



Veiled Chameleons, a type of lizard, have grasping feet that help them climb trees.



LEAPIN' LIZARDS

BY JEANNA BRYNER

Go behind the scenes of a museum exhibition on scaly lizards and snakes.

Darrel Frost has an animal-friendly office at the American Museum of Natural History in New York. In one section of his office, the walls are lined with several tanks holding lizards and snakes.

Frost walks over to one of the cages and scoops out a snake with grey and orange stripes. This Grey-Banded Kingsnake is just one species that's part of a group of animals called squamates (SKWAH-mates). "Squamates" is another name for lizards, including legless lizards and snakes. Frost has been interested in squamates since he was a kid. Now, as a **curator** at the museum, Frost hopes to educate people about these diverse organisms. That's why he's so excited about the museum's upcoming lizards exhibition.

The exhibition will allow museum visitors to observe these amazing creatures in action. Check out this behind-the-scenes

tour to learn more about the animals that Frost is gathering for the exhibition.

What are some characteristics of squamates?

Squamates are **vertebrates**. Their body temperature changes as the surrounding air temperature changes. To stay at a healthy temperature, squamates move between colder and warmer areas—such as the cool shade of a tree or the warmth of a sun-drenched log. Also, these animals have scaly skin. As squamates grow, they **molt**, or shed the outer layer of this skin and replace it with a new layer.

How did you become interested in snakes and lizards?

I grew up in southern Arizona, where there are many kinds of snakes and lizards. So I've always been curious about them. All through my teenage years I read everything I could on these crea-



Scientist Darrel Frost

tures. At the time, I never thought it could become my job. Finally, it did—at the museum.

As a curator at the museum, what are your days like?

Part of my time is spent looking for new species of lizards and snakes in regions of Africa, Asia, and the Americas. I also oversee the museum's **herpetology** (HUR-pih-TAHL-uh-gee) collections. These include squamates, amphibians, and crocodiles. And I create exhibitions such as the upcoming show on squamates.

What makes the upcoming exhibition so interesting?

The exhibition will highlight the diversity of the world's nearly 8,000 species of squamates. For instance, the smallest squamate is the dwarf gecko, which can fit all four of its feet onto a dime. And the largest squamate—an Anaconda snake—can grow to a length of 10 meters (33 feet).

To show this diversity, the exhibition will include models of squamates and live animals.

This snake *molts*, or sheds, its skin.



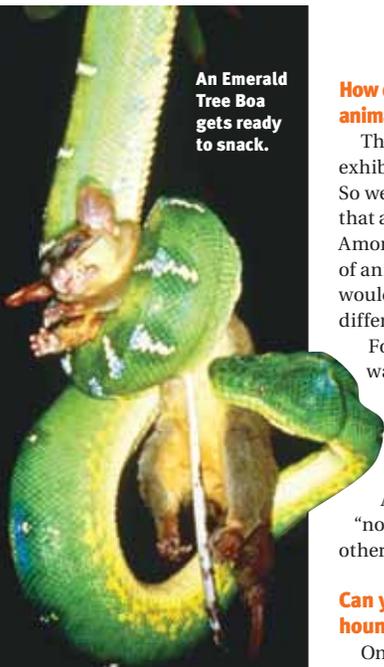
A Basilisk Lizard can run across the water's surface at speeds of 11 kilometers (7 miles) an hour.



To discover more about lizards, tour the science explorations Web site. Don't miss the live chat with herpetologist Darrel Frost. www.scholastic.com/lizards

BOB ELSAIE/GETTY IMAGES (CHAMELEONS); COURTESY OF THE AMERICAN MUSEUM OF NATURAL HISTORY (SCIENTIST); HEDD HANS-JÜRGEN KOCH/IMMENSE PICTURES (SNAKE); STEPHEN DIXON/ANIMALS ANIMALS (LIZARD)

An Emerald Tree Boa gets ready to snack.



check it out

More than 60 colorful, live squamates will captivate visitors in a new exhibition opening in summer 2006 at the American Museum of Natural History in New York. The exhibition explores these creatures' remarkable adaptations, including deadly venom, and sometimes surprising modes of movement. The Museum has been researching and celebrating the natural world for more than 135 years and has more than 30 million objects in its extensive research collection. The Museum's 200 scientists travel around the world on 100 field expeditions each year, studying everything from lizards to leeches to the universe.

