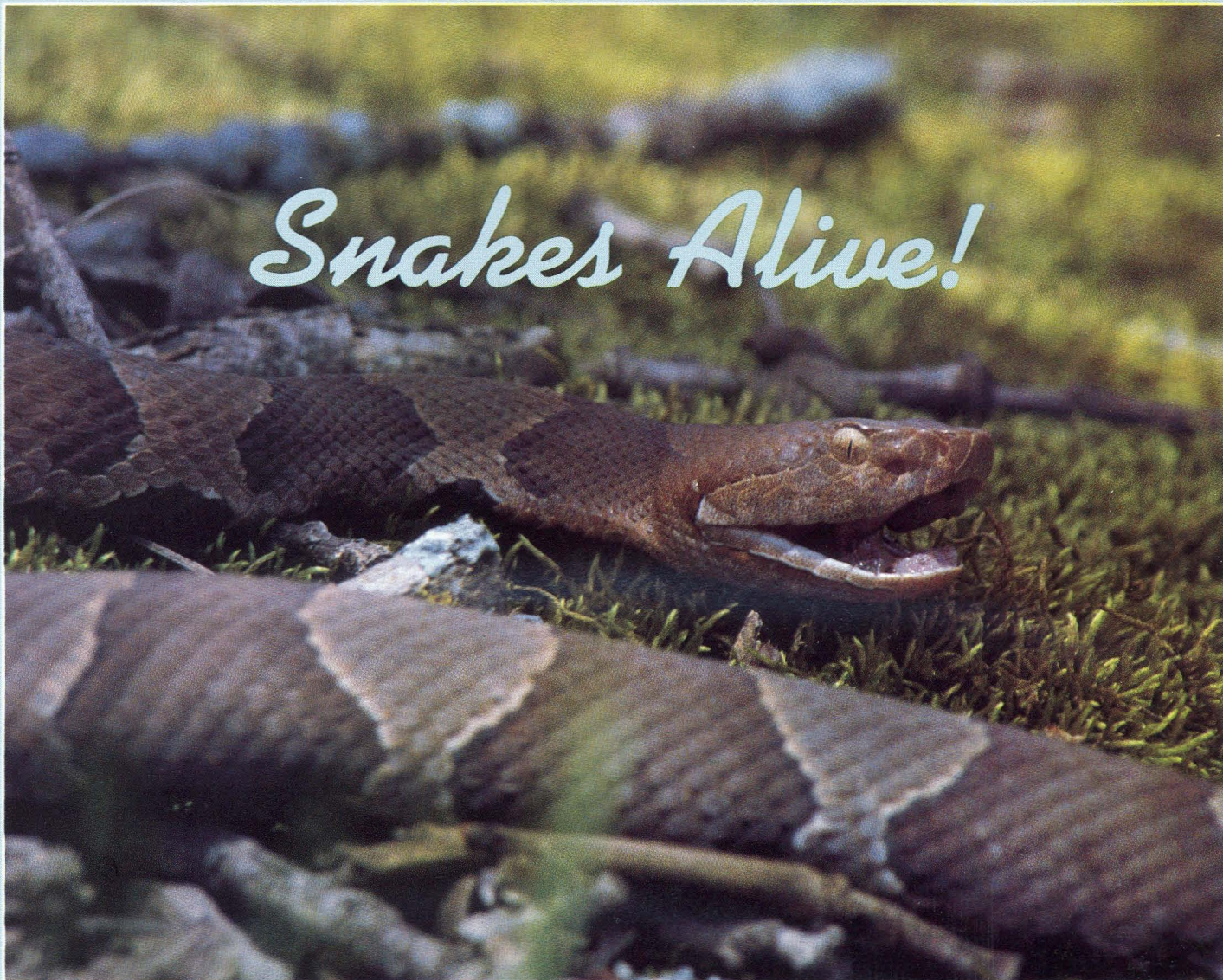


Snakes Alive!



Gene Brehm photo

Though fatal bee stings outnumber snakebite deaths in the U.S., many people still believe the most outlandish folktales about snakes.

