



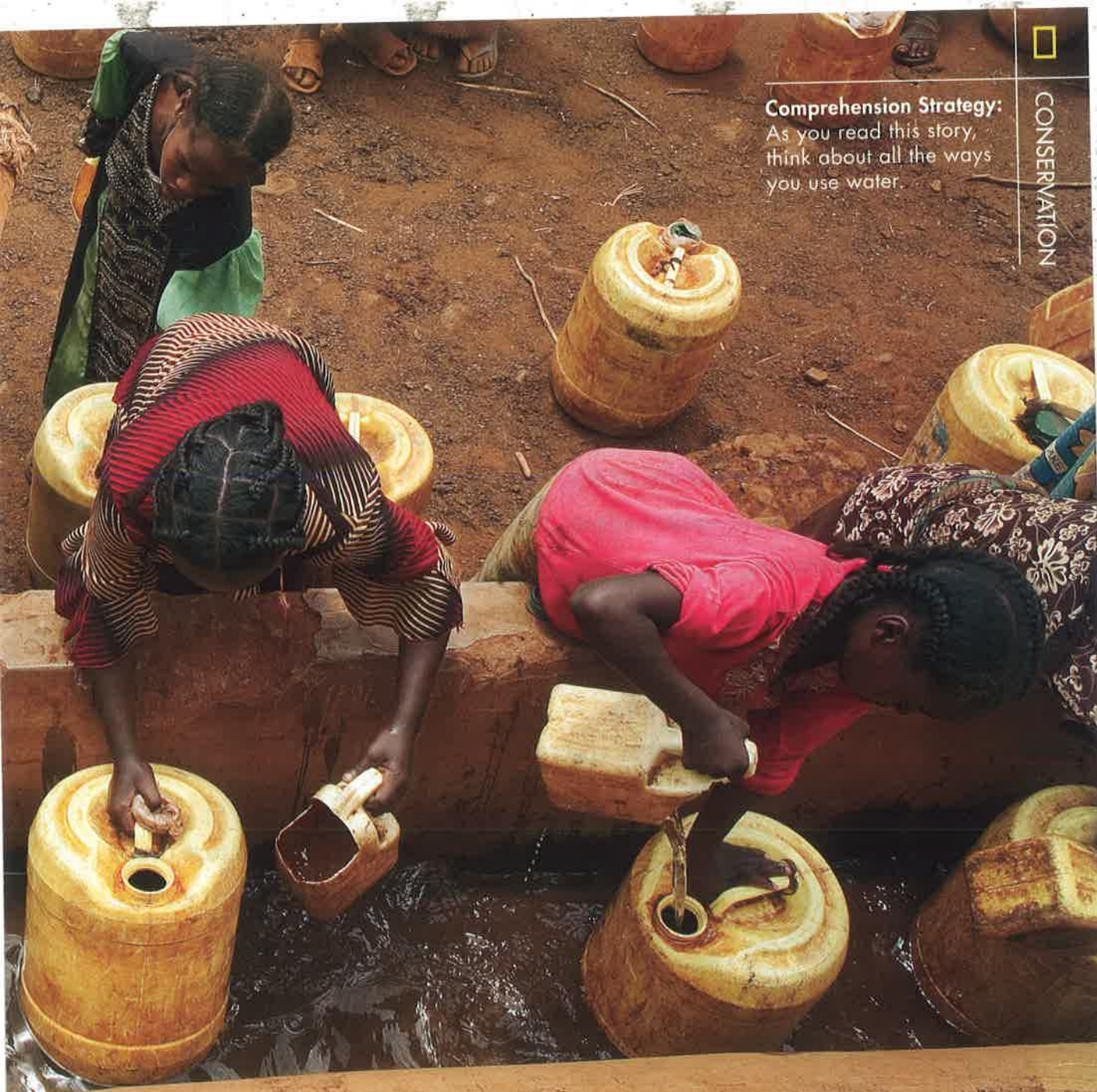
# THIRSTY

BY BETH GEIGER



**Comprehension Strategy:**

As you read this story,  
think about all the ways  
you use water.



# PLANET

Each day, the villagers of Marsabit, Kenya, gather at a well.  
They sing as they draw water from deep under the ground.  
With little to spare, each can fill just one large jug.