To learn more, ask your teacher, or go to www.amnh.org.

How did you decide which animals to put in the exhibition?

The animals will be on exhibition for several months. So we could only show animals that are hardy in captivity.

Among these, I chose a variety of animals. That way, visitors would see the similarities and differences among squamates.

For instance, when visitors walk through the exhibition, they will notice two distinct groups: One group of squamates—called “sight hounds”—hunts by sight.

Another group—called “nose hounds”—hunts through other senses.

Can you give examples of sight hounds and nose hounds?

One example of a sight hound is the chameleon (kuh-MEEL-yuhn). It uses its excellent vision to spot **prey**. Then, the chameleon grabs the prey with its tongue. The tip of the chameleon's tongue is sticky. So when it shoots out its tongue, the tip sticks to the prey. When the chameleon pulls its tongue back in, the prey comes with it.

Monitor lizards and snakes rely on other senses to find prey. They use their deeply forked tongues to track—or “sniff out”—chemicals left by other animals. For instance, a snake touches surfaces in the environment with its tongue. Then, the snake brings its tongue back into its mouth. There, the chemicals get transferred to special pits. These pits can tell whether the scent particles are from prey, an enemy, or other object. That helps the snake locate its prey.

Words to Know

Curator — scientist who oversees a museum collection

Vertebrate — animal with a backbone

Molt — to shed the outer skin

Herpetology — the study of squamates, amphibians, turtles, and crocodiles

Prey — an animal that is hunted or captured for food

Predator — an animal that captures and eats other animals

Camouflage — an animal's color or pattern that helps it blend in with its surroundings

What are some other highlights of the exhibition?

We included daytime and nighttime **predators**, poisonous and nonpoisonous animals, as well as those with different methods for avoiding predators.

Squamates use many strategies to avoid being eaten. For example, chameleons use **camouflage** to avoid predators. The color of their skin matches their environment.

Other squamates, like the Basilisk Lizard, simply flee as quickly as they can. This lizard is able to stand upright and run across water.

What part of the exhibition brings out the “kid” in you?

I'm excited to see a lot of really cool-looking squamates gathered in one place. For instance, there's going to be a Veiled Chameleon. Its bright-green color and the helmet-like ridge on its head will certainly draw a crowd. Also, there will be a 14-kilogram (30-pound) Monitor Lizard on exhibition. It gives me the same sense of wonder as when I was a kid, looking at rattlesnakes in Arizona.

Create an Exhibit

Can you create a museum exhibit?

hands-on

You'll Need

- ✦ Access to a library or the Internet
- ✦ Pen and paper
- ✦ Shoebox
- ✦ Clay
- ✦ Construction paper
- ✦ Markers and crayons

THINK: Suppose you wanted to create a museum exhibit that featured mice and snakes. Would you place the mice and snakes in the same space? Why or why not?

PREDICT: Pretend you are a curator. It is your job to create an exhibit that must feature a Green Iguana, and at least one other animal. What are some things that you need to know about the Green Iguana—and the other animal—to create such an exhibit?

Procedure:

1. To create your exhibit, you'll need to do some research on the Green Iguana. So head to the library or log on to the Internet.

2. Your job is to create an exhibit space that resembles the Green Iguana's natural environment. Be sure to look up what the Green Iguana eats, where it lives, and how it behaves. You'll need this information to create the exhibit.

3. Next, you need to place another animal in the same exhibit space. Your options are a King Cobra, a Gila Monster, and a Basilisk Lizard. Research these animals. Be sure to look up what these animals

eat, where they normally live, and how they behave.

4. Use your research to determine which animal can remain in the same exhibit space as the Green Iguana. It cannot feed on the iguana, nor should the iguana feed on the animal you pick.

5. Create an exhibit for the Green Iguana and the other animal you picked: Use a shoebox as the exhibit space. Use materials such as clay, construction paper, markers and crayons to create the animals, the environment they will be living in, and the food they will be eating.

6. When you are finished, display your exhibit.



Go to the library to do some research on the Green Iguana.



Create an exhibit space for the two animals.

Conclusions

1. What type of environment does the Green Iguana live in? Did the other animal you picked live in the same type of environment?
2. What did you add to the exhibit to make your Green Iguana feel at home?
3. Which two animals didn't you pick? Could you place these animals in one exhibit space? Why or why not?