Science in the News

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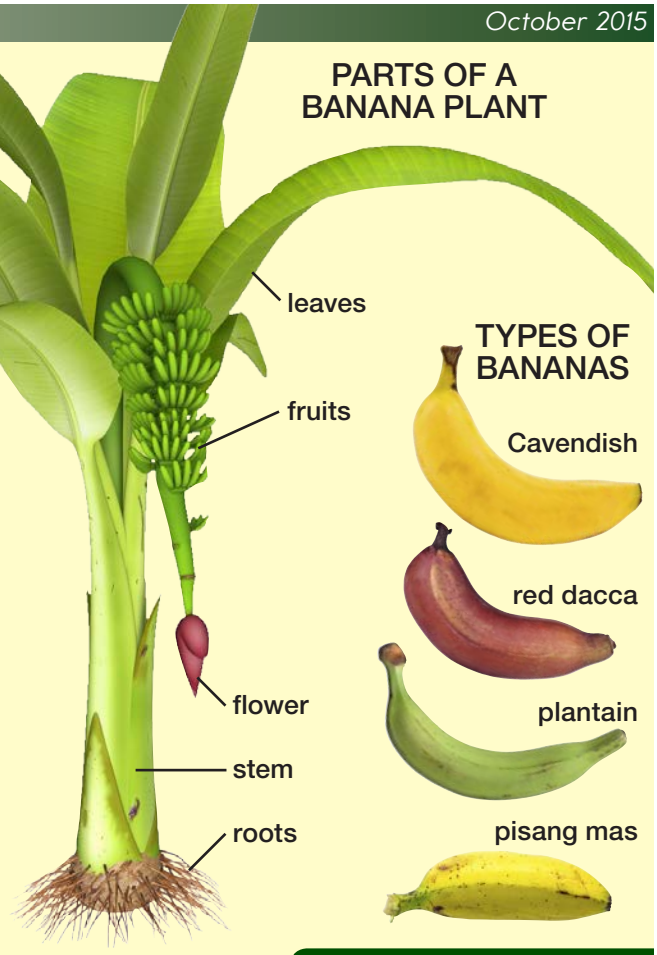
Gone Bananas!

Your favorite fruit may be going extinct! A deadly fungus is wiping out bananas.

Written by Rhonda Lucas Donald

What's Inside:

Killer Fungus Threatens World Banana Crop



Cavendish bananas are much more common than other kinds of bananas.

Life Science

Uh-oh! A popular fruit is in danger. Bananas are under attack by a living thing called a *fungus.* The same fungus killed off a different kind of banana fifty years ago. Will the same thing happen again?

Banana Backstory

Most bananas we eat are a variety called Cavendish. These bananas are nearly the only kind farmers grow today. They replaced an earlier kind that a fungus wiped out in 1965. Many funguses are harmless. But some cause infections. The banana fungus starts off in the soil. It causes banana plants to dry up and die. This fungus spreads easily. Just a handful of infected soil can kill a whole banana crop in no time.

Cloned Bananas

One reason Cavendish banana plants are so hard-hit is because they are all like identical twins. If the fungus can infect one plant, it can infect all the others, too. Plus, bananas are grown on huge farms. When a few plants get infected, the fungus quickly spreads to all the plants on the farm.

More Than Just a Snack

Bananas are often seen as treats. But for many people in Africa and Asia, bananas are a large part of their diet. Without bananas, many will be at risk of hunger.

Scientists hope the fungus can be stopped. But it won't be easy. Farmers will need to grow more of the other kinds of banana plants. They will need to grow the plants on smaller farms. Then maybe we will still have our favorite fruit! ❖

wowser!

India grows the most bananas in the world—about 220 *billion* each year!

This banana plant is beginning to dry out because it is infected with a deadly fungus.

