## Welcome to the Animals and Ecosystems of the Southwestern United States Edition of *Investi-gator*!

When most people think of the Southwestern United States, they think about deserts, deep canyons, cacti, and hot temperatures (figure 1). All those things help describe the Southwest. It is important to know, however, that the Southwest also has high mesas, mountains, trees, and cold temperatures. Some areas of these states even get snow, especially in the mountains. It is possible to play in the snow in the mountains and swim in an outdoor pool in a valley in the same day!

Figure 1. Many people think of cacti when they think of the Southwestern United States. Photo courtesy of the Forest Service Rocky Mountain Research Station Pathology Archive and http://bugwood.org.

The research in this journal was done in the Southwestern United States. The Forest Service identifies the Southwest as including the states of Arizona, New Mexico, and the western parts of Oklahoma and Texas (figure 2).

Glossary words are in **bold** and defined on page 9.

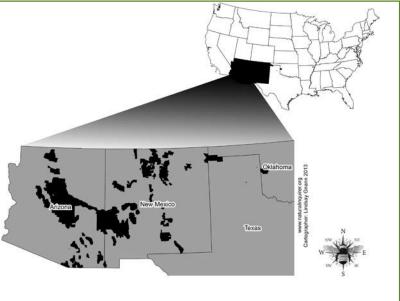


Figure 2. The Forest Service identifies the Southwest as including the states of Arizona, New Mexico, and western parts of Oklahoma and Texas. The dark areas show the location of national forests.

The Southwest is an **arid** land with lots of sunshine, low **humidity**, and occasional high winds. These factors affect the way people live their lives there. Water is **scarce**. Sometimes people are only allowed to water their yards on certain days. Some people put small, decorative rocks in their yard instead of having grass that needs to be watered (**figure 3**). Little moisture and high winds are found in the forests and grasslands, so large **wildfires** are common (**figure 4**). These large wildfires change how the land looks. Wildfires also affect what kind of animals and plants live in an area.



Figure 3. It is common to see decorative rocks in front yards of the Southwestern United States. Photo courtesy of Jean Szymanski.



**Figure 4.** Wildfires are common in the Southwestern United States. Photo courtesy of Kari Greer Photography, http://www.kariphotos.com.

Southwestern people have lived close to the land for centuries. More **archaeological** sites are found in the Southwest than anywhere else in America (**figure 5**). The area was settled by Spanish, Mexican, Native American, and **Anglo-American** people. Each of these groups of people lived on and used the land differently (**figure 6**).

In this journal, you will learn many interesting facts about the Southwestern United States. In "That's a Humdinger!" you will discover what happens to hummingbird nesting



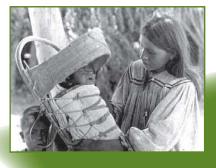
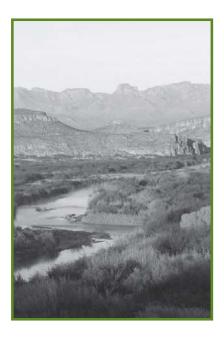


Figure 6. Apache woman and papoose on the San Carlos Reservation in 1926.

Photo by Stone and courtesy of the National Park Service Historic Photo Archive.

following different kinds of forest-related treatments. In "By the Light of the Silvery Minnow," you will find out whether a small minnow can learn to find natural foods. Without success, this minnow **population** might one day disappear. You will learn how climate change might affect 30 different animal **species** in the article entitled, "Wild Ways." Some of these species are already in danger of **extinction**.



The Southwestern United States is a dry region. In "Streaming Live," you will discover how well trees living in the Southwest use available water resources. "Prairie Dog Days" will introduce you to interesting facts about prairie dogs. You will learn how a small insect is causing big problems for a species of prairie dog. Finally, in "The Lands of Time," you will find out how some people in New Mexico feel about land their **ancestors** owned in the past.

The Southwestern United States is a special place. This *Investi-gator* will introduce you to a lot of fun facts about the animals, plants, and people living in the American Southwest.

## Glossary

**Anglo American** (an glō ə mer ə kən): A white American citizen of non-Hispanic descent.

archaeological (är kē ä lə jə kəl): Having to do with the scientific study of material remains of past human life and activities.

arid (a rad): Excessively dry.

extinction (ik stin(k) shən): The state or situation that results when something (such as a plant or animal species) has died out completely.

**humidity** (hyü **mi** də tē): The amount of moisture in the air.

**mesa** (**mā** sə): A flat-topped hill with steep sides.

**population** (**pä** pyə **lā** shən): A group of one or more species of organisms living in a particular area or habitat.

scarce (skers): Not plentiful.

**species** (**spē** shēz): A class of individuals having common attributes and designated by a common name.

wildfire ( $w\bar{\imath}(-\bar{\imath})$ ld f $\bar{\imath}(-\bar{\imath})$ r): An uncontrolled fire that destroys a large area.

Accented syllables are in **bold**. Marks and definitions are from http://www.merriam-webster.com.



Photos courtesy of the U.S. Forest Service.