

# For Creative Minds

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## Croco-what?

Crocodiles, alligators, and caiman are all called crocodilians. Crocodilian means different types of crocs. Crocodilians belong to three groups, called families. The crocodilian families are made of different species. There are 24 crocodilian species in all.

The crocodilian families are:



**Alligatoridae**  
all alligators and caiman  
8 species



**Crocodylidae**  
true crocodiles  
15 species



**Gavialidae**  
the Gharial  
1 species

How can you tell the families apart? Check out their snouts (noses) and teeth.

### Snouts

Alligators and caiman have rounded snouts, like a duck's bill. The alligator's wide snout is better suited for catching and holding large, strong animals. A crocodile has a narrower, pointed nose. That's how you can tell them apart!

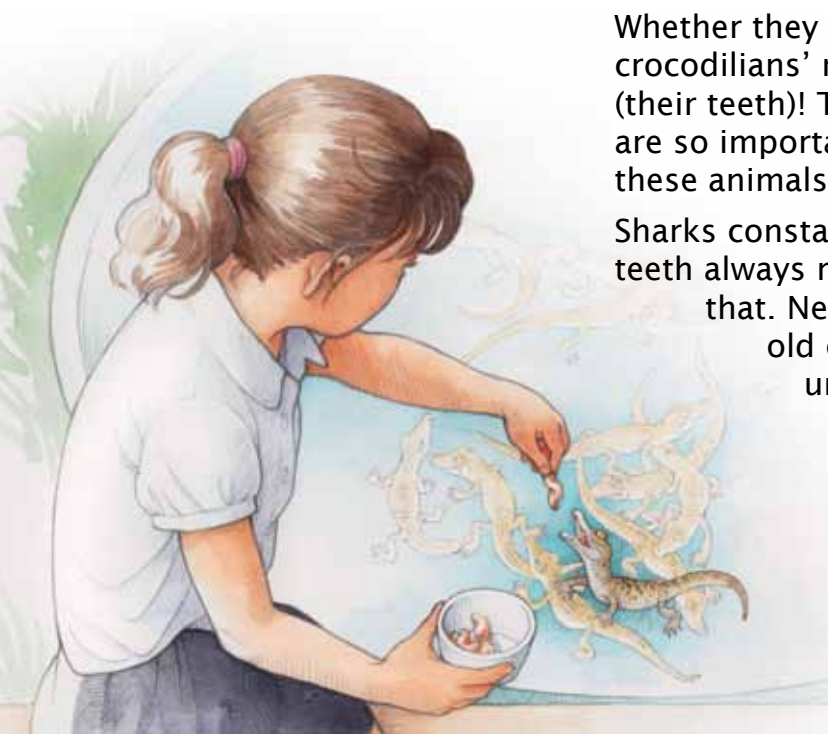
The crocodile's narrow snout is designed to quickly move side to side in the water to catch and eat fish. The longest, most narrow snout of all belongs to the Indian Gharial.

*If you were a crocodile, which family would you be in? Do you have a pointed nose or a more rounded nose?*

### Teeth

You can also tell gators and crocs apart by looking at their teeth. When alligators' mouths are closed, they only show their upper teeth. When crocodiles' mouths are closed, they show upper and lower teeth, and a lot of them. Whether croc or gator, these teeth are attached to the most powerful jaws on the planet. You combine needle-sharp teeth with strong jaws and you have something like a bear trap. Yikes, you don't want to get caught in that!

# Chompers



Whether they have a narrow or wide snout, the crocodilians' most important body part is their chompers (their teeth)! They need their teeth to catch food. The teeth are so important that they are constantly replaced so that these animals are never without a fresh, sharp set.

Sharks constantly replace their teeth, too. Rows of new teeth always move forward. Crocs' new teeth aren't like that. New teeth for crocs move up from below the old ones. Croc teeth are hollow. They stack up underneath each other, just like you could stack plastic cups. These teeth are hollow but don't be fooled. They are strong and needle-sharp! They aren't designed for chewing, like your teeth, but for holding on tight. Crocs don't chew their food. They swallow it whole or tear it into pieces that they can swallow.

