

THE FIVE MAIN FAMILIES OF SNAKES

BOIDAE
PYTHONIDAE
ELAPIDAE
VIPERIDAE

COLUBRIDAE

- o over 1,700 species
- mostly nonvenomous species
- usually have smaller or absent left lungs
- solid, cone-shaped teeth in nonvenomous species



BOIDAE

- o more than 40 species
- includes boa constrictors
- o nonvenomous
- constrictors
- live births



PYTHONIDAE

- o about 39 species
- includes pythons and some of the world's longest snakes
- includes ball python, a popular pet snake
- nonvenomous constrictors



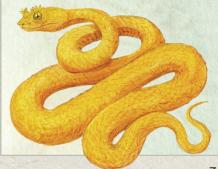
ELAPIDAE

- o about 300 species
- o all species venomous
- includes some of the most venomous snakes in the world
- victim's nervous system attacked by venom



VIPERIDAE

- o more than 200 species
- o all species venomous
- o includes pit vipers
- has most of the venomous snakes in the US
- victim's blood and tissues attacked by venom



MOJAVE DESERTSouthwestern USA

The Story of the Western Diamondback Rattlesnake

The moon rises over the Mojave Desert in southern Nevada, USA. Beneath a dense tuft of galleta grass, a striped, arrow-shaped head covered in scales lifts, and a forked tongue flickers out. The western diamondback rattlesnake cautiously begins to come out of hiding, his body as long as an adult human's. One by one, the dark, diamond-shaped spots on his back emerge from the grass. Last to appear is his tail—a striking white-and-black-striped section followed by his rattle. Made from keratin, the same material that exists in a human's fingernails, the rattle consists of several hard rings stacked next to each other. This rattlesnake just molted—shed a layer of skin—which added a new ring to his rattle.



Sliding from rock to rock, the rattlesnake moves into an area where humans have just rounded up and killed a large den of hundreds of other rattlers. Although this might help keep the humans safe, it means that there aren't enough snakes to eat the plentiful pests and other animals that multiply at a fast rate. This rattlesnake will help balance the populations of small animals, such as mice, rabbits, rats, gophers, small birds, and lizards. His ecosystem, or environment, will thrive in that balance.

At this moment, however, the rattlesnake benefits because there is plenty of food available. He has found a safe spot under a

rock to wait for food. Soon
enough, a whiptail
lizard scuttles
by, and the
rattler strikes
fast, stunning and killing
his meal. After he eats, the
diamondback coils up under the
rock to rest and digest his food.

The rattler doesn't rest for long, though, as he suddenly detects danger—a bobcat is nearby and creeping close to him. Just like the rattlesnake helps control the small animal population, something bigger than him, such as an eagle, roadrunner, coyote, fox, or this fierce bobcat, can make a meal of the rattler.



From his coiled position, the rattlesnake quickly raises the top third of his body and hisses. At the same time, he lifts his rattle and vibrates it lightning fast. Hollow, hard scales at the tip of the rattle click as they knock into each other, creating an impressive buzzing, rattling sound. Ready to bite the bobcat in defense, the rattlesnake continues to look and sound dangerous until the bobcat changes her mind about making a meal out of him. The bobcat slinks away to find something else to eat. The rattlesnake has successfully escaped becoming prey to this wildcat, but this is a daily battle he will have to fight to stay alive in the desert ecosystem.

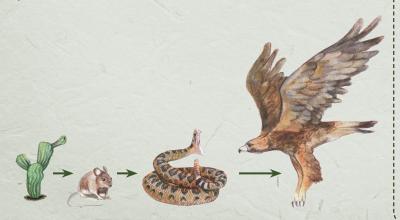
RATTLESNAKES

Snake family: Viperidae

How they eat: kill prey with venom that attacks the victim's tissues and blood

Habitat: deserts, swamps, grasslands, scrub brush, and forests in North and South America, especially Southwest United States

Fun facts: rattle vibrates 60 or more times per second





Snakes in an Ecosystem

Often killed by humans out of fear, snakes are actually very important for balancing their *ecosystem*, or habitat. In addition to controlling the small-animal populations and providing food for bigger animals, snakes help plants grow! When a snake swallows a mouse whole and then deposits it back onto the earth as waste, any seeds the mouse had stored in its stomach have a chance to germinate and grow into plants.



snakes did humans study to develop night vision technology? Are most snakes venomous? Learn the answers to these questions and more as you read all about snake species, from the anacondas of the Amazon

River to the sand boas of the Kenyan Desert and even

the snakes in your own backyard!





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