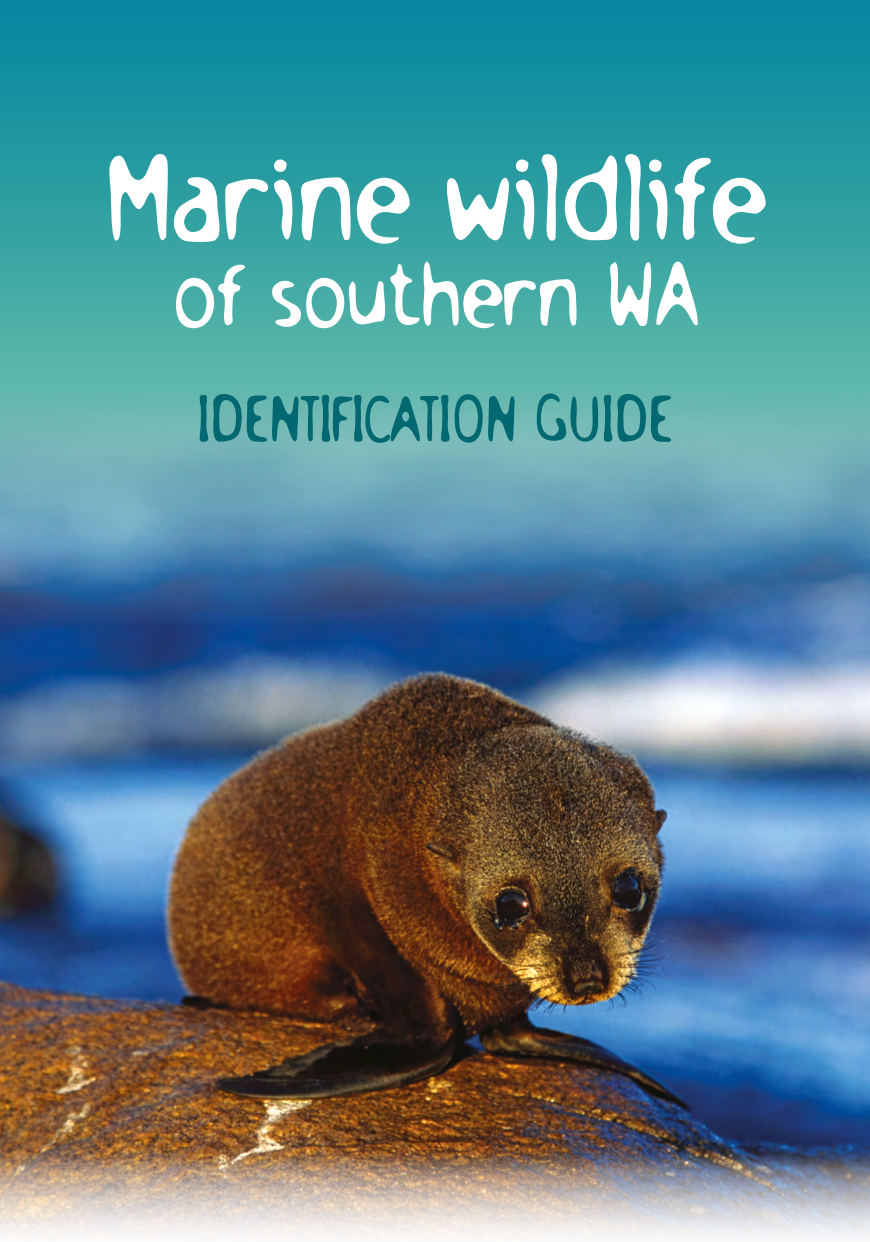
Marine wildlife of southern WA

IDENTIFICATION GUIDE



GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

PARKS AND WILDLIFE SERVICE

Protecting Western Australia's marine wonders

The marine waters from Shark Bay to the South Australian border contain extensive rocky reefs home to a large proportion of species unique to southern Australia, such as the Australian sea lion and leafy sea dragon. These waters protect wonders such as the world's most extensive seagrass meadows, the world's largest population of dugongs in Shark Bay Marine Park, the 2,000 year old stromatolites in Hamelin Pool Nature Reserve, and thousands of offshore islands providing important breeding areas for sea lions, New Zealand fur seals, little penguins and seabirds. This guide has been produced by the Parks and Wildlife Service at the Department of Biodiversity, Conservation and Attractions (DBCA), to provide information about marine parks in southern Western Australia and significant or threatened fauna in this region, including how to report marine animals in distress and how to assist the Parks and Wildlife Service by reporting sightings of these marine animals.

Top tips for conserving marine life

- When boating, **'go slow for marine life below'**, especially over coral reef, shallow areas and in channels where dugongs, turtles and other marine wildlife feed.
- **Anchor only in sand** to protect fragile reef, sponge and seagrass communities.
- Take your rubbish home.
- Visit the **Explore Parks** website for more information.
- If you find a stranded, sick or injured dolphin, dugong, turtle, whale or seabird, please call the **Wildcare Helpline on (08) 9474 9055**.
- If you find a tagged turtle or other animal, please note the number and contact your closest DBCA Parks and Wildlife Service office.
- **Fish for the future!** Abide by fish size, bag and possession limits set by the Department of Primary Industries and Regional Development Fisheries Division and help protect our fish, some of which are unique to WA.

Cover New Zealand fur seal. *Photo – Oceanwide Images* **This page** Bottlenose dolphin mother and calf. *Photo – Wildimagenation*

Marine parks – protecting oceans of life

WA's coastline spans more than 13,500 kilometres and is home to some of the world's most remarkable ecosystems and marine wildlife, including massive blue whales, playful Australian sea lions and several threatened species of sea turtle. Many of the state's marine plants and animals are found nowhere else in the world.

Our marine areas are unique and many of them rival their terrestrial counterparts in scenic grandeur. They include vast seagrass meadows and their grazing dugongs at Shark Bay Marine Park (in an amazing World Heritage Area), the caverns and reefs of Marmion Marine Park and Ngari Capes Marine Park that support colourful tropical fish, and the extensive limestone reefs of Jurien Bay Marine Park, which are like a temperate version of Ningaloo Marine Park.