Mary Kay Spanbauer

They have been called the foulest and most loathesome of creatures. But they also have been described as beautiful and graceful. When the conversation turns to snakes, opinions are sharply divided. There isn't much middle

ground on the matter. You love snakes or you leave them completely alone. Dangle a live snake in front of anybody and they will immediately offer their sentiments about these creatures. A more merciful approach might be wiser; but however you introduce the creature, human reaction to a snake is one of fascination.

For some people, a snake is simply *too* fascinating. Millions of peo-

ple suffer from ophidophobia—fear of snakes—to such an extent that it inhibits their daily routines. They can't look at snake photographs or watch snakes on television. Their enjoyment of outdoor activities is constantly tempered by the possibility they might stumble across a snake. To occupy the same room with any variety of snake is, to them, unthinkable.

It's not hard to understand the

source of all this consternation. Authors Ramona and Desmond Morris summarized the long history of mankind's love-hate relationship with snakes this way:

"The snake with its many unique and somewhat contradictory attributes has been worshipped, feared, puzzled over, hated, loved, exploited, exterminated, studied, and even petted. It has been used in magic, witchcraft, religion, medicine, war, torture, sport, science, commerce, and entertainment. On one hand, it has been a symbol of procreation, health, longevity, immortality, wisdom; on the other, it has represented death, disease, sin, lechery, duplicity, and temptation. It is a paradox. It is both sides of the coin, and mankind has seldom ignored it."

Pliny the Elder, the ancient Greek scholar, believed the snake was the most spiritual of creatures. Many cultures have elevated the snake to supernatural, sometimes even exalted, status. Some North American Indians who came upon rattlesnakes would address the creatures in reverent terms such as "grandfather" or "mother's mother." Snakes have often been associated with life and the art of healing. The snake's ability to shed its skin has often been linked with resurrection and rebirth. Snake skins were sometimes used as an aid in childbirth; ancient cultures wrapped a snake skin around the woman in labor to ease the pain and hasten delivery. Others believed that a pregnant woman needed only to ingest powdered rattlesnake to bring on parturition; the unborn child was supposedly able to hear the snake's rattle and make a hasty exit. Kentucky folklore prescribes this cure for epilepsy: Wear snake bones around your neck.

Snake oil salesmen aren't entirely the product of Hollywood westerns; snake oil actually was considered a healing commodity in 19th-century America. It was used as a liniment for sore muscles and rheumatism and sold as a "cure" for baldness.

Snake oil salesmen ascribed any number of curative qualities to their product. The American consumer apparently was willing to trust snake oil's medicinal qualities until a more legitimate replacement came along, as the following story by Lawrence Klauber, a renowned authority on rattlesnakes, illustrates:

"A customer entered a store in Atchison, Kansas in the early 1860's and asked for a half pint of rattlesnake oil. After the satisfied buyer had left with his purchase, the druggist remarked that prescriptions for rattlesnake oil, bear oil, and lard were all filled from the same barrel, so all customers' requirements were easily satisfied."

The copperhead is responsible for more poisonous snakebites in Kansas than any other reptile—though its venom rarely causes death. Copperheads are not aggressive snakes, but are so well camouflaged that people often threaten them unknowingly. Snakebites are nearly always a result of defensive action by the serpent.

The snake often appears on symbols of peace. The caduceus, an ancient emblem depicting a rod with two entwined snakes, is the symbol for the American Medical Association. At one time, the caduceus was carried into battle as a peace offering, similar to the white flag of truce. The Romans once sent the enemy a messenger who carried both a caduceus and a javelin, asking them to choose between peace and war. An American Indian way of surrendering was to lay down arrows wrapped in snake skin.

There were occasions, too, when the snake was utilized as a tool of warfare. There are numerous tales



Gene Brehm photo

of snakes, both poisonous and non-poisonous, being carried into battle and dispatched into the enemy's camp. One story relates how an army released swarms of snakes into Roman ships, thereby turning the regimented Romans into a frenzy. The Pennsylvania Gazette suggested in a 1751 edition that the colonies ship rattlesnakes to Britain if the mother country did not stop sending convicts to the colonies. Both the Union Jack and the Gadsen flag depicted a rattler with the famous slogan "Don't Tread On Me." The snake appeared in the World Wars as the official insignia for some military units.

