

Safe crossing: Closing a road to protect snake migration

newsela.com/read/natgeo-snake-migration/id/48014



Image 1. A close-up of the brown and tan patterned head and eye of a juvenile southern copperhead viper (*Agkistrodon contortrix*). During spring and fall, these venomous snakes migrate between LaRue Swamp and the hills of Shawnee National Forest, Illinois. Photo by: Smith Collection/Gado/Getty Images

By Mary Schons, National Geographic Society, adapted by Newsela staff

Published:04/09/2019

Word Count:1040

Recommended for:Middle School - High School

Text Level:6

Twice a year, an army of snakes slithers through the Shawnee National Forest in southern Illinois. In spring, snakes, along with other reptiles and amphibians, move from the forest's limestone bluffs and into LaRue Swamp. In the fall, the snakes leave the swamp to spend the winter at the dry bottom of the limestone cliffs.

Image 2. Physical map of Illinois showing Shawnee National Forest. Photo By Encyclopaedia Britannica/ UIG Via Getty Images [click to enlarge]

Running between the cliffs and the swamp is Snake Road, also called LaRue Road. LaRue Road runs between two very different ecosystems. LaRue Swamp is on the west side of the road. The swamp is part of the Mississippi River basin. Here you will see species such as the cottonmouth snake, the southern leopard frog and the bird-voiced tree frog. These animals are common in Mississippi and Louisiana, but are not usually seen as far north as Illinois. LaRue Swamp is also an important stop for migrating birds, such as ducks and geese.

The LaRue-Pine Hills are on the east side of the road. The LaRue-Pine Hills are famous for their gorgeous bluffs towering 150 feet straight into the air, nearly as tall as the Leaning Tower of Pisa.

Scientists think the bluffs were at the bottom of a vast sea called the Illinois Basin. There were seashells and coral in the Illinois Basin. When the sea creatures died, they left behind skeletons made of calcium carbonate. Over millions of years, those skeletons became limestone rock.

Wind and erosion cut grooves into the soft limestone surface. These ridges and caves make an ideal habitat for snakes. They are protected from the weather, cool in the summer and warm in the winter.

To get to and from the bluffs, snakes must migrate across LaRue Road every spring and fall. If you're a snake, crossing the road is dangerous. In the cool early morning and evening hours, the black asphalt is relatively warm. Rather than crossing quickly, snakes and other cold-blooded creatures like to hang out. That is why so many snakes, frogs, toads and turtles get hit by cars.

It is possible many snakes will eventually become roadkill. According to biologist Rich Seigel, almost 1 in 4 of the snakes he collected for one of his studies had been killed by cars. It is estimated that tens to hundreds of millions of snakes have been killed by automobiles in the United States.

In 1972, the government made the decision to close LaRue Road for three weeks in the spring and three weeks in the fall in order for the snakes to migrate safely. However, the snake migration took much longer than anyone first thought, said Scott Ballard. He is a scientist studying reptiles and other animals for the Illinois government. Based on his studies, the forest service extended the road closure. Now the Snake Road is closed from March 15 to May 15 in the spring and from September 1 to October 30 in the fall.

"There was a lot of resistance from the locals at first," explained Ballard. "It used to be sport around here to see how many snakes you could run over with your car." As time passed, area residents changed their minds. "Most people now are supportive of the road closure," said Chad Deaton, a wildlife scientist with the Shawnee National Forest.

Snake fans and herpetoculturists also support closing the Snake Road to let the snakes migrate across it. Herpetologists study snakes and other reptiles. Herpetoculturists keep reptiles and other snakes as pets or for a hobby.

Cars are prohibited, but people are welcome to walk the 2.6-mile Snake Road. Ballard and Deaton say walking across Snake Road isn't as scary as it might seem.

"Contrary to popular belief, you won't see a great river of snakes washing across the road," said Ballard. "If you see 20 snakes while you're out here, that's a good day."

Snakes play an important role in nature's ecosystem and can be good for humans. "Many people's first reaction to seeing a snake is to kill it," said Ballard, "but a single snake can eat 9 pounds — an entire pillowcase's worth of mice — in one year. Herons and egrets also eat frogs and small snakes." Without snakes, he said, these birds would lose a food source, and we would have too many rodents.

Image 3. An Eastern timber rattlesnake, photographed in 1993. This is one of the main types of snakes you'll find if you go along Snake Road in the right season. Photo: David L. Ryan/The Boston Globe via Getty Images. [click to enlarge]

There are three kinds of venomous snakes in the LaRue-Pine Hills: the cottonmouth, the copperhead and the timber rattlesnake. These snakes eat small animals such as fish, frogs and mice. They will bite people only if they are disturbed.

Questions For Biologists On The Snake Road

Q: How did you become interested in snakes?

A: Scott Ballard explained, "As a kid I was very allergic to dogs and cats. My mother gave me a pet snake when I was 10. After that I was hooked."

Q: Have you ever been bitten by a snake?

A: "Many times," said Ballard, "but I've never been bitten by a venomous snake. I've gotten very close to snakes without meaning to and haven't been bitten. Once I was looking for a rattlesnake species. I'd lain down, turned my head and found one 5 inches from my eyes. She just looked at me and I looked at her, and I slowly got up and moved away."

Q: What should someone do if they suddenly come upon a snake in the woods?

A: "They should stop and slowly take a step or two away from the snake," said Chad Deaton. Scott Ballard added, "Snakes are not mean. Snakes don't go out of their way to bite you. They only bite people when they are surprised or feel threatened."

Q: How many snakes are saved every year because of closing the Snake Road?

A: Ballard and Deaton said they aren't sure, but they see fewer snakes dead on the road. That's a good sign. It suggests more snakes are safely crossing the Snake Road every year.

Provided in partnership with the National Geographic Society. Visit this article and find others like it on National Geographic's site at:

<https://www.nationalgeographic.org/education/>