

Snakes! Yikes! The very word conjures up thoughts of evil and visions of Adam and Eve in the garden of Eden. Snakes aren't evil or out to get us, but they have been around for millions of years. Most people find snakes somewhat creepy, but others find them fascinating, and herpetologists are the snake experts who study both reptiles and amphibians. Both venomous and non-venomous species exist in Louisiana and having an overall healthy respect (or maybe a little fear) is a good idea. Let's take a look at some of their characteristics.

Snakes are considered vertebrates, that is, back-boned animals. They are in the class Reptilia, Order Squamata, Suborder Serpentes. This backbone allows for efficient serpentine locomotion. Snakes do not have eyelids, limbs or external ear openings. Snakes breathe with lungs, and they are considered cold-blooded or poikilothermic. This means they must regulate their body temperature by outside sources such as the sun. Getting 80% of their body heat from the sun, we might label reptiles as solar powered. However, if the snake gets too hot or too cold it will die. When the sun gets too hot snakes will go to water to cool down or burrow in moistened leaves or lie under a shady bush. When the temperature remains too cold, such as in winter, snakes go into hibernation, a period of dormancy in which they don't eat for months, thereby conserving calories until the warmer months when they are active again.

Reptiles have scaly skin, making their bodies practically water-tight. These scales act like a zip lock bag, locking in moisture and protecting the snakes' internal organs. These scales are made up of keratin, the same protein material that forms our fingernails. Some scales have a rough ridge and are called keeled, while other scales are smooth. The scales on the top of the snake are shaped differently than the ones located on the belly. The belly scales are crosswise and give the snake the ability to crawl.

In order for the snake to grow, or repair a damaged scale it must molt, or shed its skin. This process is called ecdysis. Usually the snake rubs its snout against something rough, like a rock, to loosen the skin. When the skin is loose enough the snake wiggles out and crawls off. Often a complete skin or molt can be found. The ancient Greeks thought this shed skin was a sign that the snake had been reborn, making them a symbol of eternity. Prior to molting the snake's eyes turn cloudy or bluish white and the skin looks dull or sometimes has a whitish cast. A few days to a week later the snake sheds. Right before shedding, snakes are vulnerable to predators and have a tendency to hide. They also don't eat during this time.

You will often see a snake's tongue flickering in and out of its mouth. This is neither a sign of venom release, inherent viciousness or an impending bite, but is the snake's way of gathering information. The forked tongue "tastes" the chemicals in the air and brings them back to the roof of the mouth to the Jacobson's organ. Since the snake's tongue is forked, they can detect "odors" from both left and right, which helps to pinpoint prey and then follow it.

Snakes play an important part in our ecosystem as prey and also predator. As predators they help keep nature in "balance" while dining on fish, frogs, toads, mice, rats,

birds, slugs and many other animals. There are no vegetarian snakes. As prey they are dined on by hawks, owls, eagles, wild pigs, skunks and humans. Automobiles and habitat clearing can also cause unintentional snake destruction.

Though a few reptiles, such as the pit vipers, have live births, many snakes lay soft leathery eggs on land. This leathery exterior keeps the eggs from drying out; which is important because the eggs are abandoned by the mother shortly after they are laid. Most baby snakes are born with an egg tooth on the tip of the snout, which helps to slice the eggshell when it is hatching time. This egg tooth will then drop off. One of the first things hatchling snakes do is shed, usually within two days to three weeks of hatching. Then they begin to forage, searching for food. When hatched, baby snakes are miniature versions of their parents. From the minute they come out of the egg, hatchling snakes must feed on their own and fend for themselves. However, nature has equipped them with everything they need for survival at birth.

There are forty species of snakes here in Louisiana, divided into three distinct families: Viperidae, Elapidae and Colubridae. We have also grouped them according to four different habitats: arboreal snakes, burrowing snakes, terrestrial snakes and water snakes. Identifying snakes is an important aspect to learning how to coexist with them. Being able to identify snakes includes recognizing the different body shapes, head shapes, habitats (where they are found), markings and behavior.

Most snakes are more scared of you than you are of them and will often flee at the sight of a human. The majority of snakes found in Louisiana are harmless. The people most at risk for venomous snake bites are those who catch and handle the venomous species. Never pick up any snake you are not sure about.

Some people think the only good snake is a dead snake. The unfortunate snakes these people encounter are sent to their reptilian maker. Actually, snakes help us a lot in Louisiana by getting rid of pests (such as rats that eat crops and carry diseases) and being food for other creatures. Learning more about snakes helps us to see them in a less threatening and more fascinating light. Then we can truly admire our native snakes for their beautiful colors, intricate patterns, and the unique place they have in our Louisiana environment.