

By Oliver Jarvis

SALTWATER CROCODILES

Astonishing, ancient reptiles

The largest of all reptiles, the saltwater crocodile, *Crocodylus porosus*, is one of the most impressive of all the crocodylia. With a hunting technique that has worked for 200 million years, “salties” are some of the last living predators from the Jurassic period. With an average life expectancy of about 70 years, fully grown salties can be up to six metres long and weigh just under a ton. While they have a reputation for being incredibly aggressive and territorial, saltwater crocodiles are also some of the most intelligent and sophisticated reptiles, being fantastic problem solvers, and patient, stealthy, cunning hunters.

The saltwater crocodile is famous for its “death roll”, a technique where it grabs onto its prey and drags it into the water, turning it over and over, until it has been killed and the carcass comes apart. Despite their huge size, it is estimated that saltwater crocodiles only eat around 50 full meals a year, going for up to several days without eating, and conserving their energy by patiently waiting in the water. Despite their moderate eating

habits, salties will eat nearly any animal that crosses their path, with larger crocodiles able to consume cattle, horses, monkeys and even sharks.

As its name implies, this species has a high tolerance for salinity, and lives in brackish water around coastal areas and estuaries. They also inhabit freshwater rivers, billabongs and swamps. Being cold blooded, they adjust their body temperature using the environment – staying in the water to cool down, sunbathing on land to heat up. Even though salties are poor swimmers, they have a wide distribution, are found in waters surrounding India to Australia, and have been tracked cruising up to 600 kilometres on ocean currents.