## The Wonder of Water

Water covers 70 percent of Earth's surface. So why do the people of Marsabit struggle to get enough? Most is too salty. Some is ice. Only one percent is drinkable. We all share that fresh water.

Drip by drip, this water is always moving. The hot sun shines on ocean water, for example. That makes some of the water **evaporate**. It rises into the sky as a **vapor**, or gas.

Vapor forms clouds and **condenses**. It then falls back to Earth as rain, snow, or ice. It flows into streams and rivers and back into the ocean.



Fresh water is trapped in this iceberg in Antarctica.

## Quenching the Thirst

Water has been recycled like this for millions of years. The amount of water on Earth never changes. There is the same amount now as when Earth formed. Think about it. The water that drips from your faucet today could be the same water that dinosaurs drank long ago.

All living things “drink” water. Plant roots suck water from the ground. Leaves and stems also take in water. Then plants release water as a vapor. On a hot day, a birch tree can use up to 300 liters (80 gallons) of water!

In dry places, plants must make every drop count. A desert cactus stores water in its fleshy leaves. Some plants sleep during dry times. They burst back to life when it rains.

## A Little at a Time

Some animals have special ways to **conserve**, or save water, too. A camel can go six months without taking a sip. It also doesn't sweat. That's one way to save water!

A kangaroo rat doesn't even need to find a pool of water when it is thirsty. It rarely drinks. Instead, it gets water from the plants it eats.





This poison arrow dart frog takes its tadpoles to pools in this plant's leaves.

## Watery Homes

Animals don't just crawl, walk, slither, or fly to water. Many live in it. Some, like fish, can only live in water. Most fish don't have lungs. They can't breathe air. So they can't live on land.

Other animals spend part of their life in the water. Take a poison arrow dart frog. Like fish, tadpoles don't have lungs. The mother frog carries them to a plant high in the trees.

The plant traps water between its leaves. That makes a tiny pool. It's a safe place for tadpoles to grow. Once the tadpoles grow lungs and become frogs, they leave their watery home.



This desert cactus stores up water during dry times.



## Putting It to Use

You need water, too. People use it to drink, cook, and clean. An American uses about 380 liters (100 gallons) of water a day. A person in Europe uses about half that. In Marsabit, a person survives on only 19 liters (five gallons) of water a day.

It takes water to make the things we use, too. Growing food takes the most water of all. Did you know it takes about 2,400 liters (630 gallons) to “grow” one hamburger?

## Water, Water Everywhere

So many people need water it may seem like we don't have enough. People in some places don't. Other places have too much water.

Just six countries have half of the world's fresh water. The United States is one of them. Yet people in places like Marsabit struggle. It's hard for them to get the water they need. In some places, people walk far each day to find water. Often this water is dirty. Drinking it can make people sick.



This neighborhood in Salton City, California, survives on water pumped in from the Colorado River.





Two sisters in a remote part of Australia sweep mud from a watering trough.

## Making It Count

It takes smart ideas to solve the water problem. In some places in Africa, merry-go-rounds pump water. Kid power brings clean water from under the ground. Some Australians reuse bath water to water plants. How can you save water? If each of us saves a little, we can all save a lot.

Learn more about fresh water at [environment.nationalgeographic.com/environment/freshwater](http://environment.nationalgeographic.com/environment/freshwater).

## WORDWISE

**condense:** to change to a denser form

**conserve:** to use without wasting

**evaporate:** to dry up

**vapor:** substance in the form of a gas

## How many gallons does it take to...?

### At home

Flush a toilet? 8-26 liters (2-7 gallons)

Brush your teeth? 8 liters (2 gallons)  
if water runs the whole time

### In the factory

Make one cotton T-shirt? 2,900 liters  
(766 gallons)

Make one pair of blue jeans?  
10,978 liters (2,900 gallons)

### On the farm

Grow a pound of strawberries?  
125 liters (33 gallons)

Grow a pound of apples? 318 liters  
(84 gallons)

NOTE: Figures are for in the United States.



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Cover: Cassowaries live in the rain forests of Australia and Papua New Guinea.

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