

Meet the Scientists!

Dr. Carol Raish

social scientist and anthropologist

Some of my favorite science experiences are listening to older people talk about the way things were in the past when they were young. I also love to travel to talk with people all over the world.





Ms. Alice McSweeney

social science analyst

My favorite science experience is talking with ranchers to learn how they teach their children about the land and animals. I also love working on my family's guest ranch in northern New Mexico. I have a Master's degree in Range Science. Range scientists study rangeland plants and animals and how best to manage the land for these plants and animals.

What Kind of Scientist Did This Research?

anthropologist (an(t) thrə pä lə jist): This scientist studies societies and cultures. social science analyst: This scientist assists social scientists as they study the values, opinions, beliefs, attitudes, and actions of individuals and groups of people. social scientist: This scientist studies the values, opinions, beliefs, attitudes, and actions of individuals and groups of people.

Thinking About Science

Social scientists study people.
Anthropology (an(t) thrə pä lə jē) is one of the social sciences. Anthropology is the study of people in societies and cultures. Societies and cultures include particular groups of people. Societies and cultures can include groups of people who lived during a certain time and in a certain place. Societies and cultures can also include groups

of people who make, for example, a particular type of art or music. Any group can have its own culture. Your school, for example, might have its own culture, different from other schools. Do you think a city school's culture is different from a **rural** school's culture in the United States? How might these cultures be different? How might they be similar?



Thinking About the Environment

Native peoples lived in Mexico until the Spanish invaded in the 16th century. Mexico won its independence from Spain in 1810. Mexico once contained almost twice as much land as it does today (figure 1). New Mexico, now a state in the United States, was once a part of Mexico

New Mexicans who lived in northern New Mexico during this time owned two types of land.

Individual families owned a small piece of land for their house and a garden. Other large areas of land were shared by the community. The lands were granted to individuals and communities by the Spanish and Mexican governments. This ownership system was called land grants.





Figure 1. Before 1845, Mexico included what became the Republic of Texas. The Republic of Texas became a part of the United States in 1845. Between 1845 and 1848, Mexico was made up of current-day Mexico, plus California, Nevada, Utah, Arizona, and parts of Colorado and New Mexico.

it promised to respect the New Mexicans' land grants. These New Mexicans became United States citizens in 1848 following the Mexican-American war. In this article, these citizens will be called Hispanic ranchers to reflect their ethnic background and how they used land.

To keep their land grants, the Hispanic ranchers had to apply to the United States government. Most of the Hispanic ranchers were not awarded their land grants. One reason was that the Hispanic ranchers did not speak English. Because they did not speak English, they did not

have the information to correctly apply for the land grants. Many

Figure 2.
The Carson
and Santa Fe
National Forests
in northern New
Mexico.

were also cheated out of their land by dishonest lawyers they hired to help them. Much of the land lost by these Hispanic ranchers became **national forests (figures 2, 3, and 4)**. In this article, you will learn about the **descendants** of these ranchers. You will learn how some of these descendants are trying to regain the land grants owned by their **ancestors**.

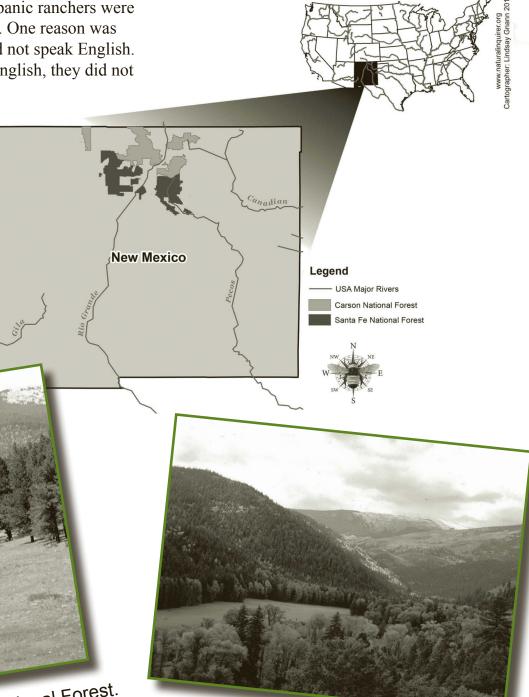


Figure 3. The Carson National Forest.