There are big differences between your teeth and crocodilians' teeth. You only have two sets of teeth (baby and adult). Crocs will go through hundreds of teeth over their lifetime. Also, your teeth are designed for chewing. They match up so that the top teeth align with the bottom teeth. A croc's teeth don't match up. They alternate top, bottom, top, bottom, and so forth. They also are needle-sharp, designed for holding on tight. Scientists have measured the bite force of crocs at over 1.5 tons. That's the same weight as a small car. A person's bite force is 100 pounds. That's the same weight as two bicycles.



	<b>Kid</b>	<b>American crocodile</b>
mouth closed	no teeth visible	lots of teeth visible
teeth alignment	match up top-to-bottom	teeth alternate
teeth used for	chewing	holding and tearing
bite force	50-100 lbs.	more than 3,000 lbs.
tooth structure	solid	hollow
number of teeth in set	32	68
sets of teeth	2 (baby and adult)	unlimited

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## Dr. Brady Barr

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I've worked on crocodylians for over 25 years, and have captured over 5,000, but I remember the first time I saw one in the wild like it was yesterday!

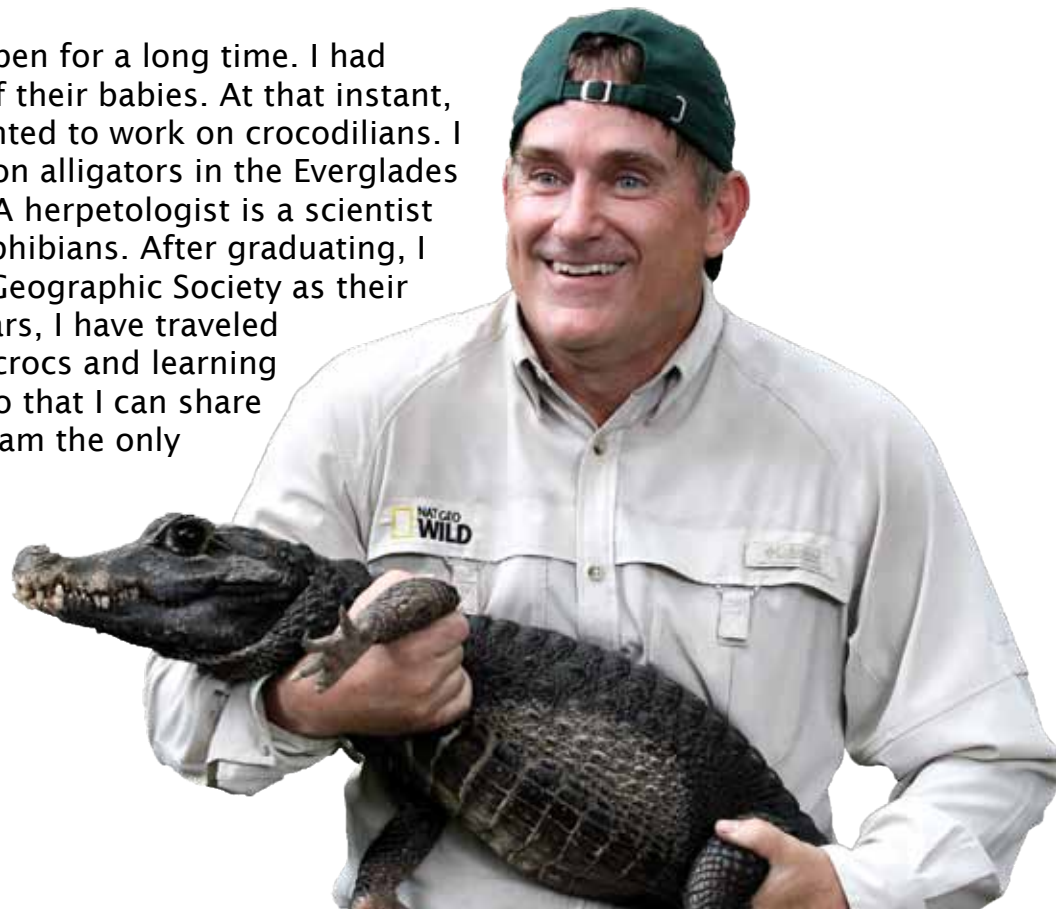
It happened over 30 years ago and I am lucky to be here to tell the story. I'd just moved to Florida, and being a lover of animals, especially reptiles, I headed to the Everglades. Before long, I came to a stream that came out of the woods and flowed under the road. I'd just started looking around when I spied him . . . my first wild alligator. I was expecting

something big and ferocious, but what I saw was a tiny baby by himself.

