kayak through the mangroves can provide a different perspective.

When in a boat, never attempt a head-on approach. Move slowly and do not get closer than 50 metres or 150 metres for a dolphin with calf. If the dolphins approach you for a closer look, do not touch, feed or disturb them, quiet observation will encourage them to stay longer!

Dolphins can frequently be seen from on-water vessels. Hopefully you will see a dolphin up close.



**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.
- Snowden's 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.

# Dolphins

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



*“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 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 estuary. 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. 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 100 species of cetaceans in the world today, including whales.

# Bottlenose Dolphins



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

### 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.

# 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 Whale and Dolphin Conservation (WDC) on the behavior and life-cycle of the coastal dolphins, in particular in Port Adelaide, and the adverse affects of human interference on their natural habitat. Each dolphin studied by the WDC 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 Wave, Oriana, Bubbles and many more, living and playing in their natural surroundings.

**Billie the Dolphin**  
Sadly, Port Adelaide's most famous dolphin Billie, died in 2009. Photos of Billie appeared in the international media twice. In 1987 photos of her swimming with racehorses appeared in newspapers all over the world. More recently, in 2008, her tail walking behaviour became another international story. Tail walking occurs very occasionally in the wild but is commonly taught to dolphins in captivity because it is so spectacular. Billie spent a few weeks in captivity in early 1988 and appeared to have learned the behaviour there. Although Billie is gone she lives on in the form of her surviving calf Marianna (who is actually a male). Her fame is also perpetuated by Wave, who is one of the dolphins to copy Billie's tail walking.

Ali

Ali is our little orphan. Ali's mum sadly passed away when Ali was only 8 months old. Ali is identified by the small notch near the top of the front of her fin.



Bubbles

Bubbles is a young active male. He has a large home range and can be seen throughout the Adelaide Dolphin Sanctuary. Bubbles is identified by the four separate natches on the trailing edge of his dorsal fin.



Marianna

Marianna is the calf of the famous dolphin Billie who used to swim with race horses. Marianna is identified by the two small nicks in the middle of the trailing edge of his fin and a slight slice off the top of the front of his fin.



Oriana

Oriana's first calf sadly passed away, hopefully her next calf will be healthy and will live a long and happy life. Oriana is identified by the small natches in the middle of the trailing edge of her fin.



Ripple

Ripple is a female dolphin who learnt the skill of tail walking from her mum Wave. Ripple can be identified by the slightly flattened area on top of her fin and the small notch in the middle of the trailing edge of her fin.



Twinkle

Twinkle is regularly seen around Garden Island. He is primarily identified by his tail fluke. Twinkle has large natches caused from entanglements in fishing line that cut deeply into his tail fluke.



# Identifying Individual Dolphins

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.

Adult male dolphins play no role in the rearing of the young.

Dolphins tend to be born tail 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 grab 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 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 1.5km/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

**Dolphin Explorer Cruises**  
Depart from Berth 2, Queens Wharf, in front of the Lighthouse, Port Adelaide  
Tel: (08) 8447 2366 Mobile: 0418 832 068  
Website: [www.dolphinexplorer.com.au](http://www.dolphinexplorer.com.au)  
Cruise times: Sundays, School & Public Holidays. Phone for bookings & cruise times.

**Port Princess 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, School & Public Holidays. Phone for bookings & cruise times.

Kayaking

**Archie Badenoch (historic police launch)**  
School vacation care programs only  
Departs from Queens Wharf Marina, near the Lighthouse, Port Adelaide  
Office: South Australian Maritime Museum  
126 Lipson Street, Port Adelaide  
Tel: (08) 8207 6255  
Website: <http://maritime.historysa.com.au>  
Open: Ring office - 10am to 5pm on weekdays for bookings and timetable details.

**Adventure Kayaking SA**  
\* Free pick-up service from Port Adelaide Visitor Information Centre \*  
Tours depart from Garden Island Boat Ramp  
Tel: 0429 019 141 (08) 8295 8812  
Website: [www.adventure-kayak.com.au](http://www.adventure-kayak.com.au)  
Bookings essential.

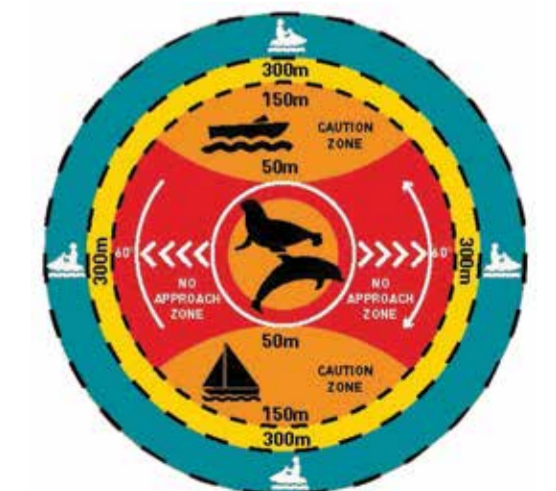
The accredited Port Adelaide Visitor Information Centre will provide you with further information and help plan your dolphin viewing day, by land or water.

# Boating Safety

## Keep your distance

**Do not approach dolphins:**

- from in front or behind
- closer than 50 metres
- closer than 150 metres to mothers and calves
- closer than 300 metres for personal watercraft



**Report all offences to Adelaide Dolphin Sanctuary Team: Tel: (08) 8240 0193 or Email: [adelaidedolphin sanctuary@sa.gov.au](mailto:adelaidedolphin sanctuary@sa.gov.au)**