Photo courtesy of the U.S.Forest Service.

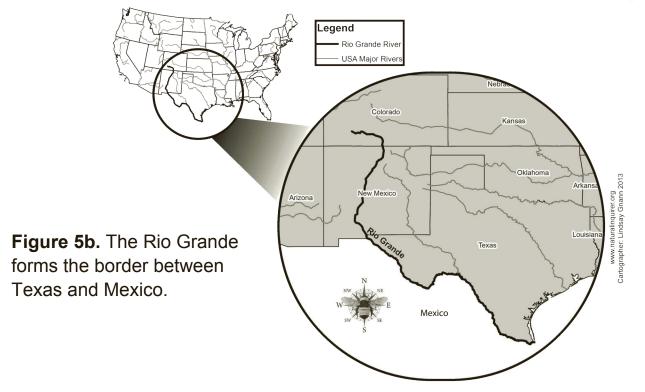
Figure 4. The Santa Fe National Forest. Photo courtesy of the U.S.Forest Service.

What is the Treaty of Guadalupe Hidalgo?

The Treaty of Guadalupe Hidalgo is the treaty that ended the Mexican-American War. This war was fought between the United States and Mexico between 1846 and 1848. The United States gained land from the treaty that ended the war. The United States gained California and a large area containing what is now Arizona, New Mexico, Nevada, Utah, and parts of Wyoming and Colorado (figure 5a). In the treaty, the Rio Grande was established as the border between Texas and Mexico (figure 5b). The United States promised to honor the land grants as a part of the treaty. These land grants had been granted to Hispanic ranchers by the Spanish and Mexican governments.

Figure 5a. The states of the United States that were gained following the Mexican-American War. During this time, these states were still one territory. In 1912, New Mexico became the 47th state in the United States. You can do research to discover when the other states gained statehood.





Introduction

National forests and national **grasslands** are managed for all United States citizens. Parts of these forests and grasslands, however, may be **leased** to individuals and companies. Some individuals and companies lease **public land** to graze sheep and cattle (**figure 6**). They may also lease public land for other purposes, such as to mine for minerals. In New Mexico, these lands were once shared by the Hispanic community in a system of land grants. Today, some Hispanic people in New Mexico feel they have a right to regain some land. They feel this way because

they believe the land grants were unfairly taken from their ancestors. Many Hispanic ranchers feel a connection to the lands once owned by their ancestors.

The scientists in this study wanted to understand the Forest Service's position about the land grants. They were also interested in understanding the Hispanic descendants who want to regain their ancestors' land grants. The scientists wondered if there was a way to **resolve** the conflict between the Hispanic ranchers and the Forest Service's land grant **policy**.



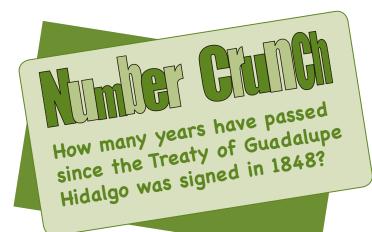
Figure 6. Public lands are often used by individuals and companies to graze sheep and cattle. Photo courtesy of Gila National Forest.

ection Sec

Describe the problem investigated by the scientists.

State the last sentence in the "Introduction" as a question.





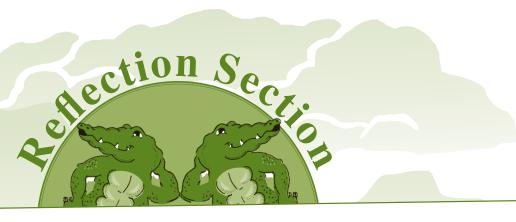
Methods

The scientists talked to 300 Hispanic ranchers who lease national forest land to graze cattle and sheep (figure 7). These ranchers lease land that their families once owned through land grants. To lease this land, these ranchers pay the Forest Service a fee every year. The scientists asked the ranchers questions about the historic land grants, current land use, and the leases. The scientists entered the answers into a computer. The scientists read the answers and comments and placed them into categories.

