

PIONEER EDITION

NGPIONEER.ORG

MAY 2011



NATIONAL GEOGRAPHIC

Explorer



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Vanishing Cultures 10 Rays 18



CRUNCH CRUNCH CRUNCH

The more caterpillars eat,
the faster they grow.

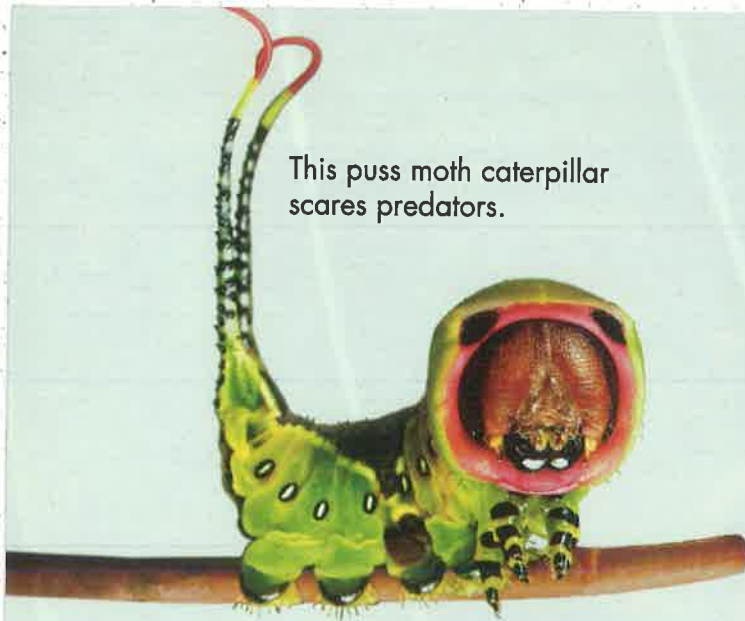
By Lana Costantini





Comprehension Strategy: After reading each section of the article, stop to summarize what you have read.





This puss moth caterpillar scares predators.

Deep in the forest, a hungry frog sees a puss moth caterpillar.

To the frog, it looks like an easy meal. Suddenly, the caterpillar raises its head. It waves two long, pink tentacles. It spits in the frog's eye. The spit stings, but it doesn't harm the frog. The frog hops away.

A caterpillar's life is full of danger. In a few weeks, though, a caterpillar changes into a moth or butterfly. Until then, it fights to stay alive.

Lots of Larvae

The puss moth is just one type of caterpillar. There are as many as 180,000 kinds living on Earth. Caterpillars look a little like worms. They're not worms, though. They are **larvae**. A larva is the young form of some kinds of animals.

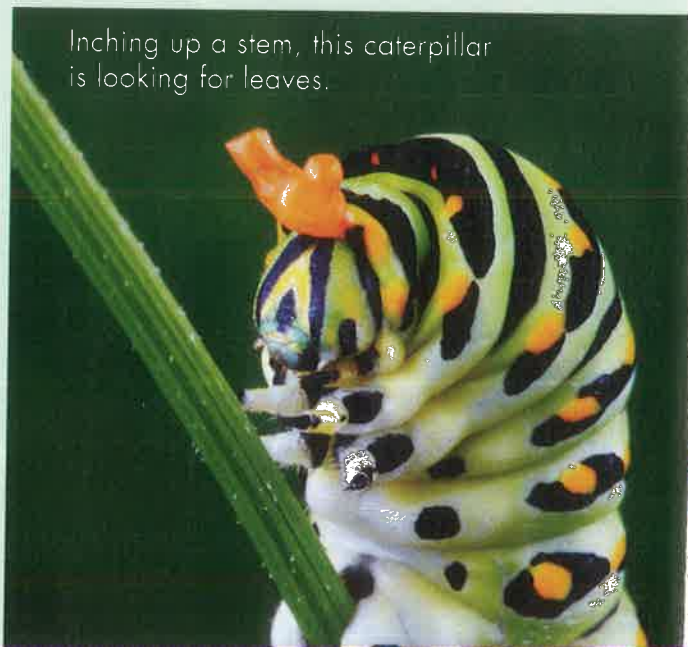
A larva doesn't look like its parents. It has a different body. It eats different foods. Sometimes it has a different name.

Caterpillars come in all shapes, sizes, and colors. They may be bumpy, hairy, or even sticky. Some have bright horns or feathery spikes.

