Crocodiles



Information guide

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

PARKS AND WILDLIFE SERVICE

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Above Estuarine (saltwater) crocodile basking in the sun.l

Biology

Crocodiles belong to the Crocodylidae family and are the largest living reptiles in the world. Their evolution history dates back 200 million years ago, to a time before dinosaurs roamed the Earth. This ancient group of reptiles lived through the Cretaceous period and successfully survived the great ice age periods of the past two million years. Perfectly adapted to their environment, today's crocodiles differ very little from their ancient relatives.

Nesting

Estuarine (saltwater) crocodiles breed in the wet season between November and May. Females construct a vegetation and soil nest in which up to 50 eggs are laid and incubated. They maintain and defend their nests against intruders and are very protective.

Johnston's freshwater crocodiles breed in the dry season, between July to October. They excavate a hole in the sand or other soft soil and lay between 13–15 eggs. They do not defend their nests but do assist their hatchlings to the water once they have hatched. They know they have hatched as they hear their chirping calls from within the nest.

The incubation period for both species is three months. The temperature during incubation determines the sex of the hatchlings.

Both species will aggressively protect their hatchlings and stay close by for the first five weeks of their lives.

Many factors affect the survival rate of young crocodiles as only a few ever reach maturity. Floodwaters may inundate and drown eggs and young crocodiles are often taken as food by birds of prey, goannas and dingoes.



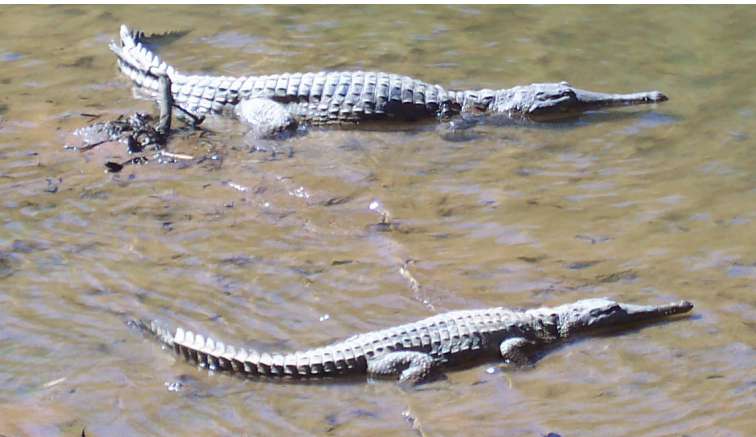
Distribution

Two species of crocodile occur in Australia: the estuarine (saltwater) crocodile and the Johnston's freshwater crocodile. Both species are found extensively throughout northern Australia, with the estuarine (saltwater) crocodile extending in the east as far as Gladstone in Queensland and as far south as Carnarvon in Western Australia.

Conservation

Unregulated hunting for skins started in 1945 which caused a drastic decline in the crocodile population. By the 1970s both species were legally protected in WA. Poaching, killing or interfering with crocodiles, their eggs or habitat is an offence carrying penalties of up to $200,000 under the *Biodiversity Conservation Act 2016*. Incidents should be reported to your local Parks and Wildlife Service office. The population is now recovering, and crocodiles are moving back into places they occupied prior to harvesting.

Below Johnston's freshwater crocodile.





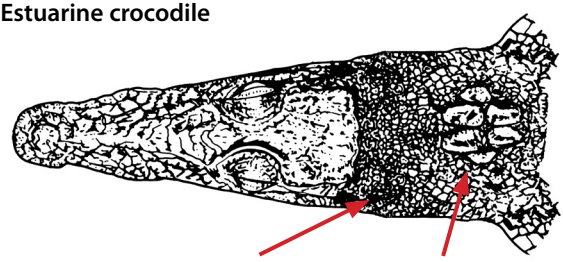
Estuarine (saltwater) crocodile

(*Crocodylus porosus*)

Estuarine (saltwater) crocodiles (commonly known as 'salties') are most likely to be encountered in tidal rivers and estuaries, billabongs and on the floodplains of the Kimberley. They can also be found in the open sea. Despite what the name suggests, estuarine (saltwater) crocodiles are not found exclusively in saltwater. They are commonly found in freshwater pools and rivers many kilometres inland. The estuarine (saltwater) crocodile is the largest of all crocodile species. It has been known to grow up to seven metres and is a dangerous predator. This crocodile has a varied diet but feeds mainly on fish, waterbirds and occasionally large land mammals, such as wallabies, cows and horses. They are ambush predators and often kill larger prey by biting them, rolling them with their iconic 'death roll' and drowning them. Their large size, broad snout and arrangement of bony scales on the top of their head and neck allows relatively easy identification in the wild (see diagram below).

