



Alligators

Transcript

Hello, and welcome to the Big Cypress National Preserve. I am Ryan Stubblebine, and I am an interpretive Park Ranger with the National Park Service.

And today I am also going to be your guide as I introduce you to one of Florida's most famous residents, the American alligator. There are 23 species of crocodylians spread out around the world, but only two types of alligators; the rare and elusive Chinese alligator, and of course the American alligator. South Florida is the only place in the world where we can find alligators and crocodiles sharing the same land. With abundant sun, ample food sources, and plenty of water the Big Cypress Swamp makes a perfect environment for this top level predator. Let's take a closer look at the more frequently seen of the tow, the American alligator.

The American alligator is a curious and ancient resident of the Big Cypress Swamp. Dawning with the dinosaurs it has remained largely unchanged in the last 100 million years of evolutionary history, and sits unchallenged as the apex predator of this wet and murky environment. They are powerful creatures as is evident of the large jaws, which can pack up to 1,700 pounds of bite force pressure, and by their equally commanding tails.

When the first Spanish settlers came to Florida and laid eyes on this powerful beast, they bestowed it with the name "El Legarto," or simply the lizard. This term has transformed into the English word alligator. As a lizard the alligator is cold blooded, meaning it gains its body heat directly from its surrounding environment. As warm blooded creatures, you and I require food to maintain our internal body temperatures. The alligator however is able to draw most of it energy directly from the sun. Making them some of the most efficient solar panels found anywhere on earth.

A photovoltaic cell, or solar panel, is designed for utmost efficiency, by having the individual cells lined up in a uniform order. This allows for even light reception and even electrical distribution providing maximum power. The same is true for the American alligator. The rows of scales on the backs of alligators are set up in a very similar fashion and work in a similar way. The scales, known as scoots, are individual bony plates covered in divots and dimples which are filled with tiny blood vessels called capillaries. In these shallow pools a tiny amount of blood is very quickly warmed and pumped back into the alligator. This process continues with each heartbeat creating the key to energy efficiency for the American alligator.

Although the American alligator is able to draw the vast majority of its energy directly from the sun, they are known to be able to spend that energy very quickly from time to time. Therefore the alligator needs to eat, and they do so only around 15 to 20 times per year based on need and opportunity. Some of the favorite foods for the alligator include; birds like the great egret, glossy ibis, the great blue heron, or even turtles, and sometimes even white-tailed deer. But the alligator is an opportunist and will eat any type of meat source that is readily available, and some of the most abundant life forms found in our environment are fishes. These fish also help to form the foundation of one of our dry season ecosystems, the alligator hole.

During our dry season when the rains stop, the remaining water very slowly flows south down the state into the Florida Bay and the Gulf of Mexico. As these waters recede fish become concentrated in the deepest areas, where water will stay the longest. This high accumulation of fish entices birds and other animals to these deep pools. The alligator now has an area where all the food sources necessary for life can readily be found. Throughout the year the alligator will maintain the amount of vegetation growth, just like a gardener, to ensure the best chance for the fish's arrival, which is why we call them Alligator Holes.

These lizards are strong and adept to living life in the swamp. But this doesn't mean we cannot enjoy this beautiful environment with them. We just need to remember a few things while having fun in the swamp. First off alligators are intimidated by height, so when we walk through the swamp we usually scare them away. Even if we don't they will most likely be content pretending to look like a log. When walking, carry a stick to help you find your footing, this helps you to keep your balance. And always remember to give these magnificent animals the respect they deserve. Hope to see you in the swamp soon.