

Crocodylian Adaptations



Study*ladder*

More than just leathery skin...



Crocodylia spend much of their time in the water so they have tough bumpy skin which is water resistant.

Their skin texture and markings provide excellent camouflage which helps them blend in with rocks and vegetation in their surroundings.



The skin around their snout also contains millions of tiny sensory bumps that help them 'feel' the slightest vibrations caused by the movement of prey. Alligators only have these bumps in and around their mouths while crocodiles and gharials have them all over their bodies.



A semi- aquatic life...

Crocodylia have lungs so they need to breathe air through their noses.

Their eyes, ears and nostrils are all located on the upper part of their head so they can still see, hear and breathe when most of their body is submerged in water.



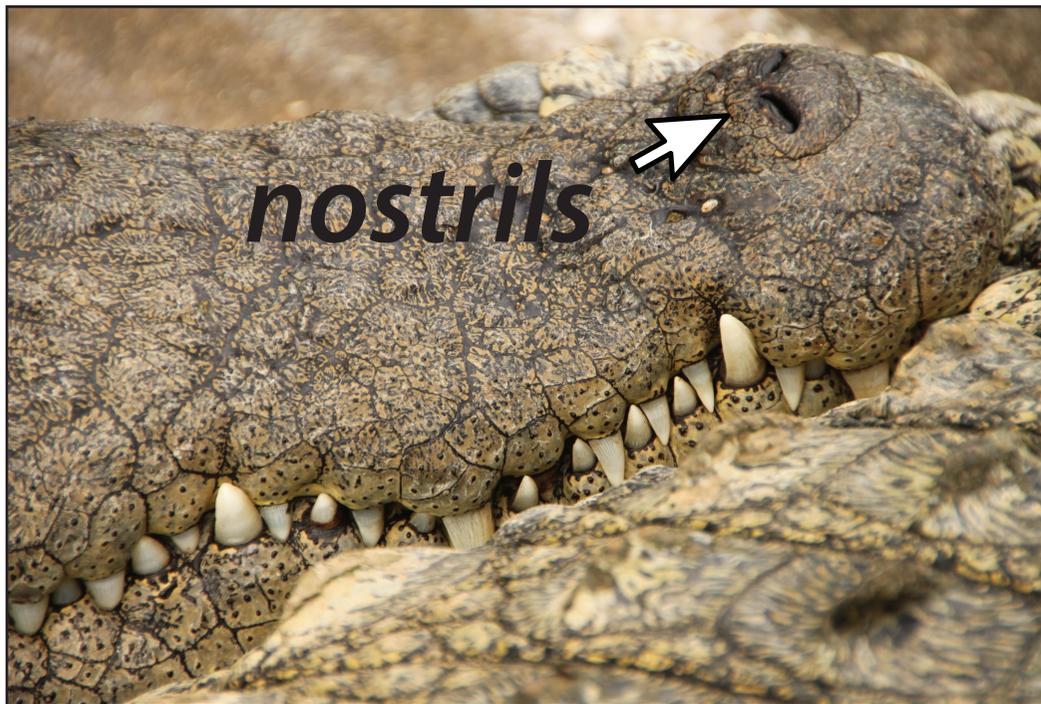
Another amazing feature is the function of their tongue. It can be flattened and pushed back to close a valve at the back of their throat that stops water entering their respiratory system. They can hold their breath for extended periods while they are under water.

This means that they can catch their prey while underwater and not drown themselves.





Ears are located behind the eyes



Crocodylia don't have to worry about water getting in the eyes and ears and up their noses when they swim!

They have special flaps that close their ears and nostrils when they go underwater. They also have a third eyelid that can close over the surface of their eyes to protect them. This eyelid is translucent so they can still see.

These extra eyelids also allow them to blink to away debris while still being aware of their surroundings.

Did you know that crocodiles can also cry tears to lubricate their eyes ?