Marine parks protect natural features and aesthetic values while enabling recreational and commercial uses that do not compromise conservation values. Within marine parks there may be four types of management zones:

- **Recreation zones** providing for conservation and recreation, including recreational fishing.
- **General use zones** managed to conserve natural resources while allowing sustainable commercial fishing as well as petroleum exploration and production where they will not affect sensitive marine habitats. Most recreational activities can be undertaken in such zones, which form the bulk of most marine parks.
- **Sanctuary zones** ('no take' areas) providing the strongest form of protection for the marine environment. The public is encouraged to visit and enjoy sanctuary zones, whether by diving, boating or simply exploring rock pools.
- **Special purpose zones** managed for a particular use or issue, such as protection of habitat or nursery grounds, seasonal events such as whale watching or a particular type of commercial fishing. Commercial and recreational activities may be allowed if compatible with the primary purpose of a special purpose zone.

Downloadable brochures (including detailed zoning maps) on all of WA's marine parks are available at **exploreparks.dbca.wa.gov.au**.

Marmion Marine Park. *Photo – Ann Storrie*

WA Marine parks and reserves

Management of our unique marine animals

The Commonwealth's *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and WA's *Biodiversity Conservation Act 2016* (BC Act) allow species, sub species and varieties of native flora and fauna to be listed as threatened or specially protected if they are at risk of extinction, are rare, or are otherwise in need of special protection. Species featured in this guide may have the following BC Act conservation status:

- **critically endangered** – at extremely high risk of extinction in the wild
- **endangered** – at very high risk of extinction in the wild
- **vulnerable** – at high risk of extinction in the wild
- **specially Protected** – meets a specially listed category of protection.

Many species in this guide are also granted protection in Australia under the EPBC Act as a '**migratory**' species due to being listed under international conventions and agreements that Australia is party to, '**marine**' species which have been specially listed by the Minister for Environment, or '**cetacean**' in which all species of whales and dolphins are protected in Australian waters.

DBCA develops management plans for specially protected species and participates in recovery plans for threatened marine animals to actively plan for and manage the conservation of marine wildlife in WA coastal waters. DBCA's Marine Monitoring Program is working to inform managers, by recording the status of marine fauna, the threats they face and our management responses.

Long-term systematic integrated marine monitoring, together with evaluation and reporting of change, is a key management strategy for measuring the success of marine fauna management plans, as early detection of problems allows adaptive management for the conservation of these species.

The Commonwealth EPBC Act also provides for protection of species deemed at risk from extinction across their range. This allows for protection of species that may not yet be listed as threatened in WA, but in areas of Australia may be facing significant threats such as population decline, are rare, or deemed to need special protection.

Green turtle. *Photo – Johnny Gaskell*

Australian sea lion
(Neophoca cinerea)

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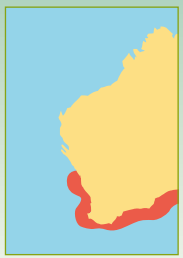

Description Sea lions have a blunt, dog-like snout and small external earflaps. Males may reach about two metres long and weigh 300 kilograms. Their fur is chocolate brown, with a creamy crown and neck. Females are silvery grey above and creamy yellow below. They are smaller than males, growing up to 1.5 metres and weighing around 80 kilograms. Australian sea lions and New Zealand fur seals have visible earflaps, or pinna, and are not true seals. True seals such as leopard seals and elephant seals have lost their pinna and their ability to use their hind legs for terrestrial locomotion.

Habitat and behaviour This is the rarest sea lion in the world, and the only one found solely in Australia. It breeds and rests on sandy beaches on offshore islands from the Houtman Abrolhos Islands near Geraldton, to Pages Island, just east of Kangaroo Island in South Australia. It can dive to depths of 300 metres to capture fish, squid, octopus, cuttlefish, small sharks and rock lobsters. This species has an unusual 18-month breeding cycle. The sea lions around Perth are all males and breed on islands near Jurien (where the females and juveniles stay year round).

Seals are protected in WA, keep a minimum distance of 50 metres in the water, and 100 metres in a vessel or watercraft. Don't approach seals on land while they are resting; it's recommended you keep at least 30 metres from them and a regulated minimum distance of 10 metres.

Photo – Kevin Crane

Photo – Ian Herford/DBCA

Long nosed fur seal

(Arctocephalus forsteri)

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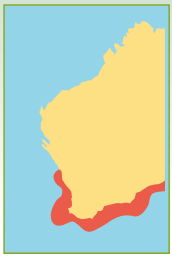


Description The Long nosed fur seal has a more pointed snout than the Australian sea lion and is a darker grey to brown colour. The bulls have a mane and can weigh 120 to 180 kilograms and reach up to 2.5 metres in length. They are much larger than the cows, which are only 35 to 50 kilograms and one to 1.5 metres long.

Habitat and behaviour This species has a liking for squid, octopus and a variety of schooling fish, which it takes in the water, but it sometimes also eats seabirds such as penguins and shearwaters. It mostly feeds at night, and rests during the day. Fishing trips may last for several days. Long nosed fur seals breed and pup in summer and they can be pupping in February/March. Bulls fight for access to females and form 'harems' of up to eight cows. Females produce a single black pup about 60 centimetres long. They remain with it for about 10 days, then leave to feed at sea, returning regularly to suckle. Pups are weaned within a year. Long nosed fur seals often rotate in the water and expose their flippers to the wind to cool down and reduce their body temperature. This behaviour is normal and is called thermoregulation.

A juvenile subantartic fur seal. *Photo – Matt Dasey/DBCA*

Subantarctic fur seal

(Arctocephalus tropicalis)

VULNERABLE

Description The smallest of the seals found in Australian waters, with males weighing 95 to 165 kilograms and females only 30 to 55 kilograms, this species has chocolate brown fur with a contrasting yellow face and neck. Adult males have a distinctive 'mohawk', along with a thick mane, thick neck and broad shoulders. The muzzle is short and flat, although still pointed. The ear flaps lie close to the head and are not especially prominent. The flippers of adults are broad but short in proportion to the rest of the body.

Habitat and behaviour Subantarctic fur seals occur throughout the subantarctic, such as at Macquarie Island in the Southern Ocean. This species forages for small fish, mostly at night. Except for cows with pups, most of the population spends much of the winter and spring at sea. Young animals are sometimes carried further north to WA's coastline by strong ocean currents. If you should find an exhausted seal fitting its description please call the Wildcare Helpline on (08) 9474 9055 and do not approach the seal too closely.

