Endangered Animals Right Here
Suggested Grade Level 4

Objective
Research what veterinarians in zoos are doing to prevent extinction of endangered animals using the impact of climate change on polar bears as one example.

Materials
• AVMA poster
• Graph paper
• Internet access

Procedure
• Teacher begins the lesson talking about polar bears and explains why they are endangered. The teacher then explains the project to students using polar bears as an example.
• Each student is assigned two states to research on the computer and answer the following questions:
  • How many animals in each state are on the endangered species list? This information is available at: http://ecos.fws.gov/tess_public/StateListing.do?state=all.
  • In what class (reptile, mammal, etc.) is each animal on their lists? Are there zoos in your assigned state with endangered species? You can find this information at: www.aza.org/FindZooAquarium/.
• Next, the teacher passes out graph paper and the students create a bar graph (the X axis includes numbers and the Y axis includes the states) of their findings. The teacher has each student come up to the overhead and graph their answer of how many endangered species are in their states and how many of these species they found in a zoo.
• Looking at the completed overhead of all the data, students determine which state has the most endangered species in each class, which state has the least number of endangered species, and the national average per state for endangered species in each class of species.
• Additional activity: include assigning ranges (e.g., 0-15, 16-30, 31-60, etc.) for the number of endangered species in each state. Students then color a U.S. map using shades of green for small numbers, shades of yellow for medium numbers, and shades of red for high numbers. Look for regional patterns. Which region of the country has the greatest number of states colored with shades of red? Which has the greatest number of green? Form hypotheses about why this may be the case and discuss as a class.

National Standards:
• Research
• Data collection
• Compute fluently & make reasonable estimates
• Represent and understand quantitative relationships
• Scientific inquiry
• Organisms and environments

Ideas to extend this lesson
Work individually and select an animal from a zoo Web site. Write a paragraph about your endangered animal answering the following questions: What type of animal is it (mammal, reptile, amphibian)? What state or country is the animal from? In what type of environment does the animal live? What type of food does the animal eat? How many of this animal are alive today? What is being done to preserve the species? How are veterinarians helping?