







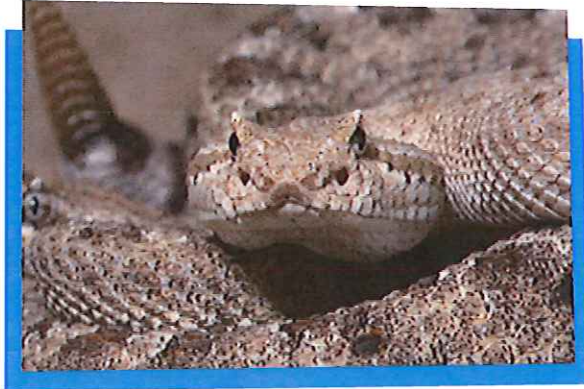




ADAPTATION PROFILES

Sidewinder

Crotalus cerastes



HABITAT

Arid deserts and flatlands in southwestern United States

BEING BROWN

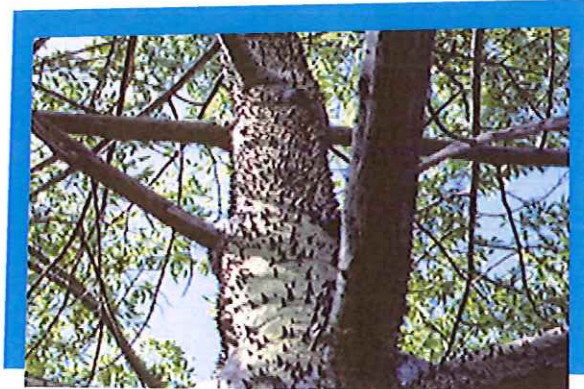
When you live on the ground, brown is best. Like other rattlesnakes, sidewinders blend in with the rocks, soil, and dry grasses where they live. This cryptic coloration allows them to hide in plain sight.

BEWARE

A rattlesnake has a unique adaptation: at the end of its tail it grows interlocking, hollow segments. When threatened, the snake coils into a circle and shakes its tail. The rattle means, "Beware, stay away!"

Silk Floss Tree

Ceiba speciosa



HABITAT

Subtropical and tropical forests of Brazil and Argentina

SPINY

Trees can't move; they grow in place. So when insects or animals attack, defenses come in handy. Some trees taste terrible, while others have sticky sap. A few, like the silk floss tree, have thorns on their trunks.

SHARP

This tree's triangular thorns cover the trunk from the ground to the top branches. Sharp tips and edges keep animals from gnawing at the trunk and from climbing the tree for tender leaves.

Indian Crested Porcupine

Hystrix indica



HABITAT

Forests, scrubland, and rocky areas of Southern Asia and the Middle East

QUILLS

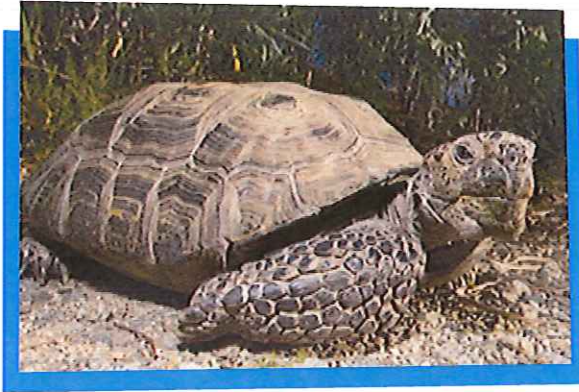
Porcupines are famous for their quills, and this one has hundreds of them. Quills are sturdy, hollow hair strands. Some can be as long as 12 inches (30 centimeters). When they shake, quills on the tail make a hissing rattle.

QUICK

When threatened by a lion or a leopard, a porcupine raises its quills. If the threat doesn't go away, the porcupine charges—backside first. Quills don't have venom. However, the deep wounds they cause become infected.

Desert Tortoise

Gopherus agassizii



HABITAT

Scrubland and deserts of the southwestern United States

TOUGH

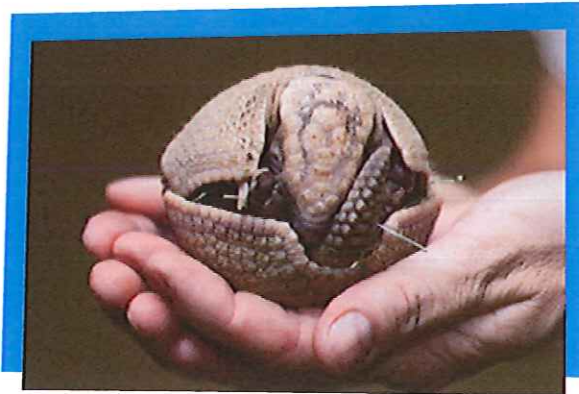
The desert tortoise lives in a hot spot—the Mojave Desert, where temperatures can reach 105 degrees Fahrenheit (41 degrees Celsius). The tortoise's domed shell, called a carapace, helps it survive.