Other seals

Leopard seal *(Hydrurga leptonyx)*

The leopard seal has a large head, a slender body and long fore flippers. These ferocious predators have large jaws, long canines and sharply pointed molars. Larger specimens can reach lengths up to 3.5 metres and weigh over 500 kilograms, with males a little smaller than females. Any animals that manage to reach WA shores, however, are likely to be emaciated and are generally inexperienced juveniles. They are more normally found throughout the Antarctic and subantarctic regions.

Crabeater seal *(Lobodon carcinophagus)*

Crabeater seals have slender bodies and long snouts. Their fur ranges from dark brown to blonde, becoming lighter in summer. Males and females are similar in size, reaching lengths of 2.5 metres and weights of 400 kilograms. Crabeater seals spend their entire lives resting, breeding and moulting in the pack-ice zone surrounding Antarctica, and feeding in the surrounding waters. Individuals will occasionally swim off-course and find their way to the WA coast.

Southern elephant seal *(Mirounga leonina)*

These enormous seals can weigh up to 3,000 kilograms. Females can reach 900 kilograms during pregnancy. Males are much larger than females and have an extremely large proboscis (nose), which is useful for producing bellowing sounds, particularly in the breeding season. Very rarely, they find their way to the WA coast and there has been the occasional record of this species pupping on WA shores.

Clockwise from top left Leopard seal, crabeater seal. *Photos – Oceanwide Images* Elephant seal. *Photo – Gilbert Stokman/DBCA*
Please stay well clear of any of these seals and call the Wildcare Helpline on (08) 9474 9055 should you see one.

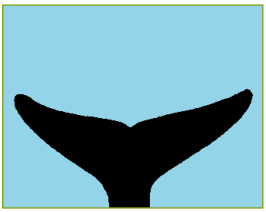
Southern right whale

(Eubalaena australis)

VULNERABLE

Description These large, stocky whales can often be seen by boaters, or sightseers watching from vantage points on land each year from about June to October. About the size of a bus, southern right whales weigh up to 80 tonnes and may reach 18 metres long. These mammals have horny growths called callosities on the top of the head, behind the blowholes, on the chin, above the eyes and on the lower lip. Patterns formed by the callosities are different for each individual. The head is up to a quarter of the total body length, and the lower jawline is distinctively bowed. There is no dorsal fin. The flippers are broad, triangular and flat, and body colour ranges from blue-black to light brown. There are often white markings, usually on the belly. The twin blowholes produce a high, V-shaped blow.

Habitat and behaviour Southern right whales are usually seen in mother and calf pairs, but occasionally congregate in groups of up to 20. Horny plates of baleen hanging from their upper jaws are used to sieve plankton from the water. Most feeding is thought to occur in the polar areas during summer. In summer, right whales prefer the open ocean, but in early winter and spring the cows come close to shore to calve near the surf line in sheltered bays. On average, they calve once every three years.



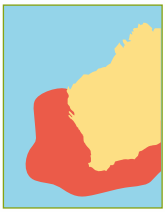


Photo – Andrew Halsall/WA Museum

Pygmy right whale

(Caperea marginata)

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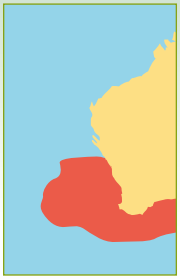


Description Like southern right whales, pygmy right whales are baleen whales with a strongly bowed lower jaw. However, they are not closely related. The pygmy right whale is the smallest baleen whale at about six metres long. They have a more streamlined shape than southern right whales, a small dorsal fin and narrow flippers. There are no callosities. The narrow, arched head is smaller in proportion to the body than in other baleen whales. The upper body and flippers are grey or black, with lighter colouring beneath, and the tail flukes are broad and notched.

Habitat and behaviour The pygmy right whale is found only in cool to temperate waters of the southern hemisphere. It spends only short periods at the surface, its dorsal fin isn't usually visible and the blow is weak. At sea it strongly resembles the minke whale and is likely misidentified, as few have been recorded in the wild. This species is usually found alone or in pairs and feeds on minute plankton. It is thought to migrate inshore during spring and summer, sometimes moving into sheltered bays.

Photo – B Parker

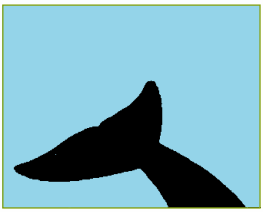
Blue whale

(Balaenoptera musculus)

ENDANGERED

Description The largest living animal on Earth, the blue whale is distinguished by its size, mottled bluish-grey colour and stubby dorsal fin well back on its body. Average length is 25 to 26 metres, but females can reach more than 30 metres and weigh more than 160 tonnes. Most blue whales off WA are the pygmy blue subspecies (*Balaenoptera musculus brevicauda*), which occurs only in the southern hemisphere and is most abundant in the Indian Ocean. However, the 'pygmy' blue, at 21 to 24 metres, is only slightly shorter than the true blue whale. Blue whales have a broad, flat U-shaped head, topped with a central ridge in front of the blowholes, and slender pointed flippers. The blow, up to nine metres high, is vertical. The large, notched tail flukes are sometimes raised when they dive, but not in the pygmy blue.

Habitat and behaviour Each year, blue whales migrate thousands of kilometres between winter birthing areas in subtropical or tropical waters and summer feeding areas in polar regions. Blue whales are seen near the WA coast in Ngari Capes Marine Park and offshore from Rottnest Island and may also feed in these areas. They are usually alone or in pairs, but groups are sometimes seen in feeding areas. They feed mostly on dense swarms of krill (tiny crustaceans) near the surface and probably don't dive deeply.



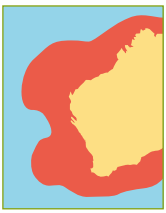


Photo – DK Coughran

Humpback whale
(Megaptera novaeangliae)

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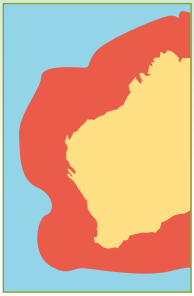


Description Humpback whales have distinctive throat grooves and knobs on their heads (tubercles). They have very long pectoral flippers with knobs on the front edge, and a humped dorsal fin that shows as the whale arches its back when it dives. They are blackish, with white undersides and sides. The underside of the tail fluke is usually white with black patterning. Adults are approximately 15 metres long. The maximum length is 18 metres and a mature adult may weigh up to 45 tonnes.

