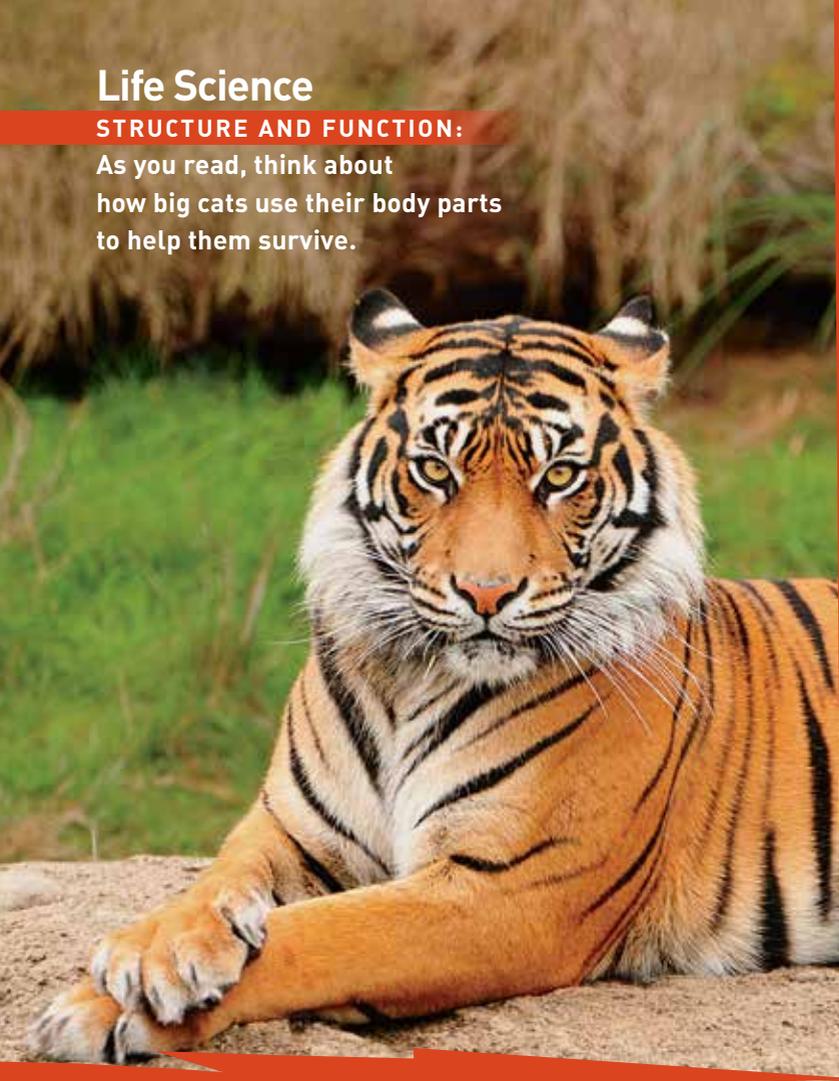


Life Science

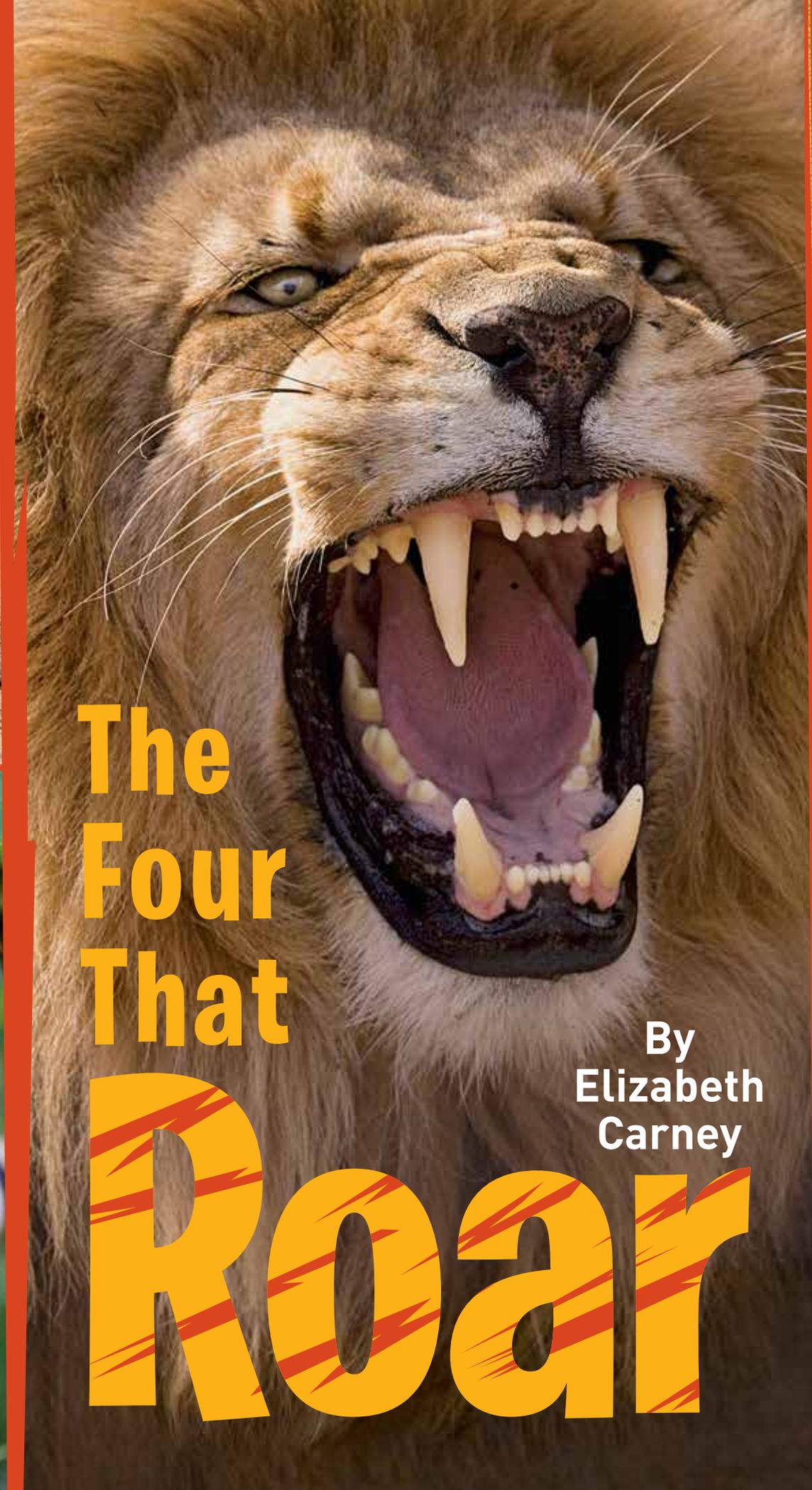
STRUCTURE AND FUNCTION:

As you read, think about how big cats use their body parts to help them survive.



NATIONAL GEOGRAPHIC
Explorer

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The Four That

Roar

By
Elizabeth
Carney

There are **36 species** of cats in the world, but only four that roar.





Kings of the jungle. Ghosts of the savanna. Rulers of the rain forest. No matter where they're found, the world's big cats command our respect. Lions, tigers, jaguars, and leopards are among the most fearsome of felines. It may seem strange, but these four are the only big cats that can roar.

Built to Hunt

All big cats are carnivores. That means they eat meat. But first they have to catch their prey. Big cats have **adaptations** that make them good hunters.

Long tails provide balance while they leap, climb, and run. Sheaths at the top of each toe protect their claws. Strong leg muscles power long jumps and big strides. A flexible spine helps the cats twist and turn during chases. It also helps them land safely if they tumble.

Big cats have 20 times more smelling power than humans have. And they see six times better at night than humans do. Sensitive whiskers help the cats find their way in the dark.