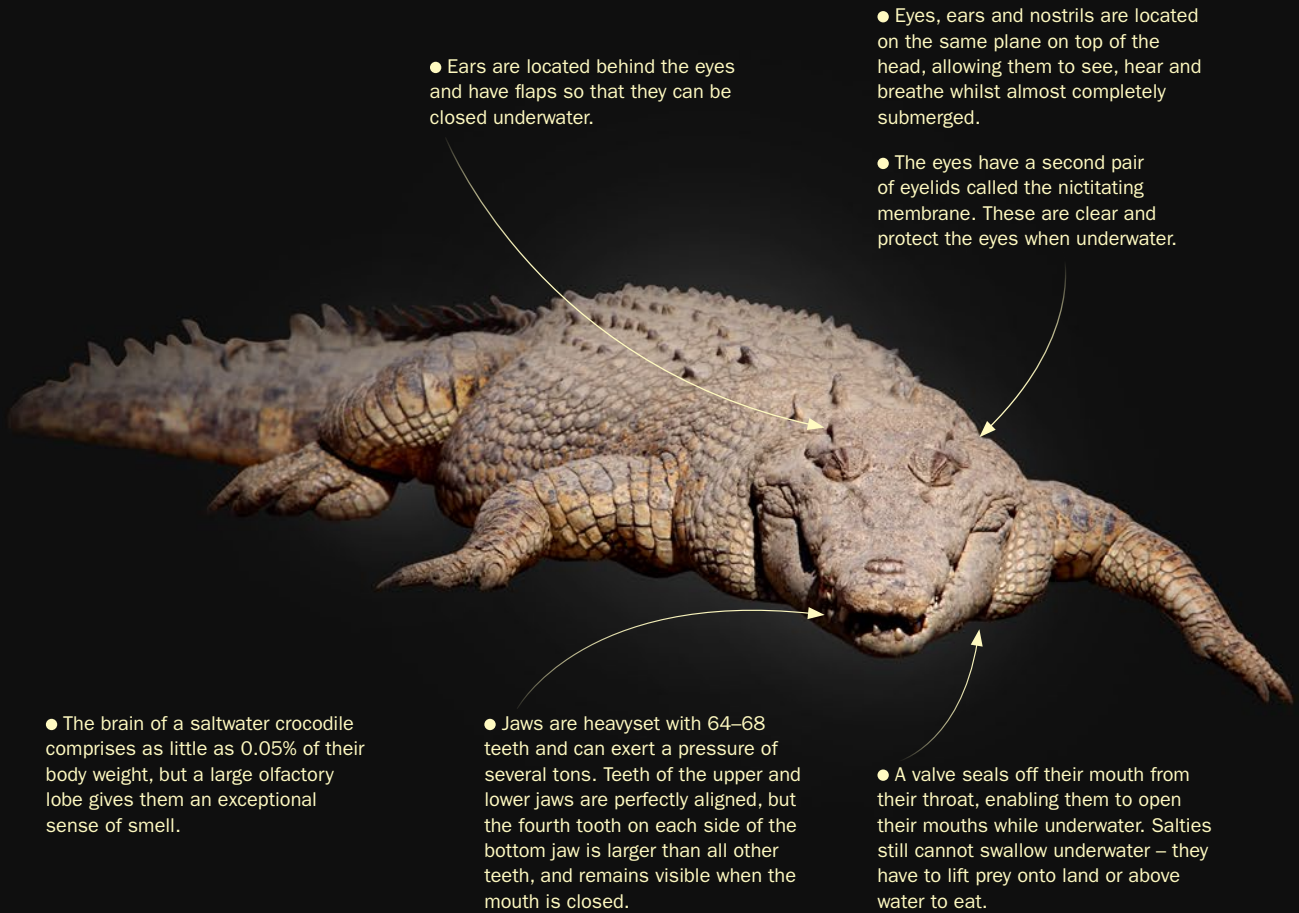
COMPLEX COMMUNICATORS, PROTECTIVE PARENTS

Their mating season occurs between November and March, during which males become increasingly aggressive towards one another, often engaging in hour-long stand-offs over a female, before one admits defeat and walks away.



Think you can't teach an old croc new tricks? Prepare to have your mind blown.

SALTWATER CROCODILE ANATOMY



● Ears are located behind the eyes and have flaps so that they can be closed underwater.

● Eyes, ears and nostrils are located on the same plane on top of the head, allowing them to see, hear and breathe whilst almost completely submerged.

● The eyes have a second pair of eyelids called the nictitating membrane. These are clear and protect the eyes when underwater.

● The brain of a saltwater crocodile comprises as little as 0.05% of their body weight, but a large olfactory lobe gives them an exceptional sense of smell.

● Jaws are heavyset with 64–68 teeth and can exert a pressure of several tons. Teeth of the upper and lower jaws are perfectly aligned, but the fourth tooth on each side of the bottom jaw is larger than all other teeth, and remains visible when the mouth is closed.

● A valve seals off their mouth from their throat, enabling them to open their mouths while underwater. Salties still cannot swallow underwater – they have to lift prey onto land or above water to eat.

To prepare her nest, the female will spend several weeks collecting materials around her environment to construct the nest on land, which needs to be large enough to place 40–60 eggs in, and far enough from the water to avoid any flooding. The female will then guard the nest with her life, and remain in close proximity to it during the 90-day incubation period, patrolling for any disturbances and occasionally splashing water on the eggs to stop them from becoming too dry. Upon hatching, the hatchlings will notify the mother with squeals so that she can prepare to carry them, one-by-one to the water. Incredibly, if a baby crocodile is struggling to break their shell, the mother will delicately help; with an extremely high infant mortality rate of 99 percent, it is vital for the mother to do everything she can to assure their survival. Being only the size of a human hand, the young are incredibly vulnerable to adult saltwater crocodiles, large lizards and birds, so the mother will guard them until they grow larger.

Researchers have identified four distinct saltwater croc calls: a distress bark, which is used mainly by juveniles;

DID YOU KNOW...

The sex of young saltwater crocodiles is determined by their incubation temperature. Below 31 or above 33 degrees Celsius means they will be female, whereas a temperature of around 31.6 degrees Celsius will result in them being male.

a hissing threat to warn other crocodiles off of their territory; a hatching squeal to alert the mother; and a low courtship growl, which makes the surrounding water dance. But salties also communicate using infrasound, as well as with chemical signals and body posture.

CONSERVATION STATUS

On the IUCN's Red List, saltwater crocodiles are listed as Least Concern, which means they have been evaluated, but are not under any threat. However, their estimated population of around 300,000 is falling due to habitat destruction and human encroachment, and people hunting them for their hides to make leather goods – even though such hunting is illegal in many areas. [SDOP](#)