Habitat and behaviour During the winter months they migrate north to calve and breed and during spring they migrate south to feed in the Antarctic waters over summer. As they are often accompanied by calves on the southern migration, they tend to stay much closer to shore than they do when heading north. Whales are sensitive to disturbance so boats should not approach closer than 300m to the front or rear and 100m to the side of the whale and a vessel should not separate a group or mother and calf.

Photo – Holly Raudino

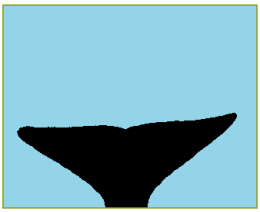
Sperm whale

(Physeter macrocephalus)

VULNERABLE

Description The largest of the toothed whales, sperm whales can weigh up to 60 tonnes with average lengths of 15 metres in males and 11 metres in females. They are easily recognised by the huge rectangular head, which is a quarter of the body length in calves and, with age, may form more than a third of the length of the body. The cylindrical lower jaw contains rows of huge teeth. The body is dark grey or brown with short, stubby flippers. The tail is large and powerful and the triangular tail flukes are often raised before diving. The blowhole is on the left of the head and the bushy, five-metre-high blow is lopsided and projects forward. Males may be heavily scarred as a result of fights with other bulls or with giant squid, which they eat.

Habitat and behaviour Sperm whales are found throughout the world in waters at least 180 metres deep. They are rarely seen near shore, unless sick. However, they occur in deep waters relatively close to the mainland in the Albany area. Females and their offspring live in family groups of between 10 and 20, within which they usually spend their whole lives. The adult males live in separate 'bachelor pods'.



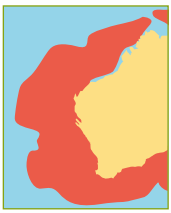


Photo – Stephen Wong/marinethemes.com

Other large whales

Minke whale *(Balaenoptera acutorostrata)*

The smallest of the seven great whales at about eight metres long, minke whales are occasionally seen off WA's coast. Their most distinctive feature is the narrow, sharply triangular head on which there is a single raised ridge. Minke whales arch their backs while diving but do not raise their tail flukes. Their blows are about two to three metres high.

Sei whale *(Balaenoptera borealis)*

ENDANGERED

These threatened whales are rarely seen. They are long and streamlined, between 17 and 21 metres long and have a single central ridge on the top of the body and a bi-coloured head.

Fin whale *(Balaenoptera physalus)*

ENDANGERED

Fin whales reach 25 to 27 metres in length and weigh up to 90 tonnes. This species has a taller dorsal fin than other baleen whales. The head is bi-coloured, with a white lower jaw and white baleen plates.

Clockwise from top left Dwarf minke whale. *Photo – Holly Raudino* Sei whale, fin whale. *Photos – DK Coughran*

Bottlenose dolphins

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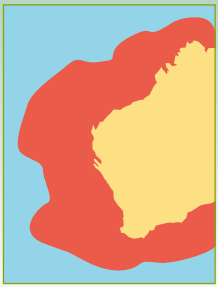
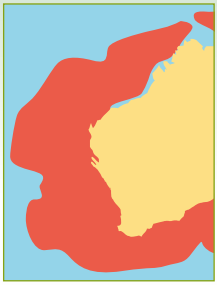


Description The common bottlenose dolphin (*Tursiops truncatus*), largely found in offshore waters, and the coastal Indo-Pacific bottlenose dolphin (*Tursiops aduncus*) are so named because they have a short rounded snout or 'beak' that resembles a bottle. Bottlenose dolphins are sleek and streamlined, have a prominent dorsal fin, and can vary in size, shape and colour depending on where they are found. In general they have a dark grey back and a light grey belly. Adults are two to four metres in length and weigh between 150 and 650 kilograms. Indo-Pacific bottlenose dolphins develop black speckles on the belly as they get older, whereas common bottlenose dolphins do not.

Habitat and behaviour Bottlenose dolphins may be seen along the coast, in estuaries and even in rivers, or well offshore in the open ocean. They can be found in all of WA's marine parks but Shark Bay Marine Park is particularly renowned for its friendly dolphins at Monkey Mia. Dolphins eat fish, and their predators include killer whales and great white sharks. Other risks include entanglement in fishing equipment, boat strikes, habitat destruction and degradation, pollution, disease and illegal killing of dolphins. It is also possible that the dolphins' key prey species are in decline, thus reducing the amount of food available to them.

Photo – Tourism WA

False killer whale
(Pseudorca crassidens)

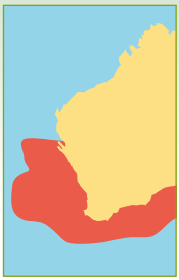


Description This medium-sized whale has a long, slender body and a narrow, tapered head with a rounded snout. Its dorsal fin is high and curved and the narrow, tapered flippers have a distinct hump or elbow on the front edge. This species is black with a grey chest, and the sides of the head are sometimes light grey. Average length is 4.6 metres for females and 5.4 metres for males. Calves are about 1.5 metres at birth.

Habitat and behaviour False killer whales are found throughout the world's tropical and temperate seas. They are sometimes seen close to the coast. They often form herds of more than 100 individuals of both sexes and all age groups and appear to have strong social cohesion. False killer whales are playful and readily bow ride, sometimes leaping from the water. Large herds of false killer whales sometimes strand themselves dramatically on a beach such as at Augusta's Flinders Bay in 1986 and 1988.

Photo – Oceanwide Images

Long-finned pilot whale
(Globicephala melas)



Description These whales are brownish-grey to black, apart from a pinkish anchor shape on the undersides. The long, sickle-shaped flippers are pointed at the tip and at least a fifth of the body length, with more of an elbow than those of short-finned pilot whales. They have a bulbous forehead and there is usually a grey saddle patch on the back, and a grey streak behind the eyes. The low fin on the back is longer at the base than at the peak. The maximum length is 6.5 metres, with males larger than females.

