Where in the World is the Wolf?

National Science Content Standards:

Unifying Concepts
- Systems, Order and Organization
- Evidence, Models and Explanation

Life Science
- Reproduction and heredity
- Populations and Ecosystems
- Diversity and adaptation of organisms

Vocabulary:
Scientific name
Binomial nomenclature
Species
Subspecies
Extinct
Endangered
Stable population
Population

Materials:
- Tape
- Yarn
- Pair of scissors
- Copies of blank data cards, cut apart, one for each student or pair of students
- Computer access
- Blank world maps for students
- Large world map for to be hung on the wall

Introduction:
Students will use an interactive map to determine that wolves are found over much of the world.

This lesson would preferably be used before playing *WolfQuest*, but could be used after, as well.

Objectives:
At the end of this activity, the student will:
1. Predict where wolves are found in the world.
2. Collect data to determine the number and species that live in various parts of the world.
3. Make predictions about trends/fate of the wolf worldwide.

Procedures:
1. Pass out a world map to each student. Ask the students to use a pencil to shade where they think wolves are found in the world. Have them put an X over the areas where they think the greatest number of wolves might be found.
2. Assign each student or pair of students a country, territory (Canada) or state (United States). Have the students use two web sites to collect data from interactive maps using the International Wolf Center and World Wide Wolves (See links.) The data from World Wide Wolves is from 1998; the International Wolf Center's information is updated regularly. The older data may give them a comparative look at trends that might be occurring. There is no separate data for states or territories in World Wide Wolves, but there is for the other countries. Have them use both of the interactive maps to determine the species found (common name), estimated number of wolves, whether they are protected, status (numbers declining, increasing or stable), and what their prey/food is. They should put this information, along with the name of the country, neatly on their data card. (See attached cards.)
3. When the students finish gathering data, they could take the quiz at World Wide Wolves entitled, "Web Quest Questions". This will require them to look around at the world map at that site

4. Back in your classroom, put a large world map on the wall where everyone can see. Have each student (or pair of students) bring their card up individually and tape their card on the wall surrounding the map. They should connect the country and the card with a length of yarn. (They will need your guidance so the map doesn't become a tangled spider web!) An empty bulletin board and thumb tacks might work wonderfully as well. They should spend about 30 seconds summarizing what they have learned.

5. Questions for a quick-write or discussion:
   a) Why do you think some countries have larger populations of wolves?
   b) What do you predict for the wolf/wolf subspecies populations in countries where there is little or no protection?
   c) Why should we care if a species or subspecies of wolf becomes extinct?
   d) Does there seem to be a main reason why many wolf populations are declining?
   e) What areas tended to have the greatest number of wolves? Make a hypothesis to explain your answer.

Links:
Defenders of Wildlife Wolves Around the World-The Global Status of the Gray Wolf
Great information on the history of wolves. Could possibly be a supplemental reading for high level readers. Also lists web sites and/or phone numbers of "Organizations Working for Wolf Conservation Around the World". Some of the web site addresses have been updated, but it still gives you a good list of organizations that are in your state or area.
http://www.defenders.org/publications/wolvesarworld.pdf
National Parks Conservation Association
Information on both the red and gray wolf
http://www.npca.org/wildlife_protection/wildlife_facts/
Types of Wolves
Includes scientific classification of wolves and information on the red and gray wolf.
http://www.wolf.org/wolves/learn/basic/wolf_types/wolftypes.asp

Location:

Common names, including subspecies:

Number of wolves:

Protected?

Status:

Prey:

Location:

Common names, including subspecies:

Number of wolves:

Protected?

Status:

Prey:

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