Many superstitions have arisen about snakes. In India some cultures believe that two snakes witnessed in struggle presage a death unless the observer immediately casts off his clothing and bathes. The Cherokees believed that it was an omen of death to see a snake at the beginning of a journey.

Perhaps it is simply the engrossing physical peculiarities of a snake that stimulate such haunting images and superstitions. It's a limbless reptile. It slithers along in undulating waves that propel the body forward. It has no ears. It has baleful, unblinking eyes. A forked tongue flickers incessantly from its mouth. It lives in holes, caves, tangles of brush, rocky ledges, and swamps. It makes no noise, except a sinister hiss and, perhaps, a buzzing rattle at the end of the tail. Any one of these attributes is not particularly threatening by itself. To combine them all in one creature, however, produces a singularly intimidating animal.

But the truth is that most snakes will not bother man unless provoked, antagonized, or cornered. Even a child can easily outrun the fastest Kansas snake. A black racer can crawl only a little over three miles per hour—impressive for a creature with no limbs but hardly a threatening display of speed.

One tale suggests that snakes are not only aggressive, but devious. While walking down a road one day,

a young man hears a noise behind him. He looks back and sees a snake on the road. The snake immediately grabs its tail in its mouth, forming a hoop. The snake rights itself on the roadway and begins rolling like a runaway wheel toward the lad. The snake picks up momentum and gains on the youth. Just as the snake is about to catch up, the intended victim scoots behind a tree. The snake, unable to veer, smashes into the tree and imbeds its stinger in it. The tree dies.

The villain in this tale may be the mud snake. This snake often is found in a coil and has a terminal scale that has been modified into a nonpoisonous spine. But even the most determined snake would have trouble propelling itself as a spokeless bicycle tire.

In many parts of the U.S. there are tales of milk snakes which drink cows dry.

Another folk tale centers on the Great Plains. Cowboys who found themselves sleeping under the stars on a midsummer night would often surround themselves with a horsehair rope. This rope with its bristles was supposed to deter rattlesnakes from the reclining cowboy. Perhaps the cowboys believed that snakes would not cross any rough material. One needs only to recall the rough terrain a snake must cross in the wild to realize this is untrue. Snakes will, indeed, cross a horsehair or other bristly rope.

The fact that this tale persisted is probably due as much to a snake's shy nature as to the real protection afforded by the rope encircling the bedroll. A rattler will generally bite for only two reasons: to catch prey and to defend itself. Since a sleeping cowboy is neither manageable prey nor an immediate threat to a snake, there really is no reason for a snake to attack him. The encircling rope, although not a legitimate rattlesnake barrier, probably did at least afford the cowboy some peace of mind and a better night's rest than he might have had without the 'protection.'

Another popular tale concerns the vengeful mate of a rattler. A party crossing Kansas by covered wagon in 1853 killed a rattler early one morning. The snake was tied to the back of the wagon and dragged the fifty miles traveled that day. The next morning, the travelers found one of their children dead in his bedroll, an apparent victim of a rattlesnake bite. It was believed that the mate of the slain snake followed the wagon to wreak its revenge.

This same theme occurs in North American Indian folklore. Most Indians would not harm a rattlesnake on the presumption that its mate would seek revenge. If one was inadvertently killed, the Indian begged forgiveness and sought to appease the mate.

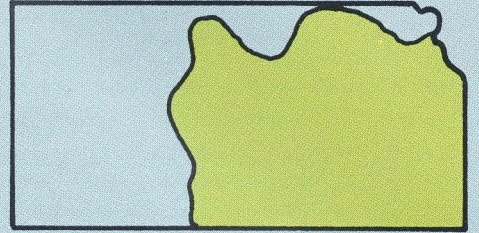
There are numerous inaccurate assumptions about the physical characteristics of snakes. Lacking the familiar fuzziness of mammals and the brilliance of birds, the snake has often been maligned. One of the most common and persistent misconceptions about snakes is that they are cold and slimy. Snakes, like all reptiles, are covered with scales made of material similar to your fingernails and are dry and leathery to the touch.