Some caterpillars don't even look like caterpillars. For example, the monkey slug caterpillar looks like a hairy spider. Disguises like these have a purpose. They can frighten away predators.



Is this a hairy spider?
No, it's the monkey slug caterpillar.



Inching up a stem, this caterpillar is looking for leaves.

Spiky horns line this stinging rose's back.



This inchworm's back end catches up with its front end.

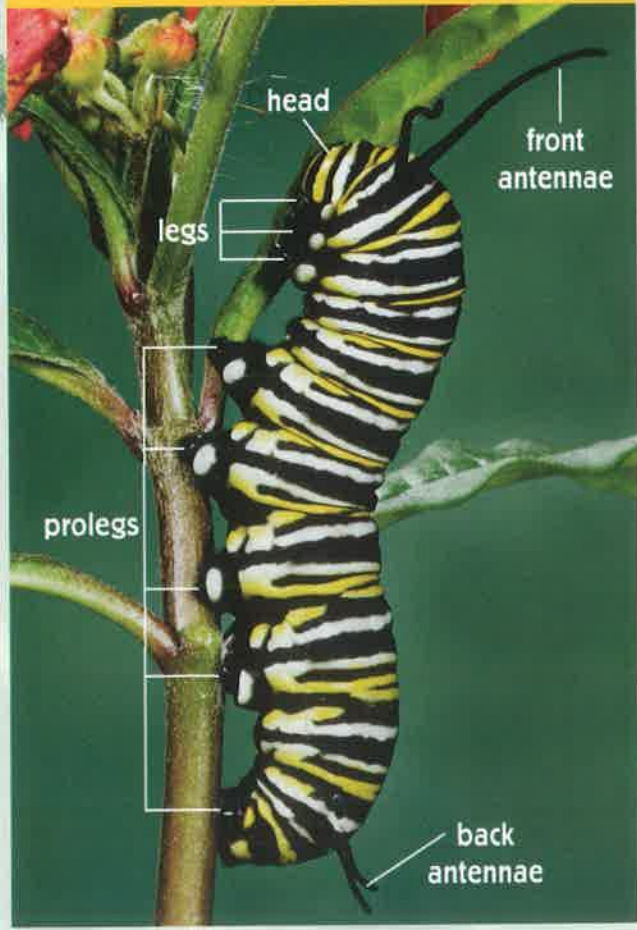


Inching Forward

A caterpillar is often on the move, looking for food. To get going, muscles in the back end push the front end forward. The front end stays still while the back end catches up.

Five sets of stumpy prolegs help a caterpillar cling and climb. The prolegs have hooks to dig into stems and branches. Three pairs of jointed legs help it hold the food it finds.

A Caterpillar's Body



Munch a Bunch

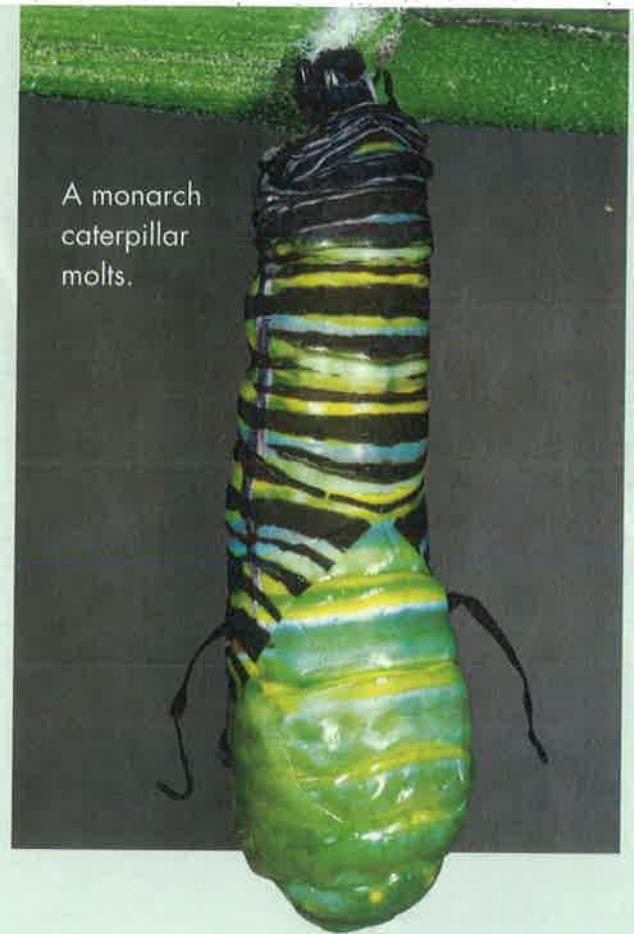
A caterpillar is hungry as soon as it hatches from its egg. It bites and chews using its powerful jaws. They open and close like scissors. They tear leaves into tiny pieces.

