

attlesnakes have a bad reputation. No wonder! They look mean. They sound spooky. And you *know* about their nasty bite. But mostly they're misunderstood. So here is all you ever wanted to know about rattlesnakes.



They're a group of snakes that have what no other snakes have: rattle-tipped tails. They also have thick bodies, wide heads, cat-like eyes, and long, hollow fangs that fold away when they're not needed. Their dull colors and patchy patterns help them blend in with their surroundings.





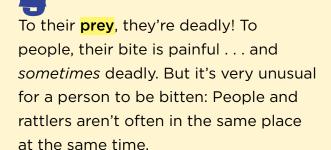
There are about 30 different species (kinds), and you can find at least one kind or another in almost every state. Rattlers also live in southern Canada, Mexico, and Central and South America.

Different rattlers hang out in different habitats. For example, sidewinders are in deserts, and many timber rattlers live in rocky woodlands. Canebrake rattlers can be found in swamps, while prairie rattlers live in grasslands.

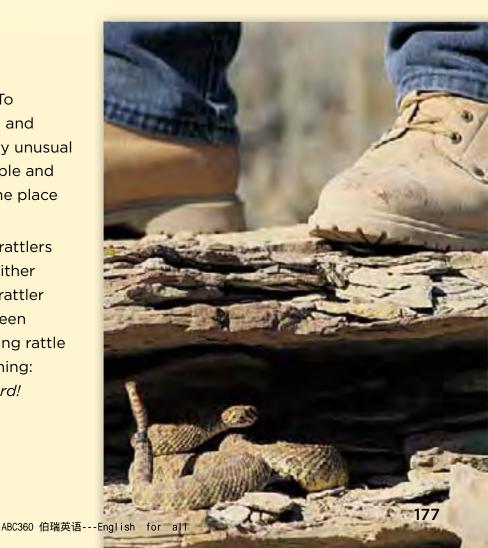


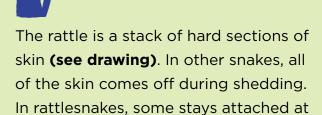
Main Idea

Name two details that support the main idea in the paragraph "Where do rattlers live?"



Even when they are, most rattlers would rather stay hidden or slither away than attack. The prairie rattler in the photo (see right) has been surprised by a hiker. Its vibrating rattle is giving the hiker a clear warning: Don't take another step forward!





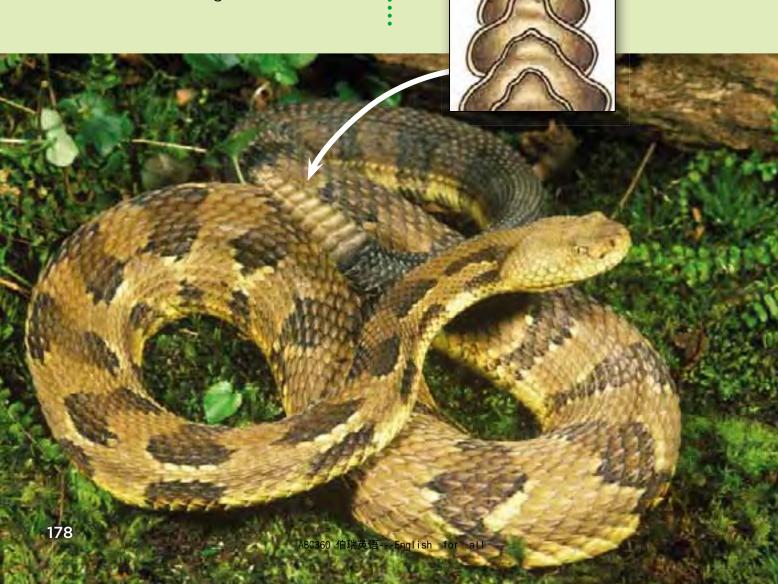
the end of the tail.

The beginning of the rattle is called the button. It stays stuck to the end of the tail the very first time a young rattlesnake sheds its skin. The next time the snake sheds, a new section is added underneath the button, and so on.

Each section fits loosely over the one under it. When the snake **vibrates** its tail, the sections rattle against each other and make a buzzing sound.

No. A section is added each time a rattlesnake sheds. But some snakes shed several times a year. Others shed not as often. Also, one or more of the rattle's sections may have broken off.

button







First it strikes by **lunging** toward the prey or enemy. The mouth opens wide, and the fangs swing out **(see above)**. When the snake hits its target, the fangs sink in deep. The rattler may—but doesn't always—pump venom (poison) through each fang. All this happens in about a second.