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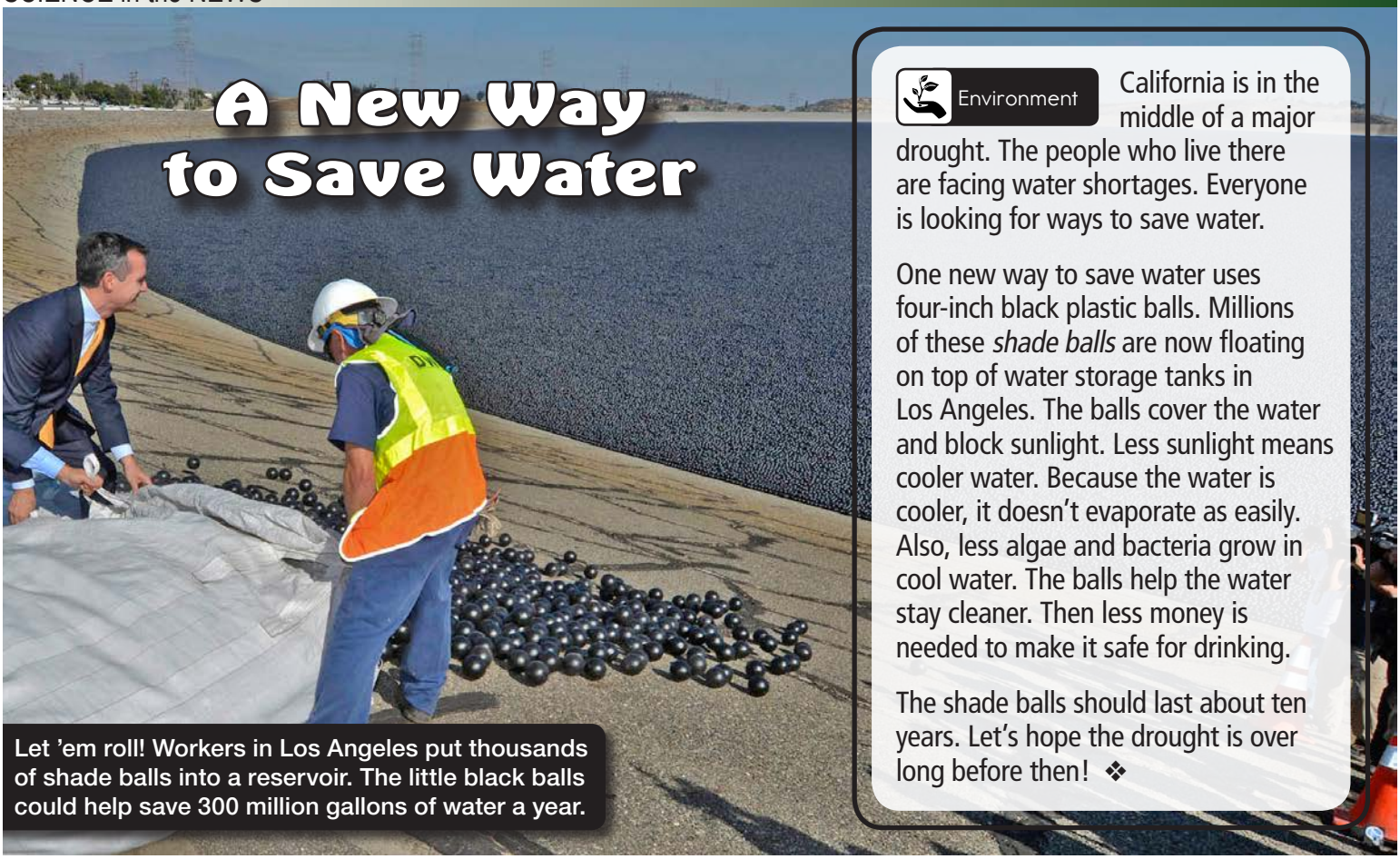
A New Way to Save Water



Let 'em roll! Workers in Los Angeles put thousands of shade balls into a reservoir. The little black balls could help save 300 million gallons of water a year.