Not all caterpillars eat leaves, though. Some eat parts of flowers, beeswax, or other insects. Most aren't fussy. They'll eat anything in their path. Slice. Snip. Grind. Gone.

For a predator, juicy caterpillars make tasty snacks. To stay safe, caterpillars defend themselves with spikes, bad smells, and even noises.



This hungry caterpillar will turn into North America's largest moth.



A monarch caterpillar molts.

Growing Out of Their Skins

A caterpillar eats and eats until it grows right out of its skin. It has a tough outer skin. As it grows bigger, a new skin forms under the old one. In time, the old skin falls away. This is called **molting**.

To molt, a caterpillar spins a small patch of sticky silk on a leaf. It grips the silk mat with its prolegs. As the old skin splits apart, the caterpillar wriggles out.

Most kinds of caterpillars molt four or five times. Between molts, they keep eating and growing. Each time they molt, they look a little different. They also get closer to adulthood.

PLAYING DEFENSE

Here are a few ways caterpillars keep themselves safe.



Defense #1: Eat Me and Be Sorry

The pipevine swallowtail caterpillar eats poisonous plants. The poison doesn't hurt the pipevine. Instead, it makes the caterpillar taste very, very bad. It tastes so bad that no predator will eat it.

Defense #2: Fooled You!

Some caterpillars look too scary or too disgusting to mess with. A young spicebush swallowtail looks like bird droppings. As it grows, two spots form on its back. They look like snake eyes. They may scare predators.



Defense #3: Don't Touch Me

See the colors on this spiny oak slug caterpillar? They warn predators, "Don't get too close! You will feel my stinging spines."



Getting Their Wings

Caterpillars spend weeks eating and growing. Then it's time for them to change. This change is called **metamorphosis**.

First, the caterpillar finds a safe place. Then it sheds its skin. This will be its last molting. Something different will come out of the old skin. It's called a **pupa**. This is the final stage for a caterpillar before its metamorphosis.

Inside the pupa, the caterpillar lies still. Its body turns into jelly. It slowly changes shape.

First Flight

Don't think the pupa is defenseless. It can twitch, click, and rattle. The noises scare away predators.

The caterpillar keeps changing inside the pupa. Its mouth becomes a hollow tube. It's called a proboscis. Its stubby legs grow long and thin. Wings start to form.

After about two weeks, the pupa splits open. The caterpillar is gone forever. A butterfly wriggles free. Slowly it opens its crumpled wings. They dry. Then the butterfly takes off for its first flight.



blue morpho butterfly

Wordwise

larva: young form of some animals

metamorphosis: body changes an animal goes through to become an adult

molting: shedding an outer layer

pupa: final stage of a caterpillar; in butterflies, also called a chrysalis

soaring
butterfly



newly-laid egg



crawling
caterpillar



stretching
its wings



FROM EGG TO BUTTERFLY

See how the oldworld swallowtail changes from an egg into a graceful butterfly.