Habitat and behaviour The males have fighting scars, so probably compete for females, and they also have a higher mortality rate than females. Pilot whales are thought to navigate by means of clicks and communicate by whistling. These mammals are abundant and widely distributed in the cold temperate waters of the southern hemisphere. Pilot whales are essentially oceanic. They live in large groups and often strand en masse. In 1996, 320 long-finned pilot whales beached themselves at Dunsborough—WA's largest whale stranding.

Photo – Saul Gonor/marinethemes.com

Beaked whales

(Mesoplodon, Berardius, Hyperoodon, Ziphius and Tasmacetus species)

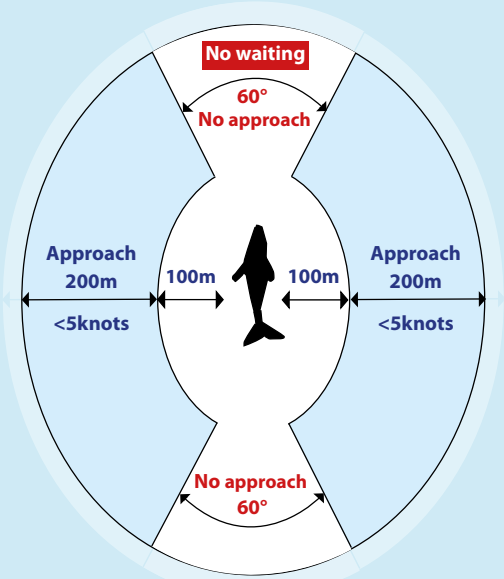
Ten species of beaked whales have been recorded in WA waters.

Common name	Scientific name
Arnoux's beaked whale	*Berardius arnuxii*
Southern bottlenose whale	*Hyperoodon planifrons*
Andrew's beaked whale	*Mesoplodon bowdoini*
Blainville's beaked whale	*Mesoplodon densirostris*
Gray's beaked whale	*Mesoplodon grayi*
Hector's beaked whale	*Mesoplodon hectori*
Strap-toothed whale	*Mesoplodon layardii*
True's beaked whale	*Mesoplodon mirus*
Shepherd's beaked whale	*Tasmacetus shepherdi*
Cuvier's beaked whale	*Ziphius cavirostris*

Description These whales all have dolphin-like beaks, defined from the melon (the bulge in front of the blowhole) to varying degrees, and they are dark grey or black above with lighter colouring below. Males of some species tend to be heavily scarred. The males have two protruding teeth or tusks on the lower jaw. In male strap-toothed whales, the teeth grow up and back, until they almost meet and the jaw is unable to fully open. The smallest species is Andrew's beaked whale, with adults four to five metres long. The largest, Arnoux's beaked whale, may reach just under 10 metres. The flippers are generally very small.

Habitat and behaviour Beaked whales inhabit deep water and rarely approach the coast. They feed on deep sea fish and squid and may dive for 30 minutes or more. This, together with their inconspicuous blows, means they are rarely seen. They generally live in small pods. They occasionally strand, such as when seven Gray's beaked whales stranded near Busselton in 2003.

A stranded Gray's beaked whale. *Photo – DK Coughran*



Whale watching protocol

A vessel must not approach closer than 300 metres within a 60-degree arc to the front or rear of the whale, or 100 metres to the side of the whale. This is called the separation distance and it must always be observed including when a vessel is underway, drifting or anchored.

Where a whale approaches a vessel and the distance between the whale and the vessel becomes less than the separation distance, the person in charge of the vessel must place the motor in neutral or move the vessel, at less than six knots, away from the whale until the vessel is at least the separation distance.

A vessel must not block the direction of travel of a whale.

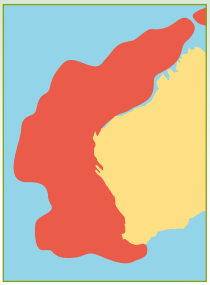
A vessel must not cause a whale to alter its direction or speed of travel.

A vessel must not disperse or separate a group of whales.

Swimming with, feeding or touching whales is not permitted. Such actions may cause stress to whales and endanger people. If you are in the water and a whale approaches, you must maintain a minimum 100 metre distance between yourself and the whale.

Please note the above protocol is for whale watching in Western Australian State waters. Please refer to the National Guidelines for Whale and Dolphin Watching 2017 when whale watching in Commonwealth waters.

Common dolphin
(Delphinus delphis)



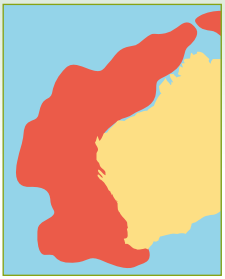
Description Unlike bottlenose dolphins, common dolphins have an hourglass pattern of light grey and tan or yellow on their sides and a dark stripe from flipper to lower jaw, with a long well-defined black beak. Calves display the same patterns but are lighter in colour. This species also has a prominent triangular dorsal fin, pointed flippers and a slender, streamlined body. Average length varies according to the location, but is approximately two metres.

Habitat and behaviour These predominantly offshore inhabitants are one of the world's most abundant dolphin species. They are widely distributed throughout tropical, subtropical and temperate areas. Common dolphins live in herds, ranging from dozens to more than 1,000, which may be segregated according to sex and life cycle. These boisterous mammals seem to enjoy bow riding, breaching and somersaulting through the air. Where they strand, common dolphins are usually alone—although one large group stranded in Tasmania in 1975.

Photo – Oceanwide Images

Striped dolphin

(Stenella coeruleoalba)



Description This distinctively patterned dolphin has a dark stripe running from flipper to eye, and from the eye to the end of the body. It is bluish-grey on top and has a white belly with lighter grey sides. A shoulder blaze curves up from above and behind the flippers towards the dorsal fin. Adults may reach about 3.5 metres, while calves are about a metre at birth.

Habitat and behaviour This species lives offshore and is rarely seen in coastal waters. It is reasonably common and widely distributed across all temperate, subtropical and tropical seas. Striped dolphins are active and playful and often leap from the water and bow ride. They live in large groups, usually between 100 and 500, with juveniles, mating adults (along with their calves) and non-mating adults living in separate groups. They commonly strand as individuals along the WA coastline. A school of more than 1,000 was reported off Geraldton in 1979.