Snakes do not really have cold blood; they are poikilotherms, with no internal mechanism to regulate their body temperature. This makes them dependent on their environment for body heat. A snake in a cool or shaded area will feel cool to the warmth of a human hand.

The belief that snakes sting with their tongues is a widespread misconception. Although the forked tongue has devious connotations, in a snake it is actually nothing more than an accessory to the senses of taste and smell. It serves to transfer chemical stimuli from the external environment to organs on the roof of the mouth which decipher the message.

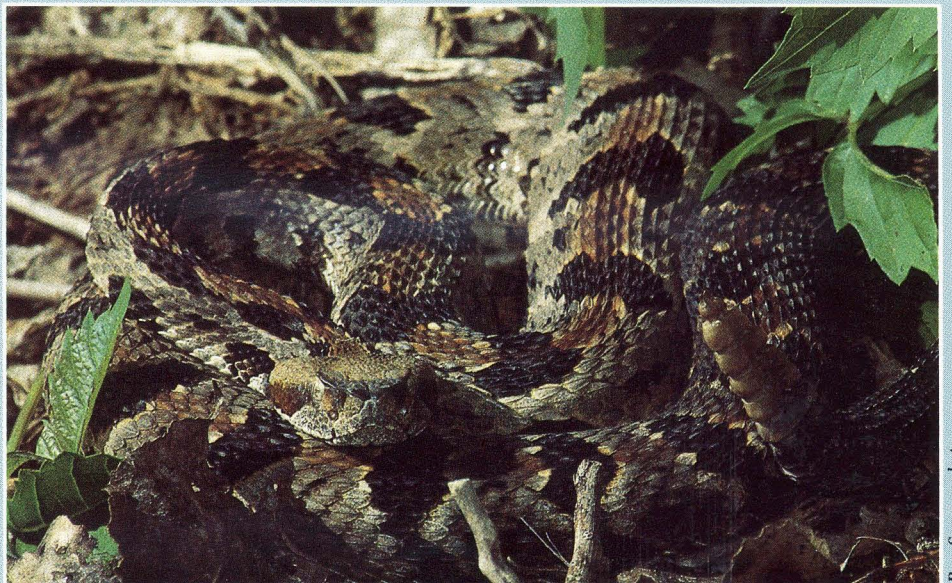
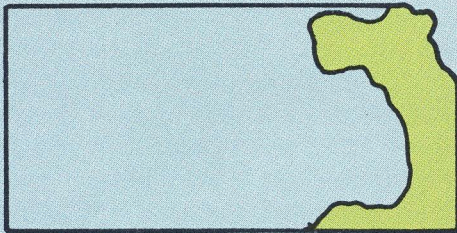


Three species of rattlesnakes are found in Kansas. All are ovoviviparous; that is, they give birth to live young. The Massasauga is the smallest of the three. Despite the myths that have arisen about rattlers, only two human deaths have ever been attributed to the widespread Massasauga!



Gene Brehm photo

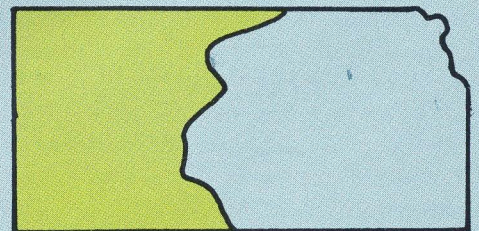
The timber rattler is normally a retiring creature, but is large enough to cause harm if provoked. Like other rattlesnakes, it is a "pit viper", so named for the heat-sensing pre-orbital pits on its nose. The broad, flat head of this and other pit vipers is a good field identification characteristic.



Ron Spomer photo



The prairie rattler has a relatively aggressive disposition and a large venom supply. Like other North American pit vipers, it has retractable fangs that "fold" into the roof of its mouth until it is ready to strike. Despite its formidable appearance, however, this snake is rarely a menace to man.



J. T. Collins photo

A snake is totally deaf to airborne sounds. It "hears" by means of vibrations its body senses, not through the air, but through the ground.

There is another tale of a snake which, when touched, shatters into many pieces, each segment then metamorphosing into individual snakes. There is no snake that fits the description. However, there is a snake-like legless lizard—the glass lizard—which can discard its tail if caught in a precarious situation, then grow a new one. There is no evidence of the discarded tail sprouting a new body.