The scientists also talked with 10 people who work with the Forest Service. The scientists wanted to know if the Forest Service workers had suggestions that might resolve the conflict.



Figure 7. A federal worker talks with a farmer. Photo courtesy of the Natural Resources Conservation Service.



Why did the scientists talk with Hispanic ranchers as well as with Forest Service workers?

Other cultures experienced something similar to this situation in America's past. What other large cultural group in America lost lands on which their ancestors once lived? Where do many of these people live now?

Findings

Some of the Hispanic ranchers said that the past should be left in the past. Most of the ranchers, however, felt anger. They felt anger because the land grants were not being honored by the United States government. Some of them said that by having to lease public land, they struggle to make a living. Others did not want to talk to the scientists about the land grant issue.

Some of the Hispanic ranchers said the United States government was trying to settle some of the land grants. Others said that there may not be a way to resolve the **injustices** of the past. Many people wished the United States government would admit its role in these injustices. Most of the Hispanic ranchers felt their ancestors had been wronged by the United States government.

The Forest Service workers told the scientists that they have no choice but to defend the United States government's ownership of public lands. The **official** viewpoint of the government is that the land grants were properly managed following the Mexican-American war. Forest Service workers had different opinions on whether this

was true. Forest Service workers suggested some actions to help resolve the land grant issue:

- Teach Forest Service workers about Hispanic ranchers' history, culture, and way of life.
- Include Hispanic ranchers on committees that plan future use of public lands.
- Develop agreements with Hispanic ranchers about collecting firewood from public lands.
- Develop agreements with Hispanic ranchers about their access to and use of public lands.
- Appoint one Forest Service worker to work directly with Hispanic ranchers.
- Build trust between Hispanic ranchers and Forest Service workers by improving communication.

Forest Service workers did not agree with each other about the land grant issue. All agreed, however, that the issue can only be resolved by the United States Congress. Congress is the body that makes United States laws. Only a new law can change the way Forest Service workers manage the national forests in New Mexico.





Should the suggestions made by Forest Service workers be tried? Why?

Have you ever heard people say that better communication will help resolve a problem? Is this true? Why or why not?

Discussion

In the 1960s, Hispanic ranchers began to protest the loss of their ancestors' land grants. Now, in the early 21st century, the question of land grants has not yet been resolved. If the United States Congress considers the question of land grants in northern New Mexico, the issue may finally be resolved. Until then, the Forest Service will continue to manage the lands as national forests for all United States citizens



Do you think the United States Congress should consider the land grant issue in northern New Mexico? Why or why not?

Many mistakes were made over 100 years ago in places all over the world. Because these mistakes were made before anyone alive today was born, no one living today is responsible. Even so, the descendants of people who were wronged feel the wrongs should be made right. How do you feel about this problem? Hold a class discussion about both sides of this issue. Identify other examples.



Adapted from Raish, C.; McSweeney, A.M. 2008. Land grants and the Forest Service. Natural Resources Journal. 48(4):1039-1055. http://www.fs.fed.us/rm/pubs_other/rmrs_2008_raish_c002.pdf.

If you are a Project Learning Tree educator, you may use Activity 32: A Forest of Many Uses, Activity 50: 400-Acre Wood, or Activity 56: We Can Work On It.

Glossary

ancestor (an ses tər): One from whom a person, group, or species comes from.

descendant (di **sen** dənt): Coming from an ancestor or source

grassland (**gras** land): Land on which the most common plants are grasses.

injustice (in jəs təs): An unjust or unfair act.

lease (lēs): Land that someone can use for a set period of time, that usually comes at some cost.

national forest (nash nəl för əst): A large area of public land that is forested and taken care of by government. It is available for all people to use and enjoy.

native (**nā** tiv): Belonging to a particular place by birth.

official (ō **fi** shəl): The rules of people in a public office.

policy (pä lə sē): A method of action to guide and determine decisions.

public land (**pub** lik land): Land that is owned by the people as a whole.