Hunting Prey

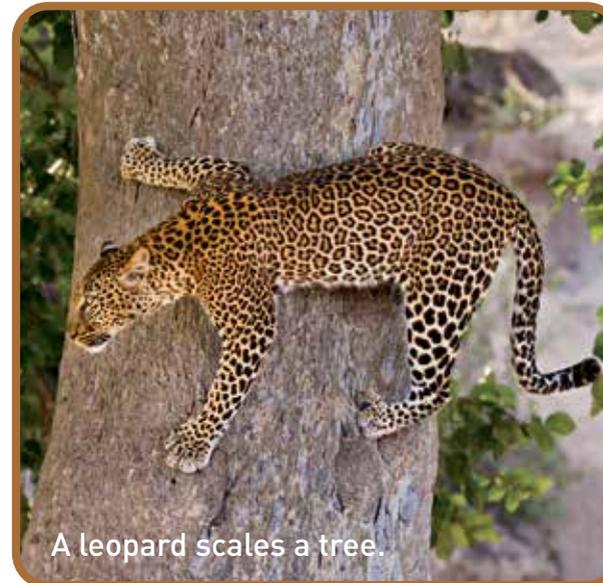
A big cat has to work hard to catch a meal. It usually stalks its prey by staying low to the ground. It sneaks closer. Then it strikes. It leaps on the prey, biting with its sharp fangs and holding on with its claws.

Each of these cats has a special hunting strength. Tigers are great swimmers. That's helpful when they swim across lakes carrying heavy prey in their mouths.

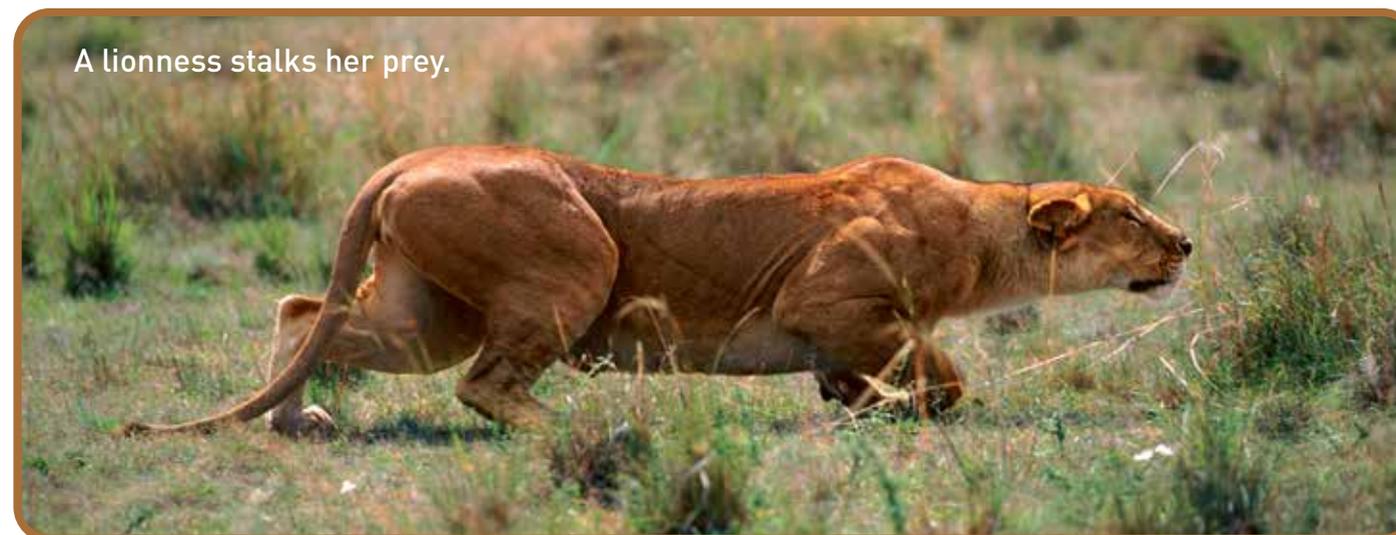
Leopards are skilled climbers. They can carry prey twice their weight up into a tree. Jaguars see well at night, so that's when they do most of their hunting. Lions hunt prey in two ways. They "search and stalk" or "sit and wait." Sometimes they follow vultures to a fresh kill. Then they steal their meal.

Each cat seeks out different prey. Lions chase down zebras and cape buffalo. Tigers prefer deer and water buffalo. Jaguars eat fish and crocodiles. Leopards hunt impalas and monkeys.

These big cats sit at the top of the food chains in their ecosystems. They are all **apex predators**. Apex predators keep their habitat healthy. They keep the number of plant-eating animals down, so plants have a chance to grow. They pick off sick and wounded members of a herd. Without big cats, the ecosystem would be out of balance.



A leopard scales a tree.