Many believe that rattlesnakes will always rattle before striking. Don't count on it.

It has also been assumed that you can tell the age of a rattlesnake by the number of segments contained in its rattle. Not true. Rattles can break off. Further, a new segment is added each time the skin is shed, which may be several times a year.

There are many folk tales concerning the potency and persistence of snake venom. One involved a man who suffered a snakebite while plowing his field. The fang had penetrated the boot and pierced his skin. The stricken plowman died. Years later his son found the boots on the porch and put them on. The fang had never been removed and the son fell victim to the same fang and venom that killed his father.

Klauber related another tall tale concerning the mystical powers of snake venom:

"In the tragic tale of Peg-Leg Ike, bitten in his wooden leg, despite the frantic efforts of his friends armed with axes to chop away the swelling timber, he was choked to death by its growth. The sorrowing survivors got enough kindling to last all winter."

There are also stories of snake-bitten trees, that, when swollen, yielded enough wood to shingle many roofs. However, the swelling is reversed when the venom is washed out.

Just how dangerous are snakes? While it is true that snake bites cause a few fatalities (usually less than 10) in the U.S. each year, it is interesting to note that more lives are lost to aspirins, bee and wasp stings, and bicycle accidents than to snake bites. Most of the snakes in Kansas are nonpoisonous and dangerous only in the imagination. Snakes are a beneficial part of the ecosystem and should not be exterminated. Understandably, most apprehension focuses on poisonous snakes.

Kansas is home to four species of poisonous snakes: copperheads, massasauga rattlesnakes, timber rattlesnakes, and prairie rattlesnakes. Two other poisonous species, the western diamond-backed rattlesnake and the cottonmouth, are extremely rare in the state—if they occur at all. By familiarizing yourself with the habitats of these species you can minimize the chance of an encounter. Here are some additional tips to keep in mind during an outdoor excursion into snake country:

- Wear comfortable hiking boots at least ankle high.
- Wear pants that are baggy below the knee.
- Watch where you walk while in brushy or rocky areas. Step *on* logs, not *blindly* over them.
- Avoid putting your feet or hands into hidden nooks and crannies. These are places snakes love to curl up and hide.

If you should encounter a snake, **DON'T PANIC.** Do not make any sudden movements, as snakes are more likely to strike at moving objects. Klauber offers this advice:

"When a rattler sounds off, don't move until you know where the sound came from. You may step on a rattler or into his range instead of away from it. A rattler seen in time is not a dangerous snake provided you and the other members of your party, including your dog, avoid it."

A related question invariably arises: What is a snake's striking distance? Most experts agree that it

is usually half, and no more than three-fourths, of the snake's body length. That may be a useful piece of information, but calculations of length and distance are probably among the last considerations on the mind of a person confronted with a snake.

Even though precautions are taken, accidents happen. Most snake bites occur incidentally rather than as a premeditated act of aggression by the snake. In the event you are bitten by a poisonous snake, **KEEP CALM.** Restrict your movement as much as possible, and get to a doctor quickly. Poisonous snake bites today can be treated successfully with antivenin.

Much of the ill will humans feel toward snakes is due to ignorance and false assumptions about the creatures and their habits. Today, we've sorted out most of the fact and fiction, so why do people still fear snakes? Children possess no inborn or instinctive fear of snakes. They *learn* to fear them. A little fear or apprehension is wise, especially for those who are unable to distinguish poisonous and nonpoisonous species. However, to instill and reinforce hatred and fear of snakes is a mistake. It's even dangerous.

"The cultivated fear of snakes has had quite the opposite results than those desired," says Klauber. "It causes people to become so paralyzed upon encountering a rattler in the field that they cannot take the most elementary safety precautions."

We humans often fear those things we do not understand. But in recent years, new light has been shed on the snake. We view it less as a malevolent creature and more as an animal that simply likes to keep to itself. You may never learn to like them. But since snakes and humans share the same land, we must learn to coexist with them. Armed with the truth, people will better understand the real value of these fascinating animals. The snake need not always be the creature we love to hate.