BACK TO THE PAST

Introduces the geologic and human history of the Sonoran Desert Region.

Objectives

Students will:

- Become familiar with some clues to the past studied by paleontologists and anthropologist.
- Understand that the Sonoran Desert environment has changed over geologic time.
- Describe how Native Americans used desert resources.

MATERIALS

copy of Handout 7 for each student.

VOCABULARY

- archaeologist
- fossil
- mano
- metate
- paleontologist
- petroglyph
- pictograph

BACKGROUND

As students complete the Explorer's Guide at the Desert Museum, they will be asked to look for specific artifacts described in this reading. Thus it is important that students become familiar with this reading's vocabulary before their trip.

GETTING STARTED

Make student copies of Handout 7.

SETTING THE STAGE

1) Ask students if they've ever seen or found fossils. Have them describe them to the class.

2) Ask students if they've ever seen ancient American Indian artifacts in museums or National Monuments. Have them describe these to the class.

READING: BACK TO THE PAST

Since many of these terms may be unfamiliar, you may want to read this article as a class or in reading groups. Older or more advanced readers may be able to read this on their own.

CONTACT THE FOLLOWING ORGANIZA-TIONS FOR INFORMATION ABOUT NATIVE PEOPLE OF THE SONORAN DESERT:

Tohono O'odham Basketweavers

Organization (TOCA) P.O. Box 1790

Sells, AZ 85634 520-383-4966

Native Seeds/SEARCH

3061N. Campbell Tucson, AZ 85719

520-622-5561

Arizona State Museum

520-621-6302

(on the University of Arizona campus)

EXTENSION ACTIVITY DESERT FOODS

Foods from the desert have sustained and nourished native people for thousands of years. Refer to the resource list for more information on wild edible foods used by Native Americans. The following recipe uses mesquite flour and might be fun to try with your students.

Mesquite flour can be purchased from the Native Seeds/ SEARCH retail outlet at 3061 N. Campbell in Tucson, and more recipes that use desert plants are available from them. (Recipe courtesy of NS/S)

MESQUITE ALMOND COOKIES

1 C. butter, room temperature

¹/₂ C. brown sugar

¹/₂ C. white sugar

2 eggs

1 ¹/₂ tsp. vanilla

1 ³⁄₄ C. unbleached flour

 $\frac{1}{2}$ C. whole wheat flour

¹/₂ C. mesquite meal

1 ¹/₂ tsp. baking soda

1 C. sliced almonds

Cream butter and sugars. Add eggs and vanilla. Mix in flour, meal and baking soda. Stir in almonds. Drop by table-spoons on ungreased baking sheets. Bake 8-10 minutes at 400°F. (Makes 3 $- 3\frac{1}{2}$ dozen cookies)

HANDOUT 7

Back to the Past

NAME

The earth tells us many stories about the past. **Paleontologists** study the **fossils** of plants and animals. Fossils give us clues to past life and climates. Fossils of seashells have been found in the Sonoran Desert. This shows that the Sonoran Desert was once a very different place. About 250 million years ago, an ocean covered our desert. There have been other interesting changes in plants, animals, and weather in the Sonoran Desert Region over thousands and even millions of years.

Archaeologists study past human activity. They search the earth for things people used like tools, pieces of pottery, and parts of plants and animals. These give them much information about what life was like a long time ago. About 11,500 years ago, ancient Indians called Clovis people arrived in this area. Archaeologists have found their stone spear points near mammoth bones in southern Arizona, and they also found them in Clovis, New Mexico. They named these carved tools "Clovis points."

The Hohokam Indians settled in southern Arizona around 2,300 years ago. They built villages along rivers where they farmed and gathered food from the desert. They painted animals, hunters and pictures of their daily lives on cave walls. These **pictographs** give interesting clues about their life. They also carved pictures called **petroglyphs** into rocks. The Hohokam may have been the ancestors of the Akimel O'odham (Pima) and Tohono O'odham (Papago.)

The O'odham have lived in the Sonoran Desert Region for hundreds, perhaps thousands of years. These Native Americans grew crops and gathered food and medicine from the desert. Many older Native Americans still know which desert plants are good to eat or can be used as medicine. Years ago O'odham people used a stone **mano** and **metate** to grind mesquite pods into a delicious sweet flour. These were also used to grind corn into corn meal. Have you ever tasted mesquite beans or flour?

Trilobite fossil



Mano and Metate



Visit the Earth Science Room to learn more about changes in plants, animals, and weather over time in the Sonoran Desert. Take a look at some real fossils, including a dinosaur tooth. You'll also find ancient tools from the Hohokam and Clovis people. Near the Grasslands Exhibit, you can see what a real mammoth kill site looked like that was found near the San Pedro River. Visit the Hohokam agave fields and learn how agave was farmed and what it was used for.

Desert Discovery Self-guided visit ©2012, Arizona-Sonora Desert Museum