

New Blood Gives New Life to Florida Panthers

Endangered Florida panthers benefited from the introduction of Texan pumas in their ranks.

Recall the Ecology Disrupted curriculum learning goals:

1. Human daily life can disrupt ecological function leading to environmental issues.
2. Scientists can collect data to investigate human impact local ecology.

Students watch additional Science Bulletins videos to learn about how human daily life can affect ecological function, and to pull out the ecological principles. An introduction to the video and background information are provided below.

While watching the Bulletins they will complete a graphic organizer with the following questions:

1. How have people changed the habitat in this example?
2. Why do people change the habitat? How does it help us?
3. How do the habitat changes impact populations in this area?
4. How do you know that the habitat is being changed and that local populations are affected? Describe the evidence or data.
5. Suggest how to solve this problem.

Introduction

" Have you seen pictures of lions and tigers in Africa? Did you know that we have large wild cats in America too? The biggest cat in North America is the puma, sometimes called a mountain lion, cougar or panther. There are many populations of panthers, and they all have slightly different traits. One population that is in danger is the Florida panther, and like the bighorn sheep, it has lost its habitat and suffered from inbreeding. However, scientists were able to help the Florida panther come back from near extinction. We are going to watch another Science Bulletin like we did for the bighorn sheep. This one will be about the Florida panther and how scientists helped it to survive. Get ready to fill out your graphic organizer."

Background Information

Biology: Florida panthers are large cats with sandy fur with no spots or stripes. They are about six feet from nose to tail, and males are bigger than females. When baby panthers are born, they are gray with brown or black spots and 5 stripes on their tail, but they grow to look like adults in about 6 months. Panthers are solitary and hunt alone. They are carnivores and feed on mammals like deer and raccoons, and they will occasionally take pigs from farms.

Habitat Loss: In the 1940s, panthers were found throughout the southern United States, from Arkansas to South Carolina and Florida in the south. However, rapid economic growth after World War II resulted in the development of panther habitat into farms and cities. They now are found only in cypress swamps in southern Florida. By the 1990s, there were just 20 panthers left in the wild. These panthers showed evidence of genetic defects – they had heart problems, physical deformities, and low fertility.

Breeding Program with Texas Pumas: Scientists chose to introduce genetic diversity into the panther population by introducing eight female Texas pumas, a related population of pumas. Texas pumas are very similar in coloration and behavior to Florida panthers. The breeding program was a success and the panther population has now tripled.