SCHOLASTIC ACAD. SCIENCE

Words in Action

Content-Area Vocabulary

Arctic: a region in the very northern part of Earth
Sea ice: a thick sheet of ice on an ocean
Global warming: a rise in the average temperature on Earth
Extinct: no longer living
Carbon dioxide: a kind of gas that is released by using energy

Polar bear cubs born this winter face tough challenges ahead.
Arctic Animals: On the Edge

The Earth is warming up. That’s bad news for these animals.

The Arctic is one of the coldest places on Earth. Animals like polar bears, seals, and whales need it to be cold in order to stay alive.

But the Arctic is warming up. The sea ice, which many animals depend on for food and shelter, is melting faster than is normal.

Experts say that global warming is speeding up the melting. And if it continues, the animals of the Arctic are in danger. But there are things you can do to help.

Polar Bears

At this time of year, female polar bears are in their winter dens. They are giving birth to their cubs.

In the spring, the cubs will come out of the dens for the first time. They will follow their mothers out onto the ice and learn to hunt.

Polar bears eat mostly ringed seals. They wait on the ice for the seals to come up from the water. But now there is less ice. And by summer, much of it will be gone.

With less ice, polar bears have fewer places to hunt. They can’t provide enough food for their cubs. Many cubs born this winter will die before their first birthday.

Today, there are about 20,000 to 25,000 polar bears living in the Arctic. Experts say that if the Arctic ice keeps shrinking, polar bears could become extinct.

Ringed Seals

Polar bears roam the ice to hunt ringed seals. The seals hide under the ice to stay safe from the bears. They pop their heads out for air when they need it.

In early spring, the mother seals come out of the water. They make dens in the large piles of snow on top of the ice. That’s where the mothers give birth to their pups.

Newborn seal pups stay inside the dens. The snow keeps them out of sight.

But there is a problem. With global warming, the ice melts earlier in the spring. Sometimes the ice under the dens melts. The dens crash into the sea. The pups fall into the water. Scientists
Sam saw the polar bears in the Arctic. Now he is working to help save them.

Melting sea ice affects both ringed seals (right) and beluga whales (above).

worry that many seal pups will die this way unless global warming stops.

**Arctic Whales**

Several kinds of whales live in the Arctic. Arctic ice protects whales from ships. Nearly 70 percent of whales hit by a ship die. But ships rarely sail where there is ice. Whales living near ice are usually safe from ships.

More boats may travel in Arctic waters if there is less ice. The World Wildlife Foundation warns that more ships in the Arctic will put the whales in danger.

**A Teen Takes Action**

Sam Leist, 17, is one teen who cares about the Arctic. Sam traveled there with Polar Bears International. It's a group that's working to help polar bears.

Sam saw the effects of global warming. “The land should have been covered in snow,” says Sam. “But there were patches of grass everywhere.”

Sam wants to help. He says, “Ending global warming is the only way to save Arctic animals. And we can only do that if everyone takes action.”

Sam is doing his part. He is persuading people in his community to reduce the amount of carbon dioxide in the air. Too much carbon dioxide is a cause of global warming.

“Spreading the word is the most important step to ending global warming,” says Sam. That's what Sam is doing. And it's something that we can all do!

—Kimberly Feltes

**You Can Help!**

Here are some simple ways to limit your carbon dioxide use:

1. Turn off the lights behind you.
2. Turn off electronics when not in use.
3. Ride a bike or walk instead of driving.
4. Recycle paper and plastic products.
5. Tell a friend to do the same.
Arctic Ice Over Time

Below are two maps of the Arctic. The one on top shows the amount of ice in 1979. The bottom one shows the amount of ice in 2007. Study the maps. Then answer the questions.

1. When did the Arctic have more sea ice?
   A) 1979
   B) 2007
   C) the amount of ice is the same for both years
   D) the maps do not show sea ice

2. Which of these countries are in the Arctic region?
   A) Russia and China
   B) Mexico and Australia
   C) Russia and Canada
   D) Italy and Japan

3. Where is the Arctic losing most of its ice?
   A) near Greenland
   B) near Finland
   C) near Alaska
   D) near Russia

4. Based on these maps, what do you think the Arctic looks like in 2009?
   A) There is more ice.
   B) There is less ice.
   C) There is no ice at all.
   D) The ice is the same as in 2007.

Answers are in the Teacher’s Edition.