Yes, especially if a doctor treats it right away. If the kind of snake is known, the person may be treated with medicine made from the venom of the snake. And how do people get venom to make medicine? By "milking" the snake! (see right)







Most kinds go for small mammals—such as mice, squirrels, and rabbits—and sometimes birds. Some kinds eat mostly lizards, and others eat mostly frogs.



It picks a good spot and waits. When prey comes along, all the snake's senses are on alert. First it may feel vibrations in the ground. Next it looks about and gathers scent molecules on its tongue. It sticks the tip of the tongue into a special

smelling organ on the roof of its mouth. Then it uses deep pits on its face to sense body heat coming from the prey. Finally the snake knows exactly where the prey is—and STRIKES!



It sinks in its fangs and pumps in venom. Then it lets go and waits. If the dying prey crawls away, no problem. The snake can follow the scent trail with its tongue. Then the snake grabs the prey headfirst and swallows it whole.

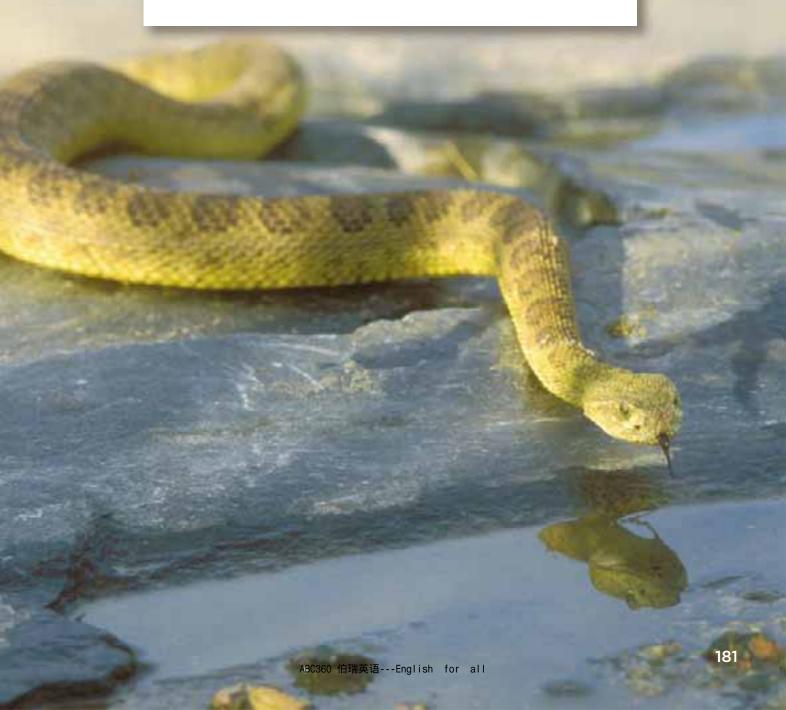
(see above)