A lioness stalks her prey.

Who's Who Among Big Cats

How to tell these big cats apart?
Look at their fur:



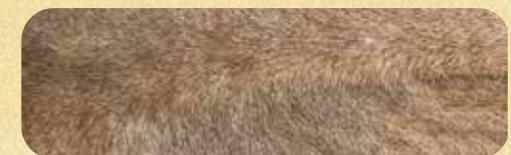
Leopards have yellow coats with dark spots called rosettes. The edges of each rosette are smooth and circular.



Jaguars have rosettes, too, but they have irregularly shaped borders and a black dot in the center.



Tigers are the only big cats with stripes. Their fur is mostly orange with vertical, black stripes.



Lions have light-brown or tawny fur. Their tails are tipped with a tuft of black hair at the end. Males have long, shaggy manes.



Looking for Big Cats

Big cats are found around the world in many types of habitats and climates. Tigers are found the farthest north. One species lives in the snowy mountains of Siberia.

Jaguars favor the rain forests and grasslands of Central and South America. Lions prowl the plains of central and southern Africa. Leopards are found in Africa and Asia.

Clashing with Big Cats

But wherever they live, every big cat shares one big problem: habitat loss. As people take over land for homes and businesses, there are fewer places for wild animals.

Within this shrinking world, big cats sometimes prey on valuable livestock. When big cats kill or hurt livestock, farmers get upset. That's because livestock are the only way many of them can support their families. Angry farmers sometimes kill the big cats.

That's not the only danger to big cats. Sometimes big cats are **poached**, or killed illegally, for their body parts. Some cultures make "medicines" from their skin, whiskers, teeth, and bones.

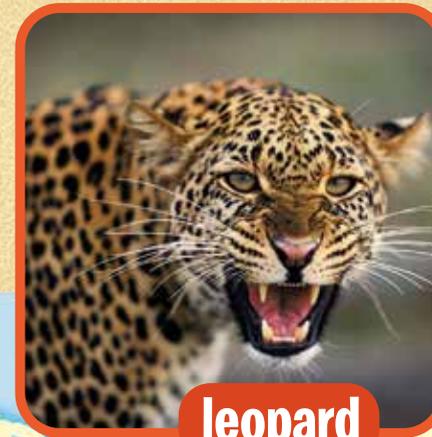
Of all the big cats, tigers face the greatest risk of extinction. Only a few thousand tigers are left in the world. The number of lions has decreased too. In the 1800s there were millions of lions. Today there is only a fraction of that number. Clashes with humans have affected the number of leopards and jaguars, too.



Where to Find Big Cats

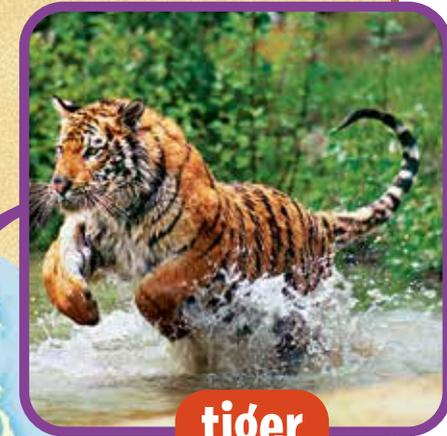
This map shows approximate ranges of jaguars, leopards, lions, and tigers.

A leopard's ears can hear five times more sounds than the human ear.