He looked like he was smiling at me! He was only as big as a candy bar. I thought he was beautiful with his big eyes and yellow stripes. It was hard to believe this little guy could grow to be 14 feet long. He looked at me and started to talk: "*Wanh. Wanh. Wanh.*" I smiled as I wondered what he was trying to say. Then I heard a huge noise, like a train rushing in fast. I backed up, not sure I wanted to meet what was charging through the brush. Suddenly, a huge gator came into view, racing right toward me. Yikes! She looked like she wanted to eat me! The baby seemed excited and started talking. I realized the big gator didn't want to eat me; she was simply the mother coming to get her baby!

Right before my eyes, the big mama picked up the baby in her powerful jaws and swam a short distance away. She released the baby from her mouth, and they swam into the sawgrass and disappeared.

I stood there with my mouth open for a long time. I had never seen reptiles take care of their babies. At that instant, I was hooked. I knew that I wanted to work on crocodylians. I went on to get a PhD working on alligators in the Everglades and I became a herpetologist. A herpetologist is a scientist who works on reptiles and amphibians. After graduating, I went to work for the National Geographic Society as their croc expert. For the last 20 years, I have traveled all over the world researching crocs and learning as much as I can about them so that I can share that information with others. I am the only person that has ever captured all 24 species of croc in the wild. In fact, I am the only person that has ever seen every species in the wild!





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## Croc Conservation

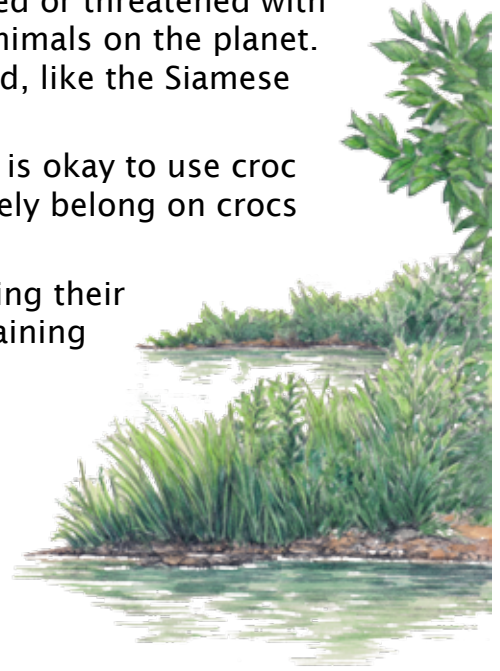
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Sadly, about a third of all crocs are in big trouble—endangered or threatened with extinction. In fact, crocs are some of the most endangered animals on the planet. Some species have just a handful of individuals left in the wild, like the Siamese Croc, the False Gharial, and the Chinese alligator.

One reason crocs are in trouble is that some humans think it is okay to use croc skins to make shoes, handbags, and belts. Croc skins definitely belong on crocs and nowhere else!

Another reason some crocs are in trouble is that they are losing their habitats, the places they live. In many places, humans are draining wetlands and swamps (places crocs call home) to construct buildings. We humans like waterfront property near beaches, rivers, and lakes. But when we develop these areas, where will the crocs live? When we build on crocs' habitats, we can destroy them and leave crocs homeless.

In addition to destroying habitats, some people kill crocs because they are scared of them, feel that they pose a danger, or even for no reason at all. That isn't right.



We need to spread the word that crocodilians need help or they could become extinct! They have been on the planet a long, long time—more than 200 million years! They were swimming around during the time of the dinosaurs. Tell your family and friends that crocs need to be better protected. We shouldn't destroy their homes. And we absolutely should not be wearing their skins! With your help, hopefully crocs will be here with us for another 200 million years.