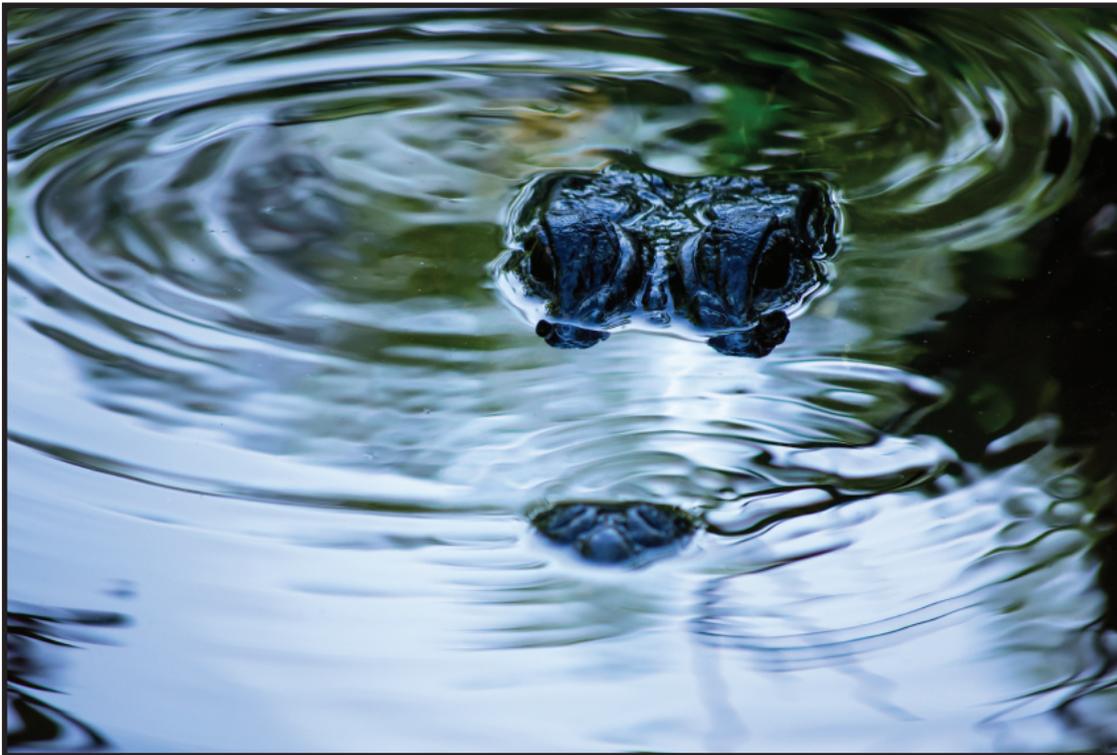
Crocodylians are excellent swimmers. They propel themselves through the water with their powerful tail. They are very agile and are able to leap out of the water to catch prey. They have webbed toes on their hind feet which helps them change direction easily, allowing them to speed through the water.



Masters of Stealth

Crocodylians are masters of a quiet attack. They can stay hidden in the water with just their eyes and nose exposed, allowing them to still see, hear and breathe. They will stay submerged, balancing on their hind feet, then glide silently toward their unsuspecting prey.

They are extremely swift swimmers. They take their prey down into the water in their powerful jaws while rolling their bodies over and over until their victim drowns. Crocodylia do not chew their food. They swallow their prey whole and they can easily tear large prey into smaller pieces with their powerful jaws.



Why do crocodiles often rest with their mouths open?

Animals have different ways of controlling their body temperature. Humans have warm blood which generally keeps our body at an optimal temperature. We still need to be able to cool down our bodies on a hot day, or when we are exercising. Our bodies have developed an amazing way of automatically regulating our temperature. We have sweat glands that release excess heat from our bodies and produce moisture in the pores of our skin. When a breeze passes over the wet skin, it cools us down.

Many animals also use moving air to cool down their bodies. Dogs, for example, will pant, exhaling warm moist air and allowing cool air to pass over their tongues.

All reptiles, however, are ectothermic, which means that they have cold blood and rely on using the environment to control the temperature of their bodies. For example, they will go and lie in the sun to warm up and seek shade, water or mud to cool down.

Crocodiles have developed a behaviour that is similar to panting. When their temperature gets too high they sit with their mouths wide open, allowing the breeze to pass over the inside of their mouth. This allows body heat to escape and cools down the blood passing through vessels just under the skin.