'Salties' are dangerous!

Estuarine crocodile





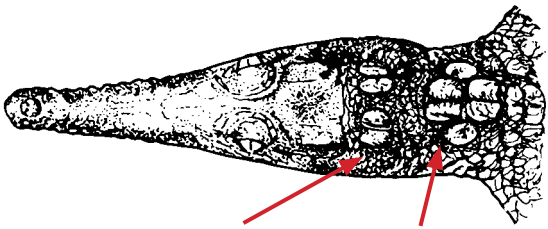
Johnston's freshwater crocodile

(*Crocodylus johnstoni*)

As the name suggests, Johnston's freshwater crocodiles (commonly known as 'freshies') inhabit freshwater rivers, creeks, artificial lakes (such as Lake Argyle and Lake Kununurra) and occasionally tidal areas. They feed mainly on insects, small aquatic animals and fish. Compared to the estuarine crocodile, 'freshies' are relatively small, are rarely longer than three metres and are not considered as aggressive but can be dangerous if disturbed or provoked. Their relatively small size and narrow snout distinguish them from estuarine (saltwater) crocodiles,
as well as the pattern of bony scales on their head and neck (see diagram below).

Freshwater crocodiles may be spotted at Bandilngan (Windjana Gorge) National Park and occasionally Dimalurru (Tunnel Creek) National Park.

Freshwater crocodile





Do not feed crocodiles!

Feeding crocodiles is dangerous and can change natural behaviour including decreasing their fear of humans, increasing aggression, and teaching them to associate people/boats with food. Feeding crocodiles is an offence under the *Biodiversity Conservation Act 2016* and carries penalties of up to $20,000.



Problem crocodiles

In Western Australia, problem crocodiles are those actively presenting themselves as a threat to humans. These situations include:

- An estuarine (saltwater) crocodile within a Crocodile Control Zone
- The crocodile has attacked or is likely to attack people
- The crocodile is behaving aggressively towards people
- The location of the crocodile makes it a threat or potential threat to human safety or wellbeing
- The activity of the crocodile is affecting the productivity of industry or commercial enterprises in an area of approved operation
- The crocodile has been fed by humans and habituated to associate humans with food.

If you believe you have seen a problem crocodile, take a photo and GPS location if safe to do so and report it immediately to the local Parks and Wildlife Service office.

The decision on what to do with such an animal is made on a case by case basis. When appropriate, problem animals are caught and relocated to a crocodile farm. Crocodiles cannot usually be relocated to another area due to their territorial nature.

Reporting an estuarine (saltwater) crocodile

Please provide the following information when reporting an estuarine (saltwater) crocodile sighting to the appropriate Parks and Wildlife Service office:

- Your name and phone number
- Location and time of day the crocodile was spotted
- Estimated size
- What the crocodile is doing and what direction it is travelling
- If there are any people in the water nearby
- If it is possible and safe to do so, please take a photo to include with the above information.



How to Be Crocwise

CROCS ARE COMMON:
WA's North West is 'Crocodile Country'.

CROCS MOVE AROUND:
They can be found in any waterway, including fresh water.
They can move large distances and kilometers inland.

CROCS ARE DEADLY:
Crocodiles are dangerous and attacks can be fatal.

BE CROCWISE:
Don't become complacent.