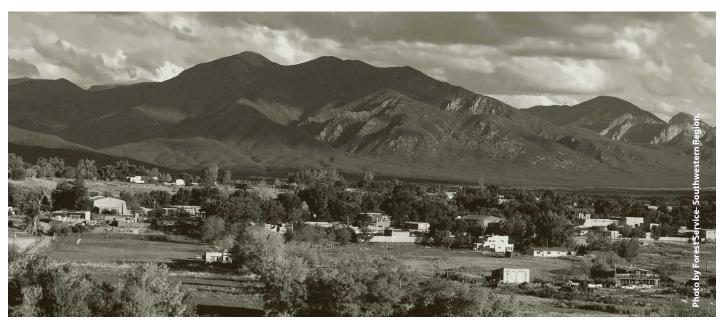
regain (re gān): To get back.

resolve (ri **zälv**): To find an answer or solution.

rural (rur əl): Something related to the country, country people or life, or agriculture.

scarce (**skers**): Not plentiful.

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



FACTivity

Time needed:

One class period

Materials

• "The Lands of Time" Investi-gator article

The question you will answer in this FACTivity is:
How is the current situation in the southern African nation of Botswana similar to and different from the

historic land grant situation in New

Mexico?

The method you will use to answer this question is:

1. First, you will read the following background information:

Botswana is a country located in southern Africa. The Kalahari Desert is located in southern Botswana. For tens of thousands of years, the San Tribes, or Bushman, have lived in the Kalahari Desert. The Kalahari Desert is also home to several Botswana National Game Reserves. The Botswana government wanted the San Tribes to move out of the Kalahari Desert. The government said it wanted the San Tribes to move because the tribes were killing too many animals for food. The San Tribes said the government wanted them to move because diamonds had been discovered underground.

In 2002, the Botswana government moved the San Tribes from the Kalahari Desert into places similar to refugee camps. The San Tribes went to court to win the right to return to the Kalahari Desert. In 2006, the San Tribes won the court case and returned to the desert. The Botswana government then kept the San Tribes from drilling or using any existing water wells. Because the Kalahari is a desert, water is **scarce**. The San Tribes appealed the court ruling that prohibited them from drilling or using water wells. In 2010, a judge upheld the government's right to prohibit the San Tribes from using or drilling water wells. The San Tribes then appealed to a higher court. On January 27, 2011, an appeals court overturned the earlier ruling. The appeals court said the San Tribes could use existing water wells and drill new water wells.

2. You will use the graphic organizer in the next section. Compare and contrast the situation faced by the ancestors of the Hispanic ranchers in "The Lands of Time" with the experience of the San Tribes. Use the spaces to write what you know about each of these situations. Use complete sentences, proper grammar, and correct punctuation.

| | GROUP | |
|--|-------------------|------------|
| | Hispanic Ranchers | San Tribes |
| Describe the land area where each group lived. | | |
| Describe the background of the people involved in each situation. | | |
| Which national government was involved in each situation? | | |
| What kind of public land was created out of each group's homelands? | | |
| What happened to cause the government to take each group's land? | | |
| What legal options were available to each group? | | |
| How successful with their legal options was each group? What might be some reasons? | | |
| Write one sentence identifying at least one similarity between these two situations. | | |
| Write one sentence identifying at least one difference between these two situations. | | |

Your teacher will lead a class discussion about these two situations. As a class, discuss what you know about similar situations in history.



"The Lands of Time" is taken from this saying by David Lawrence Dewey: "Through the sands of time...the written word has changed the course of history, inspired many to fight for their beliefs, and most importantly...elevated mankind to a higher understanding of man's inhumanity to mankind." In ancient times, time was measured by an hourglass, through which sand would fall over a specified amount of time (figure 8).

Figure 8. In this hourglass, the sand falls through the small hole in 30 minutes.

Web Resources

Santa Fe National Forest

http://www.fs.usda.gov/santafe/

Carson National Forest

http://www.fs.usda.gov/carson

Historical Events That Affected Northern New Mexico

http://shelledy.mesa.k12.co.us/staff/computerlab/Western_CO_ History_Mexican_American_War.htm