Photo – Joao Quaresma/marinethemes.com

Other species of whales and dolphins

Killer whale *(Orcinus orca)*

SPECIALLY PROTECTED

These stocky black and white whales have broad flippers and rounded heads with indistinct beaks. The dorsal fins are extraordinarily high, especially the straight fins of males, which may be up to 1.8 metres tall. Females have shorter and more dolphin-like fins. Average length is between six and eight metres. Males are generally larger than females and may reach more than nine metres. They live in pods of between two and 40. Killer whales occasionally visit WA waters and often follow migrating humpback whales to feed on the calves and old, sick or injured animals.

Risso's dolphin *(Grampus griseus)*

SPECIALLY PROTECTED

Risso's dolphins have a white anchor-shaped patch on the chest. Adult animals are otherwise grey over most of their bodies, which are covered with numerous scars and scratches. Older animals may have so many scars that they appear almost white. The blunt, square head has no beak. The mouth slants upward and the front of the melon has a vertical groove. Other features include long, sickle-shaped flippers and a sizable dorsal fin. They are between three and four metres long when fully grown. Risso's dolphins are reasonably widespread and abundant in tropical, subtropical and temperate waters well offshore. They live in stable subgroups of 12 or more, but sometimes form herds of several hundred.

Top Killer whale. *Photo – Holly Raudino*
Bottom Risso's dolphins. *Photo – Stephen Wong/marinethemes.com*

Dugong
(Dugong dugon)

SPECIALLY PROTECTED

Description Dugongs are light brown, with a rotund body. Young calves are pale brown. Adults can grow up to three metres long and weigh over 400 kilograms. They have a flattened fluked tail (like a dolphin) but, unlike dolphins, have no fin on the upper back. They also have paddle-like flippers and a distinctive head shape. Their nostrils are near the front of the head.

Habitat and behaviour In WA, dugongs live mostly in the shallow warm waters from Shark Bay Marine Park north, but are occasionally reported as far south as Jurien Bay Marine Park. Often referred to as 'sea cows', dugongs feed on seagrass, usually in quite shallow water one to five metres deep, but are known to feed on seagrass at depths of more than 20 metres. They are the only herbivorous marine mammals and live in small herds. Their movement over an area can be followed by the sand cloud made as they move along the seafloor. Their movements are usually slow and graceful.

Photo – Oceanwide Images

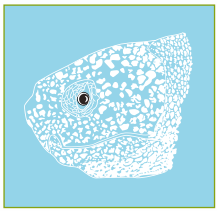
Leatherback turtle

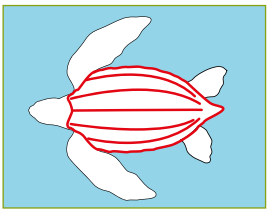
(Dermochelys coriacea)

VULNERABLE

Description The leatherback turtle is the largest of all sea turtles. Its shell alone can reach 1.6 metres long and the turtle can weigh a massive 500 kilograms. This sea turtle also has relatively large shoulders and huge front flippers. The shell is leathery and largely blackish in colour with a smattering of light spots and five distinctive ridges that run along its full length.

Habitat and behaviour While leatherback turtles have the widest distribution of any turtle, they do not nest in WA. They forage widely through both coastal and open ocean waters, taking food from the surface through to great depths. The leatherback turtle is a threatened species that is very poorly known in WA waters. The Parks and Wildlife Service is keen to know of any sightings or receive any photos (email **turtles@dbca.wa.gov.au**).





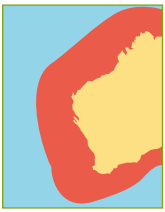


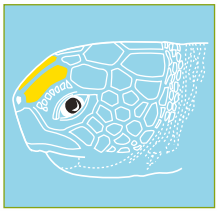
Photo – Linda Reinhold

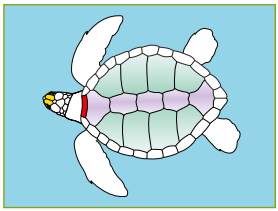
Green turtle
(Chelonia mydas)

VULNERABLE

Description The high-domed shell of the green turtle is light to dark green with grey mottling, with four pairs of costal scales (the large scales on either side of the shell). They are cream coloured beneath. Adults reach about a metre long and weigh from 100 to 125 kilograms.

Habitat and behaviour The green turtle is found in all of the world's tropical and warm-temperate oceans and is listed as threatened under WA legislation. Like other sea turtles, the species spends almost its entire life at sea. However, during the summer months, the females come ashore to nest on some mainland beaches and many offshore islands of northern Australia. The hatchlings dig their way out of their nests and journey to the sea from January to April. They are sometimes washed up on beaches along the south-west in winter storms after being swept south in the Leeuwin current. Small numbers of juveniles and adults also live in temperate south-west waters year round.





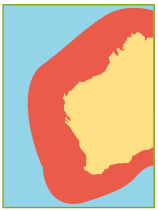
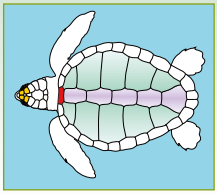


Photo – Tourism WA **Far left illustration** Unlike the flatback turtle, the green turtle has no preocular scale.

Loggerhead turtle
(Caretta caretta)

ENDANGERED

Description Most loggerhead turtles are less than a metre long and weigh up to 150 kilograms. The huge head is characteristic – the loggerhead is the only turtle where the head comprises at least a fifth of the body length. The shell is more or less heart-shaped, quite elongated and has five pairs of costal scales (shown in green in the illustration). It is usually tan to dark brown above and much lighter below.



Habitat and behaviour The most threatened turtle that nests in Australia, the loggerhead turtle mostly inhabits warm shallow seas and estuaries but also occurs in the ocean where people fish with long lines. Small numbers of large juvenile and adult loggerheads live in southern temperate waters year round. In winter, loggerhead turtle hatchlings are often carried thousands of kilometres south by the Leeuwin current from northern breeding areas in Shark Bay Marine Park and the North West Cape region. Weighing only about 100 grams, with shells between five to eight centimetres long, the youngsters are blown onto beaches along the entire western coastline. Should you find one, please call the Wildcare Helpline on (08) 9474 9055.

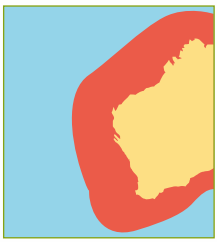


Photo – Linda Reinhold

2 DIGGING BODY PIT

Lots of sand flicked into the air using front flippers only. Turtle may move and repeat this process until finding the correct spot.