TOTE

The carapace encloses a tortoise's lungs and internal organs. A tortoise can store up to 40 percent of its body weight in water inside its bladder.

Three-banded Armadillo

Tolypeutes matacus



HABITAT

Savannas and dry scrublands of Brazil

ARMOR

Three flexible sections of skin join together two domed shells on the body of the armadillo. Tough plates also cover the head and tail. For digging, modified second, third, and fourth toes of the hind feet have fused to make a hoof-like claw.

AGILE

When threatened, this armadillo tucks in its legs, ears, and head, curling into a ball. Although this provides excellent protection from predators, the armadillo is helpless from people who easily pick up the small ball.

Prickly Pear Cactus

Opuntia littoralis



HABITAT

Deserts in the southwestern United States and Baja California, Mexico

FLAT

Cactus are plants, but where are the leaves? These cactus conserve water by growing thick, flat stems called paddles. The spines on the cactus paddle are highly modified leaves!

FLOW

Spines protect this cactus from animals that want to munch on its water-rich paddle. They also reduce airflow across the surface, which decreases water lost through transpiration.

Cape Clawless Otter

Aonyx capensis



HABITAT

In or near rivers in much of Africa

WATER WORLD

A river otter spends more than half its time in the water, and it shows. Its slender body is covered in short, dense fur and the otter's tail is thick and strong. Long whiskers called vibrissae are sensitive to the slightest touch.

WEBBED

A river otter's short legs help it crawl in and out of watery areas. Rough skin on the palms and fingers helps grip slippery fish. Webbing between the hind toes helps the otter swim.

Poison Frog

Dendrobates galactonotus



HABITAT

Near streams and ponds in Central and South America

COLORFUL

Known as the jewels of the rain forest, these small frogs show off vibrant colors. You'd think this would make them an easy target for predators, but their warning coloration signals a deadly defense.

CAUSTIC

This frog's skin oozes poison. Once a predator tastes a poisonous frog, it doesn't go back for more. Each species of poison frog produces a different toxin.

Sugar Glider

Petaurus breviceps



HABITAT

Forests in Australia, Papua New Guinea, and Indonesia

GLIDING

A possum that flies? Well, almost. This one glides up to 150 feet (45 meters) between tree branches. A thin, furred membrane between its wrist and ankle stretches wide in the air. The membrane is called a patagium.

GRABBING

Gliding between branches isn't easy, especially at night. To help, sugar gliders have large claws and an opposable toe on the hind foot. A long tail helps with steering.

Blue Morpho Butterfly

Morpho peleides



HABITAT

Tropical rain forests of Mexico, Central America, Colombia, and Venezuela

MULTIPLE

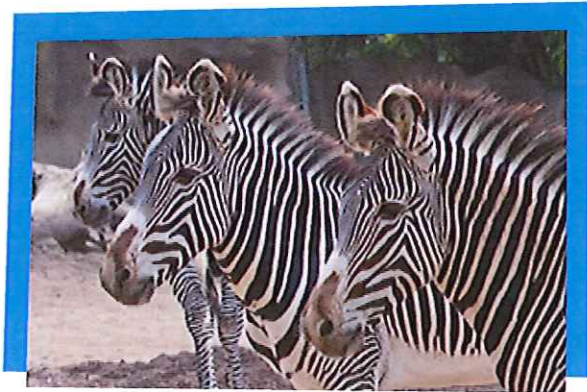
Some butterflies have the same colors on both sides of their wings, but not the blue morpho. The undersides are brown with spots and rings. The tops are shimmering blue.

MOVING

As this butterfly flies, the changing wing color confuses predators. A bird sees blue, then brown, then blue again. Against a multicolored forest, the change in color makes the butterfly hard to spot and follow.

Grevy's Zebra

Equus quagga grevyi



HABITAT

Dry grasslands of eastern and southern Africa

ZIGZAG

Too many stripes can be confusing. That's the plan when zebras get together in herds. When a predator approaches and all the zebras move at once, it's difficult to distinguish just one zebra in the crowd.

ZIPPY

Zebras are not slow; they can reach top speeds of 40 miles per hour (65 kilometers per hour). Threatened zebras may buck or kick as they run.

Indian Axis Deer

Axis axis



HABITAT

Wooded regions and grasslands of India, Sri Lanka, and Nepal

HIDING

These deer browse on plants, eat fallen fruit, and nudge through leaf litter. White spots on a brown-red background help them blend in with background colors and broken sunlight as they move through the forest.

HEAVY

Adult male deer grow antlers as long as 3 feet (1 meter). Each antler has three points, or tines. A male uses its antlers to protect itself against tigers and other predators.