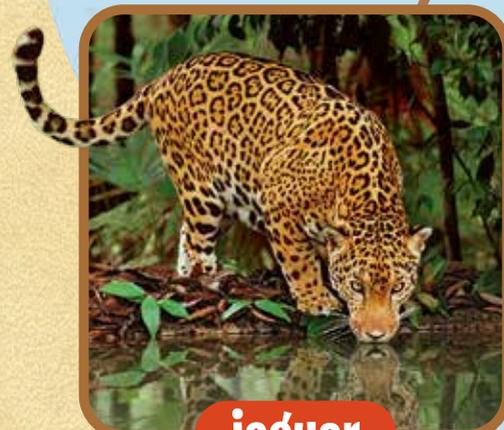
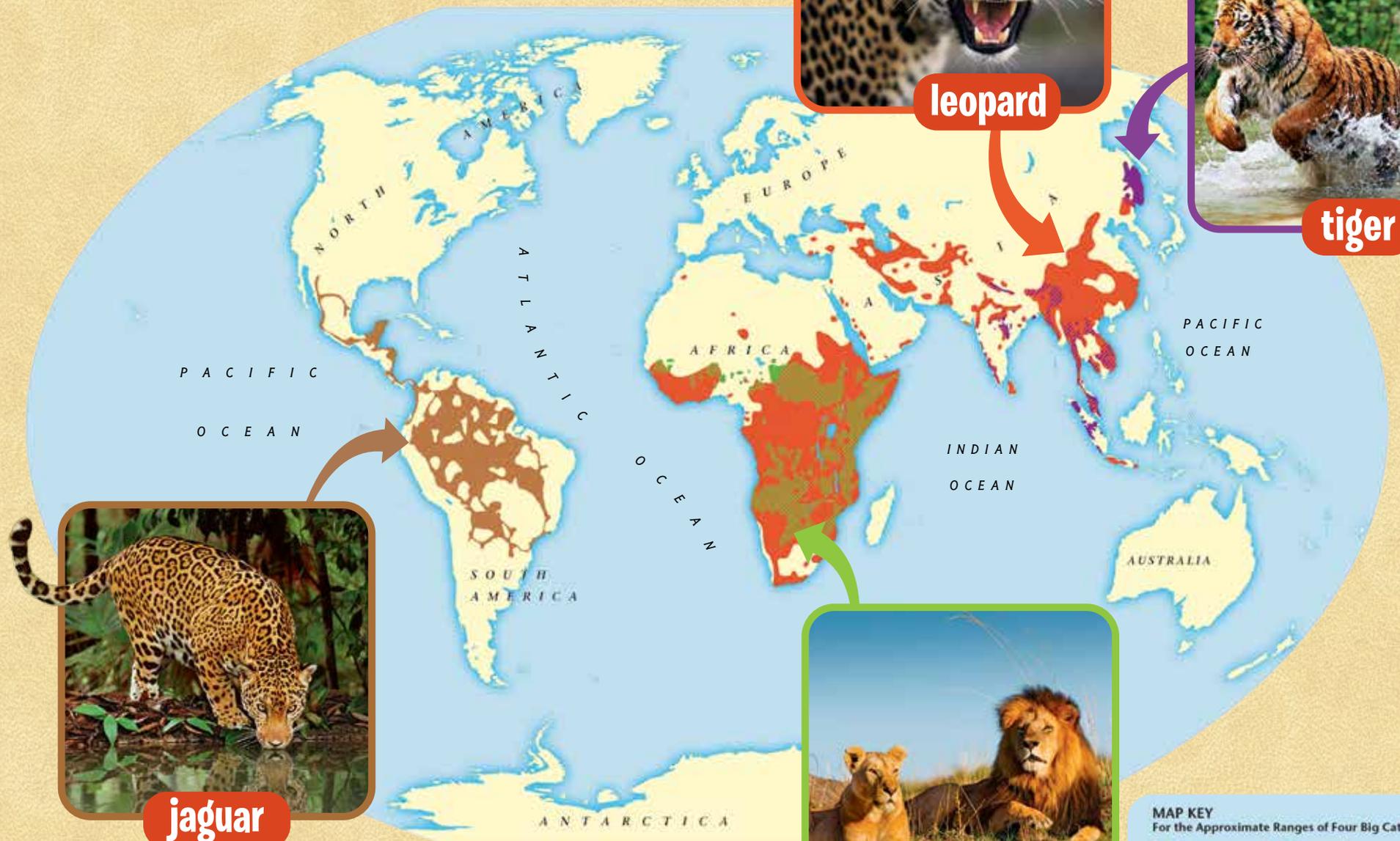


leopard

A tiger's stripes are like fingerprints—no two animals have the same pattern.



tiger



jaguar

"Jaguar" comes from the Native American word "yajuar." It means "he who kills with one leap."