Estimated time 20-40mins

3 EXCAVATING EGG CHAMBER

Sand stops being flicked as turtle scoops out egg chamber with rear flippers only. Rocking motion side to side.

Estimated time 10-20mins

4 LAYING EGGS

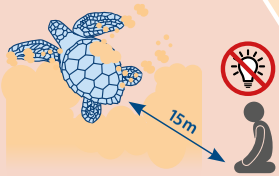
Turtle remains very still, with a gentle heaving motion. If her flippers are moving and sand is being flicked she is NOT laying yet.

Estimated time 3-10mins

5 COVERING NEST

Turtle covers egg chamber with sand using rear flippers then gradually moves forward, camouflaging nest, flicking lots of sand into air.

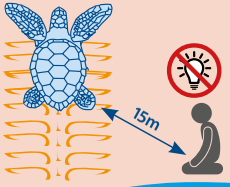
Estimated time 20-40mins

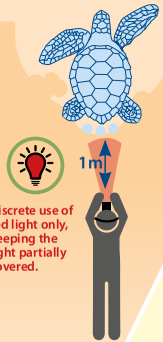


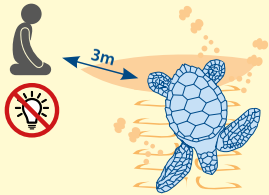
1 EMERGING TURTLE

Crawls from ocean towards potential nesting area.

Estimated time 5-20mins



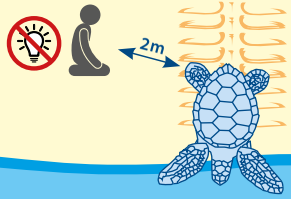


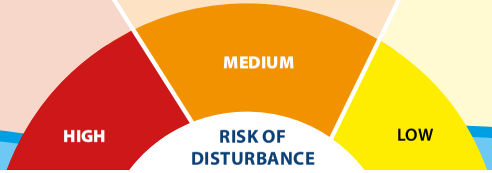


6 RETURNING TURTLE

Crawls back from beach to ocean. May stop to rest at water's edge to restore energy.

Estimated time 20-40mins





NO GLOW: turtles are easily disturbed by lights, use the moon to light your way.
MOVE SLOW: at all times to avoid disturbing turtles, walk along the water's edge and slowly follow an emerging track.
STAY LOW: out of sight of nesting turtles - sit, crouch or lie in the sand.

No flash photography at any time

TURTLE WATCHING CODE OF CONDUCT

Great white shark

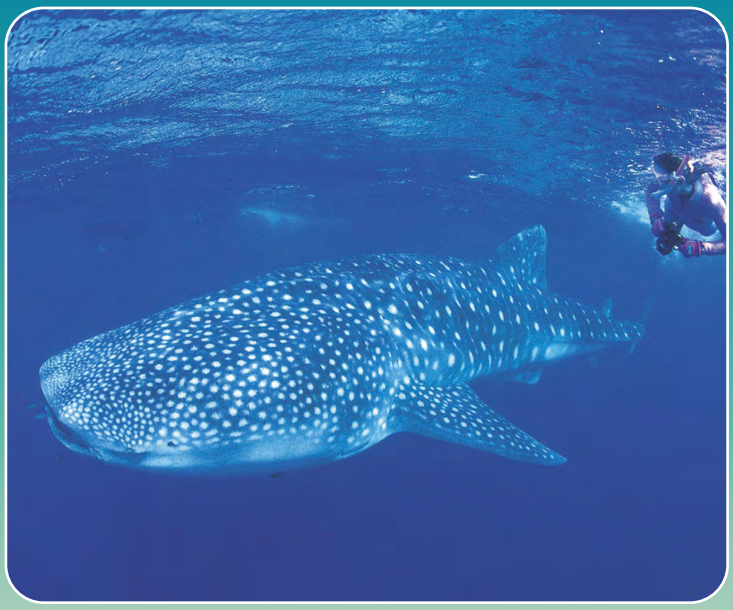
(Carcharodon carcharias)

VULNERABLE

Description Great white sharks have a moderately stout, torpedo-shaped body and are grey to greyish-brown on the upper surface and white below. They grow to at least six metres long, with unconfirmed reports of sharks up to seven metres.

Habitat and behaviour The great white shark is distributed widely in temperate and subtropical oceans throughout the northern and southern hemispheres, though it prefers temperate waters. In WA, it is found mostly in the southern half of the state, particularly near seal and sea lion colonies, although it has occasionally been recorded as far north as Ningaloo Marine Park. The species will follow humpback whales during their southern migration along the WA coast, to prey on the young calves and old and sick adults. Great whites will attack people, with a number of deaths being attributed to them over the past 100 years or so. They are inquisitive and unafraid, and will approach small boats and even bite outboard motors.

Photo – Kelvin Aitken/marinethemes.com



Whale shark

(Rhincodon typus)

SPECIALLY PROTECTED

Description The whale shark is the world's largest fish, growing to lengths of 14 metres and above. It has a mouth up to 1.5 metres wide, a broad flat head and two small eyes near the front of the head. The body is mostly grey, marked with lots of white spots and stripes (in a pattern unique to each individual whale shark), with a white belly. Three ridges run along each side of the shark and there are five large pairs of gills.

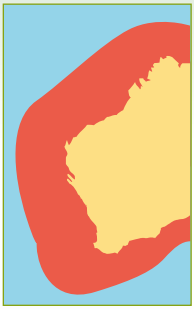
Habitat and behaviour Whale sharks are known to inhabit both deep and shallow coastal waters and the lagoons of coral atolls and reefs. From around mid-March to mid-July each year they are common in Ningaloo Marine Park. However, they are often seen offshore from Dirk Hartog Island National Park in Shark Bay and sometimes further south, with one filmed at a Fremantle beach in late 2011. They tend to be solitary and are rarely seen in groups unless feeding at locations with abundant food. Despite its enormous size, snorkellers can safely swim with this giant fish, as long as they stay at least three metres from its head and body and at least four metres from the shark's large tail. It is illegal to disturb, harm or fish for whale sharks in Australian waters.

