Snakes

Have you ever been out in the woods, or near a lake or river, and come face-to-face with a snake? Who was more startled, you or the snake? Chances are, it was a toss-up. Just as you were out enjoying nature, the snake was likely doing the same. It was probably out enjoying the cool grass or the hot sand, maybe scavenging for bugs, mice, and other tasty and nutritious morsels at the same time. Whatever it was doing, you can bet it was no happier about the encounter than you were.

Many human beings have an innate fear of snakes. And it's not hard to understand why. What animal looks or acts more slithery or slimy than a snake? What animal is harder to notice until you're right next to it—or until you step on it?

First, let's clear up the reputation snakes have for being slithery and slimy. Snakes are slithery. That's partly because they have no limbs — arms or legs — and if they want to get from point A to point B, they pretty much have to slither. But slimy? Snakes aren't slimy at all. Rather, they have scales. With most species of snakes, you can see the scales if you look closely. But with some, particularly sea snakes, the scales are granular. They are so small that you can't even make them out. But the scales are there. If you touch them, you would not find them to be slimy.

You no doubt know that some snakes are extremely dangerous. Some are enormous and strong and can squeeze large animals to death and eat them. And some of the ones that don't eat animals are still quite deadly; their sharp fangs contain venom, and their bite injects that toxin into the bloodstream of their victims.

But there's no real reason to be an alarmist when it comes to snakes. Out of the 3,000 or so species of snakes on Earth, only about 400 are harmful. The vast majority of them are harmless to humans, and some are actually beneficial.

Let's look at their role in the ecosystem. Snakes are carnivorous; their taste in cuisine definitely tends toward other members of the animal kingdom. But most of them are entirely too small to eat anything except rodents, frogs, and once in a while, other snakes. Some are also notorious egg burglars.

Some species of snakes live entirely on bugs. Scientists in the field of entomology know that snakes are instrumental in keeping the insect population from getting out of control. A snake in a field, or near a body of water, won't think twice about eating any insect egg, larvae, or full-grown bug that it comes across.

Snakes also have their fair share of worries. They are prey for eagles, foxes, coyotes and other birds and mammals. People hunt snakes for their skin, which is used to make purses, belts, shoes, and jackets. People are also responsible for the destruction of snakes' habitats, which can wipe out the animals by the thousands.

We've established that the average snake isn't going to try to poison you. Nor is it going to try and make a meal out of you, or even a lovely garnish. Let's look at some reasons that they're not only *not* terrifying, they're actually interesting.

Snakes are similar to frogs, toads, lizards, and fish in that they're cold-blooded. Unlike warm-blooded creatures such as dogs, cats, and people, a snake's cold-bloodedness causes its body temperature to change with the temperature of the air around it. When it's warm out, snakes tend to be active. They become more sluggish the cooler it gets, and when it gets too cold, they hibernate.

This is why you don't see snakes when it's snowy and icy. An individual snake hibernates in the same den every year. It's not unusual for several snakes to share a winter den. In fact, this is one of the few times when snakes are social with one another. In general, snakes are not social or nurturing. Even baby snakes are left to fend for themselves!

As spring approaches, snakes emerge in the daytime to sun themselves. During this period, they return to their dens at night. When it finally warms up, they travel as far as five miles to their feeding and breeding grounds.

They have to eat while they're traveling. Snakes don't have ears, and their noses are used only for breathing, not smelling. So, hunting their prey presents challenges for them.

Even though snakes don't have ears, they are far from deaf. They have inner ears that don't show on the outside. And while they don't hear in the way that people and most animals do, they can detect it when the ground vibrates. The vibrations are picked up by special bones in their lower jaw. From there, the sound travels to their inner ears.

The way that snakes detect odors is also a bit unusual. Have you ever noticed that a snake can stick out its fork-like tongue even when its mouth is closed? There's a little space in the front of its mouth that allows it to do that. A snake is always flipping its tongue in and out, up and down, from side to side. The snake actually has a good reason for doing that. That tongue is picking up odors and aromas in its environment.

There are two little holes in the roof of a snake's mouth. Those holes are just the right size for the points of the snake's tongue. The openings have a direct connection to the part of the snake's brain that's responsible for its sense of smell.

Snakes don't see all that well. Snakes that go out in the daytime can detect motion and sense large objects, but that's about all they can see. Luckily for them, their senses of hearing and smell are very sharp. They can find food, detect danger, and in general get along just fine.