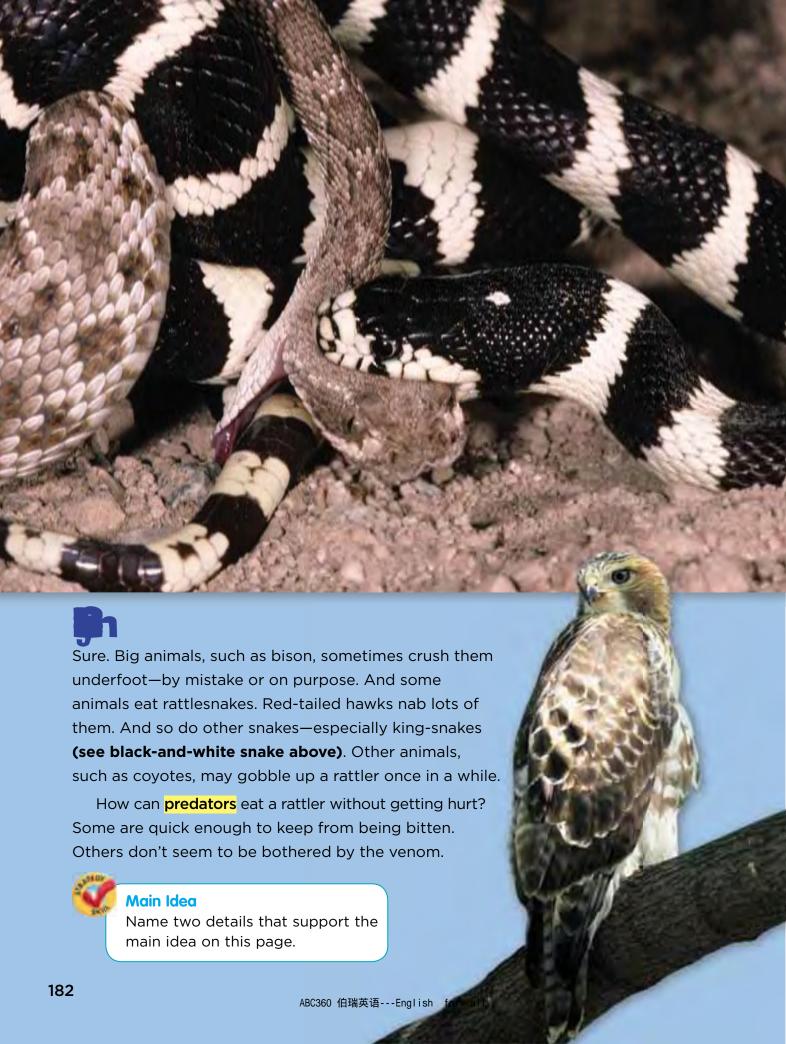


Rattlers, like all snakes, get water from the food they eat. But sometimes they suck some in from a puddle or pond, as the western diamondback rattler (see below) is doing.



All sizes. The eastern diamondback probably is the biggest. It can get to be 6 feet (1.8m) long or more. But usually it grows no more than 4 feet (1.2m) or so. Most of the smallest species, such as the pygmy rattlesnake, are less than 20 inches (50 cm).







Two kinds—the New Mexican ridge-nosed and the Aruba Island rattlesnakes—are on the U.S. endangered species list as "threatened." That means they could easily become endangered. So they must be protected by law. Many other kinds also are a lot rarer than they once were. Here's why:

Humans have changed many of the places rattlesnakes live—by plowing under grasslands or draining wetlands, for example. That can make it hard for the rattlesnakes to find food or hiding places.

Humans have also killed way too many rattlers—sometimes for the skin or meat, but more often just for "fun" or out of fear.





No. They give birth to live young—usually at summer's end. A mother rattlesnake may have only one baby . . . or more than twenty!
But the average number is eight.

Each young rattler is inside a thin sac when it comes out of the mother. Soon it wriggles itself free.

Like the newborn timber rattler (see left), the young snakes may stay near their mother for several days or longer. But then they all go their separate ways.





Most people want to know how to protect themselves from rattlesnakes. But one scientist and his family want to help protect rattlesnakes from people.

Hugh McCrystal is a herpetologist (her-pih-TOL-uh-jist). And his two best helpers are his kids, Rachel and James.

The McCrystals are studying the ridge-nosed and rock rattlesnakes. These shy, rare snakes live in the mountains of southeastern Arizona. The more the McCrystals learn about them, the easier it will be to protect them.

But how do you study a dangerous creature up close?
Carefully! First Dad catches a rattler and sticks it headfirst into a plastic tube so it can't bite. Then James scans it with a special machine (below). If the McCrystals have caught the snake before, it will have an ID tag that they had put under its skin. The machine works like a store scanner to "read" the tag.

Rachel writes down which snake it is and then records the animal's weight, length, and temperature. (If it's a new snake, they give it a tag and number.) She also jots down other information, such as where the snake was found and what it was doing. After they let the snake go, they hunt for another one.

The family compares the information with other information they've already collected. That way, they can keep track of each rattler and find out more about what it needs to survive.



Raffle Around with ELLEN Lambeth



Ellen Lambeth writes for magazines, mostly about animals. Besides meeting monkeys and avoiding snake bites, she talks with scientists, watches videos, and visits zoos. It's a lot of hard work, but the more Ellen learns, the more she wants to know. She has a pet dog and a horse at home. Ellen has taught each of them tricks, but sometimes feels they are the ones teaching her.





Author's Purpose

Ellen Lambeth used a question-and-answer text structure. How does this information help you to determine her purpose for writing?



Summarize

Use your Main Idea Web to help you summarize "Rattlers!" Be sure to include only the most important information in your summary.



Think and Compare

- What is the main idea of the three passages on page 180? Make a list of details to help you find the main idea.
 Summarize: Main Idea and Details
- 2. Reread the first page of "Rattlers!" How do you think the author feels about rattlesnakes? Include specific examples from the text to support your answer. Apply
- **3.** Explain whether you think rattlers and other snakes are misunderstood. Discuss any personal encounters that you may have had with snakes. **Evaluate**
- 4. Rattlers are on the endangered species list. What can be done to help keep these snakes from becoming extinct?
 Analyze
- 5. Reread "Poisonous Snakes" on pages 172-173. How are coral snakes and rattlesnakes similar? How are they different? Use evidence from both selections to support your answer. Reading/Writing Across Texts