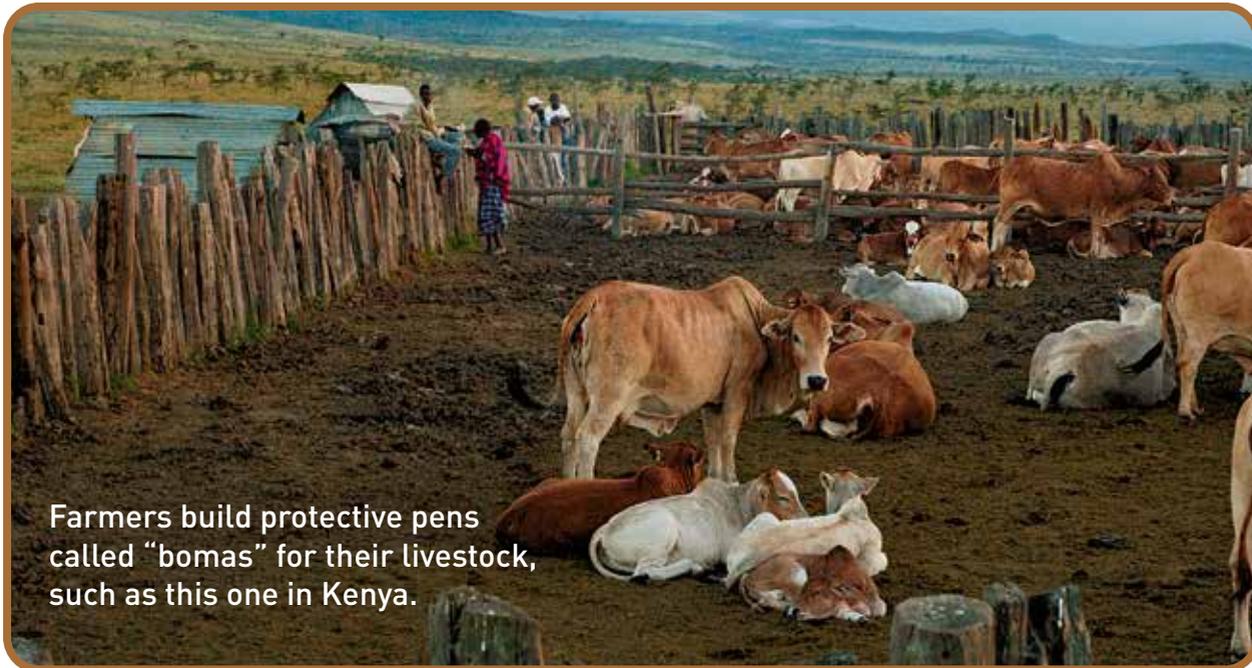


lion

An adult lion's roar can be heard up to 8 kilometers away.

MAP KEY
For the Approximate Ranges of Four Big Cats

	Jaguar		Leopard
	Lion		Leopard and Lion
	Tiger		Leopard and Tiger



Farmers build protective pens called “bomas” for their livestock, such as this one in Kenya.

Living With Big Cats

Can humans and big cats live together in peace? Many people think they can.

Wildlife **conservationists** in some areas pay farmers for lost livestock. In return, farmers must agree not to kill big cats.

Conservationists also teach farmers ways to keep livestock safe. One way is to build a boma. A boma is a pen for the livestock. It’s made from wood and wire fencing. It helps to keep livestock in and big cats out.

In many countries, large areas of land are set aside as **reserves**. There, the animals are protected and can roam freely.

More Solutions

In Central and South America, conservationists are working to connect pieces of jaguar habitat. Safe routes between wild places mean jaguars can breed and hunt in their habitat without disturbing the humans who live in parts of it. Clear paths ensure that these big cats stay strong.

In Southeast Asia, scientists have identified areas of healthy tiger habitat. They’ve found enough wild land to support up to 20,000 tigers. In Nepal, tiger habitat is being created out of previously cleared land. If the world’s remaining tigers can be protected, they just might rebound.

In Africa and Asia, photo safaris may help big cats, too. Travelers pay money to see big cats up close. Local people who work at tour companies make money. For them, big cats are valuable and worth protecting.

Nine Lives

In 2009, the National Geographic Society launched the Big Cats Initiative. It supports scientists working to save big cats in the wild. Through conservation, education, and spreading the word about big cats, this program hopes to ensure the survival of all big cats.