Swimming, camping, fishing and boating in Croc Country

- Estuarine (saltwater) crocodiles have no fear of humans; they are often inquisitive and may swim towards boats. Leave the area immediately if you see one.
- If your vessel is approached by a crocodile, take immediate action to move away from the animal and maintain a safe separation distance.
- Never hang arms, legs or any part of your body over the edge of a boat.
- Be especially vigilant when launching or retrieving your boat.
- Avoid the water's edge whenever possible. Children and pets are at particular risk.
- Do not paddle, clean fish, prepare food or camp at the water's edge. Fill a bucket and do your chores at least 50 metres away.
- Returning daily or regularly to the same spot at the water's edge is dangerous.
- Stand a few metres back from the water's edge when fishing.
- Dispose of food scraps, fish offal and other waste properly and away from your campsite.
- Crocodiles are stealth predators. They can remain hidden for long periods so you won't always know they are there.

Crocodile Control Zones

Kununurra and Broome have Crocodile Control Zones where crocodiles are managed within the area for the purpose of public safety. The department will respond to all sightings of estuarine (saltwater) crocodiles that are reported in these areas.

The Kununurra Control Zone runs along the Ord River from the Lake Argyle dam wall to the diversion dam at Lake Kununurra.

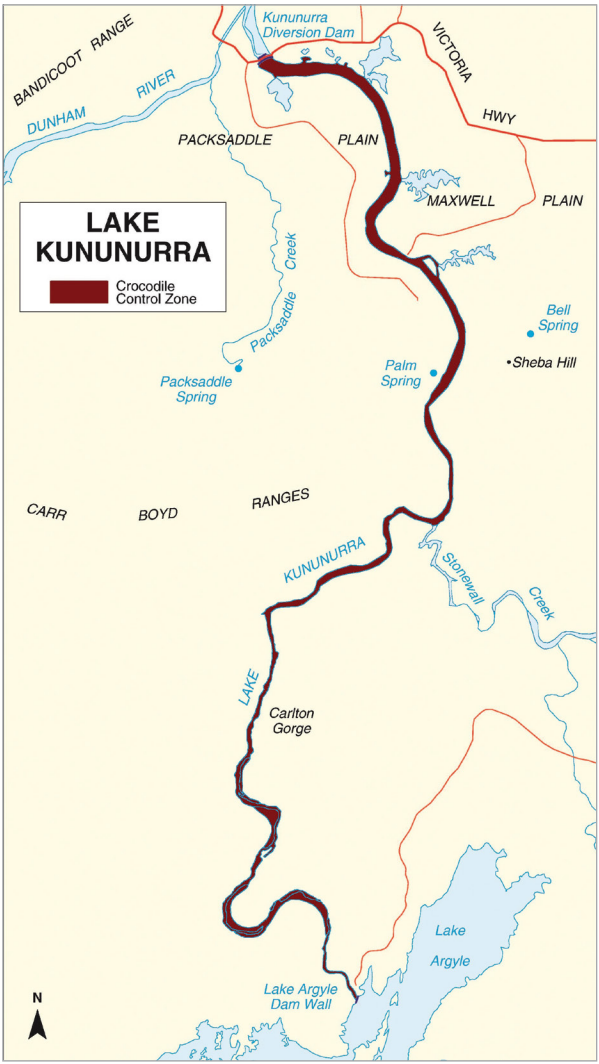
The Broome Control Zone runs from just north of Coconut Wells (excluding Willie Creek) to Fall Point (eastern side of Dampier Creek). Please call the local Parks and Wildlife Service if you see an estuarine (saltwater) crocodile within these areas.

Broome Crocodile Control Zone





Kununurra Crocodile Control Zone





Crocodile warning!



Throughout the Kimberley region and parts of the Pilbara region you may see crocodile warning signs erected on tracks and roads, or when entering known crocodile habitats. The absence of a warning sign does not signify that it is safe to swim or carry out other water-based recreation activities such as canoeing, fishing or boating. When you enter the Kimberley or Pilbara regions, you are entering crocodile country.

Be Crocwise in your behaviour.

000 EMERGENCY

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



Above Miriuwung Gajerrong Rangers inspecting a crocodile trap in Lake Kununurra. *All photos – DBCA*

More information

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Check for alerts and updates directly related to parks and major trails at **alerts.dbca.wa.gov.au** and for all emergency information in Western Australia at **emergency.wa.gov.au**.

Find more park visitor information, book campsites and share your experiences at **exploreparks.dbca.wa.gov.au**.

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