Earth's Climate Changes
http://beyondweather.ehe.osu.edu

Can You Read a Tree?
By Jessica Fries-Gaither

What's the weather like now? Is it sunny? Maybe it's rainy. Will it be the same tomorrow? You know that **weather** changes from day to day.

Climate can change, too. It just happens over long periods of time. A place might have been very different long ago. A cool place might have been warm. A warm place might have been cool. How can we know what the climate was like in the past?

Scientists keep track of the weather. They also read old journals that talk about what the weather was like. This tells them about the climate hundreds of years ago. But what about before that?

Trees can help us learn about climate. A tree's trunk is made up of layers. Each layer looks like a ring. Every year, the tree adds a new ring as it grows. You can count the number of rings to find out how old a tree is.

Look carefully at the rings. They aren't all the same size. Some are thick. Some are thin. Why are they different sizes?

Thick rings tell us that the tree grew a lot that year. The weather was good. It wasn't too hot or too cold. There was just enough rain.

Flesch-Kincaid RL = 1.5

Thin rings tell us that the tree didn't grow very much. The weather wasn't good. Maybe it was too hot or too cold. Maybe there wasn't enough rain.

Some very old trees grow in California. The trees grow on the sides of mountains. One of them is almost five thousand years old! We can learn a lot by studying these very old trees.

Go outside and look at the trees near your home or school. What can they tell you about the past?

Glossary

weather – what a place is like right now

climate – what a place's weather is like over a long period of time