You can learn more about how to protect big cats. Go to causeanuproar.org

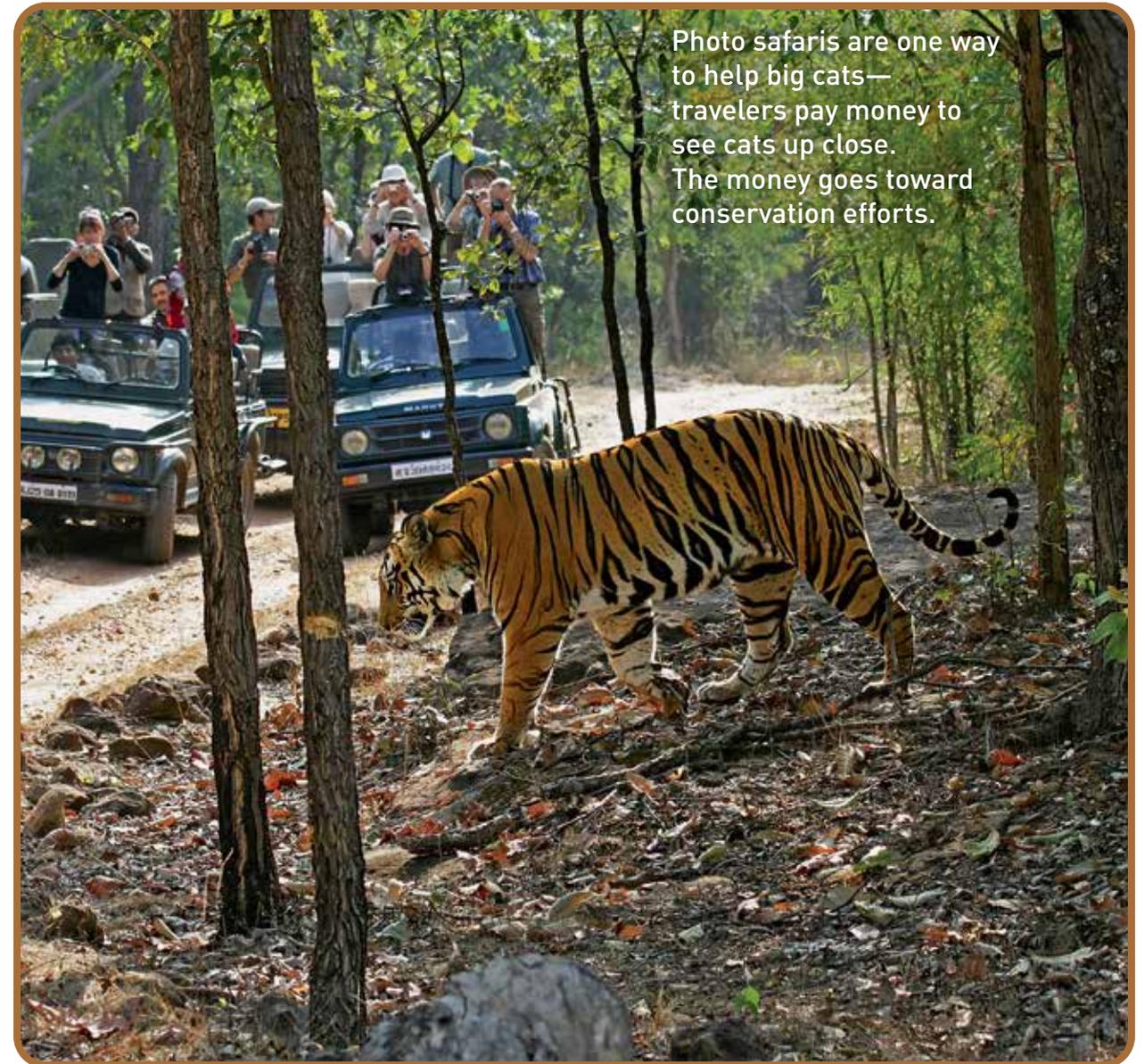


Photo safaris are one way to help big cats—travelers pay money to see cats up close. The money goes toward conservation efforts.

Wordwise

adaptation: a behavior or body part that helps an animal survive

apex predator: the most powerful predator in an ecosystem

conservationist: a person who works to protect and manage Earth’s natural resources and the wildlife that depends on those resources

poach: to illegally hunt an animal, usually to sell its meat, skin, or other body parts

reserve: a tract of public land set apart for the protection of plants and animals