Environment

California is in the middle of a major drought. The people who live there are facing water shortages. Everyone is looking for ways to save water.

One new way to save water uses four-inch black plastic balls. Millions of these *shade balls* are now floating on top of water storage tanks in Los Angeles. The balls cover the water and block sunlight. Less sunlight means cooler water. Because the water is cooler, it doesn't evaporate as easily. Also, less algae and bacteria grow in cool water. The balls help the water stay cleaner. Then less money is needed to make it safe for drinking.

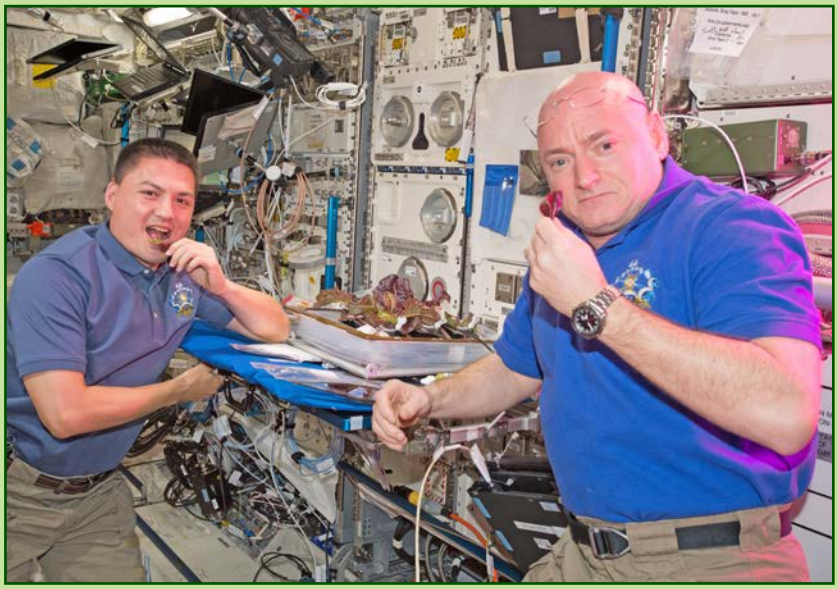
The shade balls should last about ten years. Let's hope the drought is over long before then! ❖

Astronauts Eat Their Veggies!

Space Science

NASA astronauts on the International Space Station got a taste of their own work! For over a month, they cared for lettuce plants in a special zero gravity "garden." This "garden" grows plants without soil. Instead, it uses a small amount of water and bright LED lights.

The red lettuce was a tasty hit. It gave the astronauts something fresh to eat. They usually eat packaged meals. Tending the plants also gives astronauts a way to relax. Plus, there's a need for this food. For long space missions in the future, astronauts will need to grow some of their own food. Maybe this red lettuce will someday grow on the Red Planet. ❖



Kjell Lindgren (left) and Scott Kelly (right) chow down on fresh lettuce they grew in space.

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CLASSIC CAMPFIRE DESIGN IS STILL THE BEST

Physical Science

Scientists set out to answer a burning question: which campfire design works best? Now we have the answer. Chances are you've probably made a few s'mores with this one.

The winner is a fire built with wood stacked in a pyramid. The key is that the stack is about as wide as it is tall. This design allows for good airflow. That makes the fire burn hotter with less fuel. Wood stacked too high or spread out too wide won't burn as well. Professor Adrian Bejan of Duke University did the calculations to prove it.

What's interesting is that people have been building this type of fire for thousands of years. It's a tried-and-true design that has helped humans live all over the planet—and make s'mores! ❖

This classic fire design was proven to work the best.

Writing

Problem Solving

Read the following questions and write about how you might solve each problem. Use more paper if needed.

1. You have read that the banana fungus spreads easily because banana plants are grown on big farms. How would you stop the spread of the banana fungus?

2. You have read that people are using black plastic balls to keep water from evaporating. How would you *conserve*, or save water during a drought?

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