Photo – Tourism WA

Grey nurse shark

(Carcharias taurus)

VULNERABLE



Description The grey nurse shark has a large stout body, grey to greyish-brown above and off-white below. Reddish or brownish spots may occur on the tail fin and to the rear of the body. Grey nurse sharks grow to at least 3.6 metres. They are slow but strong swimmers and are thought to be more active at night.

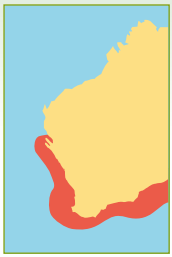
Habitat and behaviour The grey nurse shark is found in inshore subtropical and temperate waters around continental landmasses. It has occasionally been recorded off the continental shelf. Grey nurse sharks are often seen hovering in or near deep sandy gutters or rocky caves, and in the vicinity of inshore rocky reefs and islands, usually at depths of between 15 and 40 metres. These sharks are generally harmless to people but have been greatly depleted through fishing.

Photo – AQWA

Leafy sea dragon
(Phycodurus eques)

Common sea dragon
(Phyllopteryx taeniolatus)

Description Due to its leaf-like appendages, the leafy sea dragon resembles floating pieces of seaweed, making this pipefish species extremely difficult to spot. Most adults are green to yellowish-brown with thin bands or stripes across the body. Common sea dragons have fewer and smaller leafy appendages, are more elongated and have brighter colouring. Both species can reach about 45 centimetres long.



Distribution Leafy sea dragons have only been recorded from the southern coastline of Australia, from Jurien Bay Marine Park to Wilsons Promontory in Victoria. Common sea dragons are found over the same area and east and north to New South Wales with isolated records from Queensland. In WA, most sightings of leafy sea dragons are in Ngari Capes Marine Park (which stretches from Busselton to Augusta).

LEAFY SEA DRAGON and COMMON SEA DRAGON

Top Leafy sea dragon. *Photo – Ann Storrie*
Bottom Common sea dragon. *Photo – Peter Nicholas*

Albatrosses

(Diomedea, Thalassarche and Phoebetria species)

Fourteen species of albatross are listed as threatened in WA

Common name	Scientific name	Listing
Amsterdam albatross	*Diomedea amsterdamensis*	CR
Tristan albatross	*D. dabbenena*	EN
southern royal albatross	*D. epomophora*	VU
wandering albatross	*D. exulans*	VU
Gibson's albatross	*D. gibsoni*	VU
northern royal albatross	*D. sanfordi*	EN
sooty albatross	*Phoebetria fusca*	VU
light-mantled albatross	*P. palpebrata*	VU
Indian yellow-nosed albatross	*Thalassarche carteri*	VU
shy albatross	*T. cauta*	VU
Atlantic yellow-nosed albatross	*T. chlororhynchos*	VU
grey-headed albatross	*T. chrysostoma*	VU
black-browed albatross	*T. melanophrys*	VU
Salvin's albatross	*T. salvini*	VU

Description These birds are best recognised by their enormous size and huge bills. With lengths from 1.1 to 1.35 metres and a wingspan up to 3.5 metres, the wandering albatross is the largest of all seabirds and has the widest wingspan of any bird.

Habitat and behaviour While they breed on subantarctic and other Southern Ocean islands, individuals travel vast distances, up to 15,000 kilometres, around the world's oceans during each non-breeding period. They feed mainly from cool, oceanic waters, especially those enriched by up-welling nutrients and along the edge of continental shelves.

Yellow-nosed albatross. *Photo – Simon Allen*

Little penguin
(Eudyptula minor)

Description The little penguin is the smallest of the 17 penguin species. Adults stand about 40 centimetres tall and weigh about a kilogram. Birds in the Shoalwater Islands Marine Park are larger than those elsewhere in Australia.

Habitat and behaviour Penguin Island supports about 1,200 little penguins and is probably the largest breeding colony in WA. Visitors can see them at the Penguin Discovery Centre. Little penguins breed at about three or four years of age, and live for about 10 years. Breeding females lay one or more clutches of two eggs between June and September. Incubation is shared by both parents over a period of five weeks. Two chicks often hatch, but usually only one is raised unless food is abundant. Little penguins feed on pilchards, whitebait and other small fish. During a two to three-week period in December or January, plumage is shed en masse and then replaced. Penguins do not go to sea to feed during this stressful process. Moulting penguins often stand in the open to cool themselves and are particularly vulnerable to disturbance.

Little penguin moulting. *Photo – Michael James/DBCA*

Helping stranded marine mammals

Strandings of marine mammals sometimes occur along WA's extensive coastline. If you should come across a stranded whale, dolphin or seal, whether it is a solitary or mass stranding, please ensure both your own and the animal's safety.

What to do:

1. Think about your safety first.
2. Call the Wildcare Helpline on (08) 9474 9055.
3. While waiting for assistance, try not to make too much noise.
4. Keep the animal's skin moist (but do not cover the blowholes or nostrils with water).
5. Listen to the instructions of the wildlife officer.

What NOT to do:

1. DO NOT put your safety or the safety of others at risk.
2. DO NOT stand close to the head or tail.
3. DO NOT touch the animal more than is necessary and especially do not push or pull on the flippers, flukes or head, or cover the blowhole.
4. DO NOT attempt to push the animal back out to sea. This will only add to its suffering.
5. DO NOT apply sunscreen even if the animal's skin is burnt.

Photo – Henderson Photographics

Reporting sightings of marine fauna

The marine fauna sightings app, by the Department of Primary Industries and Regional Development (DPIRD), is designed to allow users to submit information about sightings of marina fauna to help researchers gain a better understanding of their movements and behaviour.

Download the free app from **Google** (for android) or **Apple**, and note down as many details as you can from the list below:

- time and date
- species name and description, plus photos if you have them
- number of adults and calves
- their movements (travelling, resting, playing, breaching etc)
- location
- any further comments that could help explain the event.

If however you find a stranded, sick or injured marine mammal, please call the Wildcare Helpline on (08) 9474 9055.

Alternatively you can connect online with **DPIRD Fisheries**.

Wildcare
HELPLINE
9474 9055

Photo – Kevin Crane/DBCA

Photo – Andrew Halsall/WA Museum

More information

For more information, view our DBCA office locations and contact details **online**.

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

PARKS AND WILDLIFE SERVICE

Information current at March 2023. This information is available in alternative formats on request.

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