turning into
a pupa



breaking free

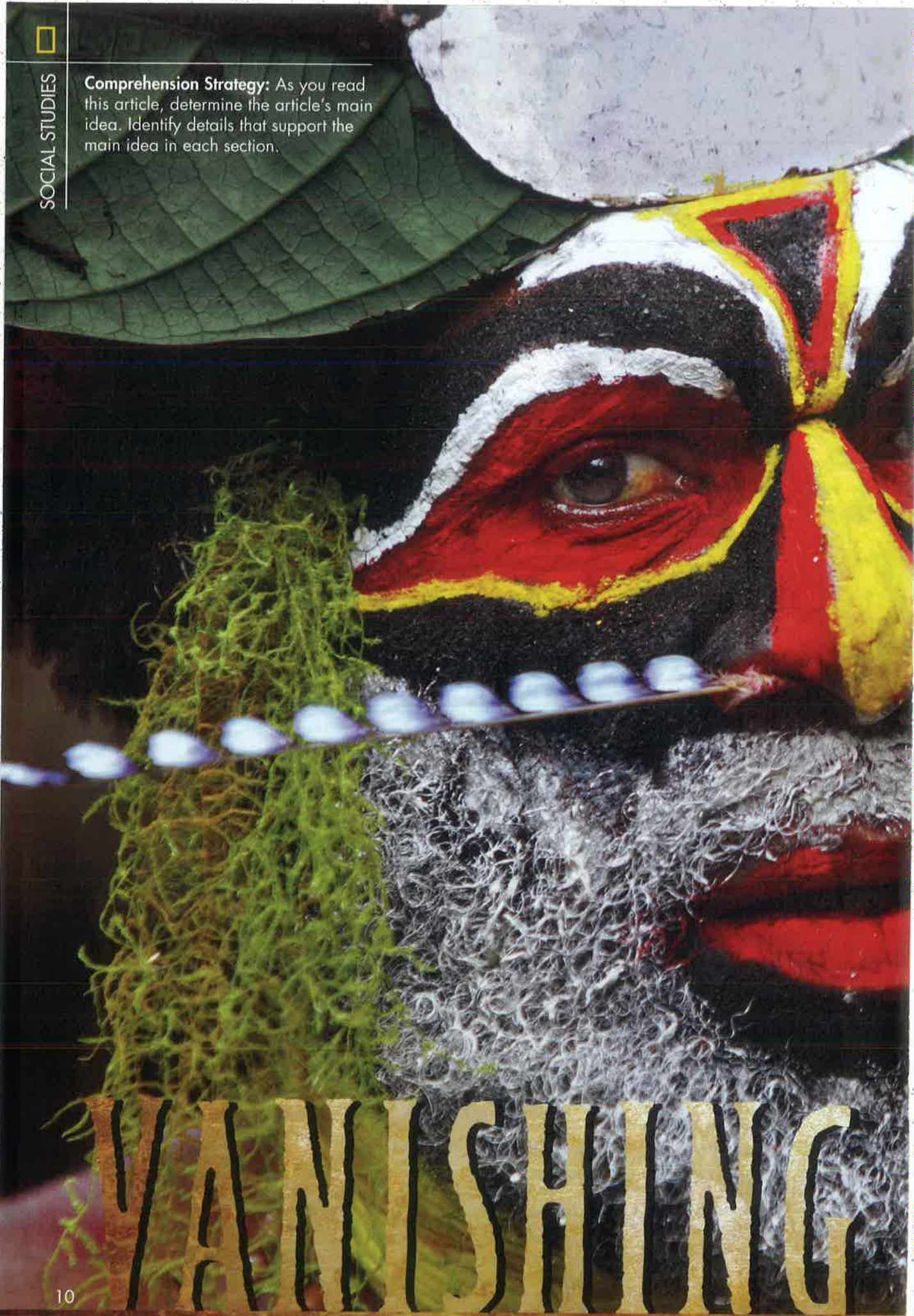


changing inside
the pupa






Comprehension Strategy: As you read this article, determine the article's main idea. Identify details that support the main idea in each section.



WANISHUNG



The Huli wiggman beats his drum and chants. He stomps his feet to prove he is not afraid of unseen spirits. The wiggman and his people live on the island of Papua New Guinea. For centuries, they have passed on their history and beliefs through dance, song, and costume.

Today, cultures like the Huli are vanishing. A culture is a people's way of life. In today's world, some cultures struggle to survive. They are losing their old ways. Worse yet, the Huli aren't the only ones.

