

Research

By studying the behaviors, habitat, and characteristics of animals, scientists are taking the first step to ensuring the survival of the species.

Before man can take active steps to protect endangered species, scientists must first understand the different needs the animal has. Scientists have to learn about the endangered animal's habitat and also its niche in that habitat. We must first understand the animal's environment in order to protect it, and to ensure the animal has a place to live. Scientists must ascertain what type of food the animals eat, and what nutrient requirements they have, in order for the researcher to make recommendations to government about the protection of the animal. Scientists must also learn about the behavioral characteristics of a species so that they may establish important relationships between the endangered species and other species that share its environment.

The best environment to study an animal in is its own habitat.

The most accurate and realistic studies about an animal and its needs can be determined by studying the endangered species in its native habitat. Sometimes, however, traveling to the animal's ecosystem is not feasible to the researcher. In this instance, the next best source of information is available through study of the animal at a zoo or wildlife park. The more closely the captive environment resembles the native environment of the species, the better the quality of the research will be.

Fully understanding an animal and how it lives can alter the public's perception of it for the better.

An important component of a researcher's study should be to establish how the endangered species and man can share the same environment. In the past, man has mistakenly associated undesirable traits with endangered species, and killed the animal due to these misconceptions. For example, in the early 1880's the gray wolf had a terrible reputation. Isolated incidents of wolf attacks on livestock caused the wolf and ranchers to become mortal enemies. Governmental support of the extermination process of wolves nearly led to the species' demise. Thankfully, the reintroduction of wolves into national parks has been successful, mainly due to a change in public opinion as to the importance of predators in a balanced ecosystem. According to wolf biologist Adrian Wyldevan, "People's attitudes are changing. They're accepting the idea that it's natural to see predators as well as prey species. It's less of a utilitarian attitude -- it's OK to have animals that don't serve a direct useful purpose to humans." Similar efforts to establish the importance of predators in an ecosystem with the local human inhabitants are being undertaken with cheetahs in Namibia. The first step to ensuring the survival of an endangered species is establishing its importance in the public sector. Because man is frequently the cause for an endangered species' decline, man is frequently the only one who can help.

Guess who?

Objective: The student will identify animals at Global Wildlife Center by descriptive features.

Introduction:

The purpose of this activity is to enhance the student's visual awareness. While at Global Wildlife Center, the students will use their mystery animal identification cards to differentiate between appearances of the animals.



Materials:

- *Mystery animal identification cards
- *Crayons or markers
- *Paper

Activity:

1. On the way to Global Wildlife Center, students can play "I spy" to prepare themselves for using descriptive phrases to identify objects.
2. At Global Wildlife Center, each student will be given a different descriptive card. As the students tour the Center, they should be searching for an animal that fits the criteria of their descriptive feature card.
3. After the tour of the Global Wildlife Center is complete, the student will write down the name of the animal on the card. If a student has not identified their animal, the tour guide, teacher or peers may help.
4. After the students return to the class, have the students brainstorm for three additional descriptive phrases that could describe their animal. Have the students say their created descriptive phrases out loud, and see if the other classmates can guess what their mystery animal was. They will discuss their finding and other unique animal features they may have observed.
4. Then the students will draw, identify, and color their mystery animal, taking careful care to illustrate all the descriptive features found on the notecards. The students should diagram and label the drawing with each of the different features.

Closure: Ask the students to bring their descriptive phrases home to their parents. Have them read the descriptive phrases aloud to see if members of their family can identify the student's mystery animal by hearing the clues.

Scientific Savior

Objective: The student will research an organism of his choice and work cooperatively with a partner to collect and gather research information and design a public-relations type brochure advertising a particular animal.

The student will identify the habitat and niche of his organism, create a realistic food chain involving his organism, and determine the importance of his organism ecologically.

Introduction:

The purpose of this activity is to show students that every organism has a purpose and is an important part of an ecosystem.

The student's goal is to promote his organism through his brochure and create an understanding and acceptance of the importance of his organism to those who don't like or fear it.



Materials:

- *Brochure guidelines
- *Internet computer library
- *Library research materials
- *Paper, pencils, crayons, scissors, glue, staples

Activity:

1. Distribute the animal brochure activity instructions. Have the students read and discuss the instructions. Answer any questions and stress the importance of expected outcomes. Allow students to choose a research partner or assign partners. Each pair should then choose an organism or animal of their choosing.
2. Allow the students time to conduct two days of research using both the Internet and library materials.
3. Have the students take one day to compile their information and plan their brochure. Monitor the students to ensure that they are both actively involved in its organization and that they are addressing all required components.
4. Allow the students three or four days to complete the brochures at home. Have the students present their findings to the classroom in an effort to create awareness of the importance of various species.

Closure: Store the brochures in the classroom for use as an in-class library, or bind them and donate them to an elementary school classroom.

Scientific Savior

Due to an overwhelming public misconception about your organism, you are its last chance for survival. You must create a brochure convincing enough to ensure public acceptance of your organism and to establish the importance of your organism's survival in the public sector.

In order to complete this task successfully, your brochure should follow these guidelines.

1. You must use at least three sources, one of which includes the internet.
2. The brochure must be typed or neatly printed in black ink. All pages must be numbered and labeled as follows:
3. The brochure will consist of two 8 1/2 by 11 inch sheets of paper, folded in half and stapled in the middle.
4. The cover page should be in color and inviting. It must include a picture and the name of the animal. The picture may be drawn, cut and pasted, or graphic.
5. Page 2 must include a physical description of the animal and a picture of the animal. At least five characteristics of the animal must be included. These may be in paragraph form or in the form of individual statements. The title of the page should be labeled "*Characteristics of _____*"
6. Page 3 must be a description of the animal's habitat: where they live, where they find shelter and food, etc. A picture of the animal's habitat must be included. The title of page is labeled "*Habitat.*"
7. Page 4 must be a description of the animal's niche, including if the animal is a nocturnal or a day time dweller, the type of consumer it is, if it is a predator, prey, parasite or host, number and frequency with which it has offspring. Fully describe the organism's role in the environment including its relationship with other species. There should be no less than five descriptive statements, and to be complete should probably be more. The title of this page is "*Niche.*"
8. Page 5 must be diagrams of at least two realistic food chains which include the animal. It may include descriptive statements or labels. The pictures may be cut and pasted, drawings, or graphics. The title of this page is "*Food Chains.*"
9. Page 6 must be titled "*Ecological Importance and Threats.*" At least five statements must be included describing how this species is important to the environment and how this species and its future might be threatened.
10. Page 7 must be titled "*General Information*" and include at least five statements that you found interesting or important that were not applicable elsewhere on the brochure. This could include any laws or special research involving the animal.
11. Page 8 must be entitled "*Credits.*" It must list any sources your team used for information, including the title, author, date, publisher, and/or web site address. At the bottom on the page should be Researched by: Your Names, Date