What is Geography?

Geography is the study of Earth, its land, and its inhabitants. A geographer studies places where life is found and the way living beings interact with their Earth home. In this *Natural Inquirer*, you will learn about how geographers study ecosystems as special places and how people, other animals, and plants interact with and gain value from ecosystems.

Scientists with the United States Geological Survey, or USGS, often use satellites to study geographic questions on Earth. Satellites continually orbit Earth, collecting information about our planet (figure 1). For example, USGS scientists use information from satellites to track the dates that leaves unfold in spring and fall off of trees in autumn. This helps them to identify how changes in an area’s climate affect the growth of trees. Information from satellites has also been used to create a map that shows the types of ecosystems found in the United States. This map will help scientists better understand the types and values of the ecosystem services provided.

USGS geographers also do research within ecosystems themselves. One place these geographers are studying is the Everglades. This is a large wetland area running through the middle of south Florida. Wetlands are areas of land that are sometimes covered by water, and often they are beside areas of water. Wetlands provide many ecosystem services to people including clean water, clean air, and natural places for many animals and plants to live.

**Glossary**

**inhabitant** (in hab uh tent): One who occupies a particular area.
Because the Everglades provides a variety of ecosystem services, it is important to make good decisions about how it is managed. USGS geographers have created a computer program that uses maps to help get the most out of the ecosystem services provided by the Everglades (figures 2, 3, and 4).

Figure 2. Dr. Bill Labiosa helps people think about the different effects that decisions have on alligators in the Everglades. Unless you are a scientist studying alligators, remember not to get close to an alligator!

Figure 3. Dr. Dianna Hogan studies the way people use land in the Everglades, and how that affects the ecosystem services they receive. She especially likes to study plants and animals. This Double-crested Cormorant (next to Dr. Hogan) catches fish in the Everglades using its hooked bill.

Figure 4. Mr. David Strong provides the computer and GIS (Geographic Information System) computer program that allows the scientists to answer their questions. Here, Mr. Strong works on his computer from the trunk of his car.

As you read this Natural Inquirer, think about geography and how it helps people to better understand and protect our planet. As you read each article, identify which of the following geography questions the article is describing:

- How do maps and images help us better understand the environment?
- How do life forms behave in their own environment?
- How do life forms behave differently in different environments?
- How do life forms move from one place to another?
- How do life forms change the environment?
- How do people change the environment and how does that affect other life forms?
- How are places different?
- How are different places similar?