source of food. After fire burns an area of coastal sage scrub, the shrubs are burned to the ground. The shrubs can grow back, but it takes them about 5 years to grow 1 meter high. California gnatcatchers cannot live in an area that has been burned until about 5 years following the fire.



Reflection Section

• How many feet are in 1 meter? (Hint: You can find

out by reading the "Findings" section.)

• Why do you think that gnatcatchers cannot live in an area that has been burned until about 5 years after the fire?

Implications

The California gnatcatcher's habitat is reduced when people build homes, other build-

ings, roads, and parking lots in areas of coastal sage scrub (figure 5). Once buildings are built near coastal sage scrub, people want to reduce the risk of wildfire to those buildings. One way to do that is to set prescribed fires in the coastal sage scrub areas that are close to buildings. The fire will burn most of the fuel away. Then, if a wildfire does occur in the coastal sage scrub, it will not be able to reach any buildings.



Reflection Section

• Do you think that the habitat of the California gnat-

catcher should be conserved? Why or why not?

How do you think that purposely setting fire in the natural areas near buildings protects those buildings from wildfires?



Figure 5. Coastal sage scrub with buildings nearby.

FACTivity



The question you will try to answer with this FACTivity is: What should be done when

the habitat of a threatened bird is in conflict with the safety of people's homes? The method you will use to try to answer this question is: Divide your class into two discussion groups and one decision group. Each discussion group will take one of the following positions:

Group 1: People's homes are much more important than conserving the habitat of a bird, even if it is threatened. Therefore, wildfires must be controlled by reducing the amount of fuel available. This must be done by frequently burning areas of coastal sage scrub surrounding people's homes. If this burning takes away a threatened bird's habitat, that is the way it has to be.

Group 2: When people build homes in areas that are likely to have wildfires, they take the chance that their homes will be burned by a wildfire. We should leave these areas alone. If a wildfire occurs, we can then go into the coastal sage scrub areas and put the fire out. Until then, we should let nature take its course.

The two discussion groups should meet separately for at least 10-15 minutes to develop an argument to support their position. One person should be appointed the spokesper-

son for the group, and another person should record what the group members say during their discussion.

The third group will make the decisions. This group will decide which course of action to take based on the presentations of the other two groups. While the two discussion groups are developing their arguments, the third group must decide how they will choose a course of action. Will they vote and allow the majority to rule? Will they insist on *consensus*? Will one person make the decision for everyone else? After the 15 minutes

has passed, the first two groups will each present their argument to the third group. The decision-making group will then make a decision, and explain why and how they made their decision. The decision-making group may choose parts of more than one option when making their decision.

Note: People often disagree about the best course of action to take to solve a problem. This FACTivity is similar to the process communities across the United States take to decide on a course of action. Many communities

have locally elected commissions (kuh mish uns) that serve as the decisionmakers. What is the name of the body that makes these kinds of decisions for the United States as a whole? (Hint: It is made up of people elected from across the United States, and it is divided into two houses.)

From: Beyers, J. L. and Wirtz, W. O. II. (1997). Vegetative characteristics of coastal sage scrub sites used by California gnatcatchers: Implications for management in a fire-prone ecosystem. In: *Proceedings: Fire Effects on Rare and Endangered Species and Habitats Conference*. Coeur d' Alene, Idaho: November 13-15, 1995, 81-89

Fire Facts: Writing a Prescription for Fire

When you are sick and go to the doctor, the doctor might prescribe medicine or some other action to help you to become healthy again. Prescribed fire (a fire that is started on purpose) works in a similar way. But why start a fire on purpose? Fire is one way to help restore health to a forest. If trees are too crowded, if there are too many dead leaves and branches on the forest floor, or if insects and disease have become wide-

spread, the forest may need help from fire. Land managers only prescribe fire when the weather conditions are right. Long before a fire is lit, prescriptions are made for different types and locations of forests. The prescription describes what the condition of the forest should be after burning. Factors to consider are the locations of homes and other buildings, weather forecasts, wind speed, humidity, the amount of moisture in the

trees, and the types of trees and plants. Before fires are started on purpose, the forest conditions have to be measured to see if they meet the prescription for that type of forest. Burning begins only when conditions are right. If the weather conditions change quickly or the fire does something unexpected, firefighters reduce the flames or put the fire out.