CULTURES

TUAREG

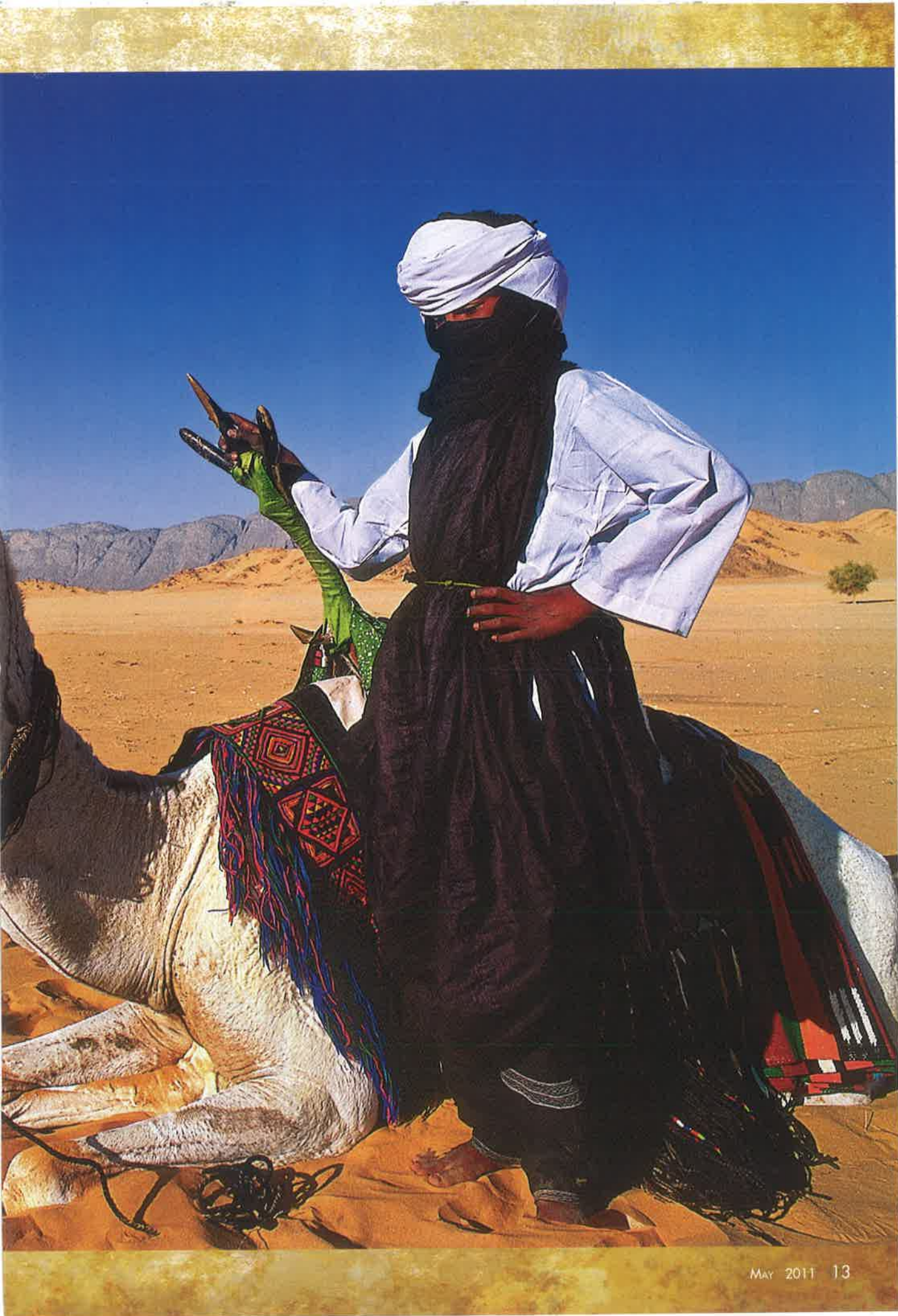
The Sahara

The camel protests. Its master needs it to stand. Already, it has traveled far across the hot desert. It still has a long way to go. The Tuareg must keep moving.

The Tuareg are traders and nomads. They move back and forth across the desert. Their camels carry bags of salt, dates, sugar, and even gold.

The Tuareg have lived this way for thousands of years. Yet the world around the Tuareg is moving faster. The world does not want to wait for slow camels. Trucks, trains, and planes move much faster. When the Tuareg arrive, who will buy what they sell?





LEGONG DANCERS

Bali

The girl snaps open her fan. She raises her fan against her enemy. She is not really in danger. She is a Legong dancer telling a story.

In the story, she is a princess. She has been kidnapped. Her stiff costume covers her body like a golden cocoon. It is hard for her to move freely. To tell the story well, each movement that she makes must be perfect.

Legong is a holy dance. It is also an art. It is very old. Yet it is an "old way." Many people in Bali want to give up old ways. They want their culture to be modern.







EAGLE HUNTERS

Kazakhstan

The hunter races over the snowy mountains. He sees a fox. The hunter releases the golden eagle that sits on his arm. The bird takes flight. The eagle will find and kill the fox.

Eagle hunting is a very old skill. Its secrets have been passed down through the hunter's family.

Not long ago, life in the hunter's country began to change. New leaders banned eagle hunting.

Only a few people still know how to do it. Soon the art may be lost forever. This, like other unique cultures, may one day vanish.

