

1.4 Explore an Issue

DECISION-MAKING SKILLS

- Define the Issue
- Identify Alternatives
- Research
- Analyze the Issue
- Defend a Decision
- Evaluate

What Is the Value of Wolves?

Once an ecosystem has been damaged, should it be “fixed” by restoring the species that was removed? Do we “own” wildlife? The case of the wolves of Yellowstone National Park (**Figure 1**) can help us think about this issue.

Few animals stir as many emotions as the wolf. Some Native North American peoples saw the wolf as a traveler, a guide, and a teacher capable of appearing and disappearing at will. Admiration for the tireless predators, who work together to bring down much larger and more powerful prey, is easy to understand. People saw many similarities to humans in the way wolves cooperate.

The image of the wolf held by early settlers from Europe was also influenced by folklore. The wolf of European stories chased three little pigs, disguised itself in the fleece of a lamb, and ate the grandmother of Little Red Riding Hood. Unlike the Native Peoples of the Plains, Europeans held an image of the wolf as a sharp-toothed villain that preyed on livestock and people.



Figure 1

In 1996 wolf packs were relocated to Yellowstone National Park in an attempt to restore an ecological balance.

The Decline of the Wolf

When European settlers reached central North America and found plains covered in bison, they were not willing to compete with the wolf for valuable hides. Thousands of wolves died after they ate poisoned bison carcasses that had been laid out as bait.

After the bison hunters left, having killed most of the bison, there was a break of a few years before the killing of wolves was revived again by ranchers in the 1880s and 1890s. Wolves killed cattle, and it was also widely believed that they killed people, despite the lack of evidence to support that belief. In both the United States and Canada, anyone bringing a wolf skin to a local government office would be paid. In 1910 the bounty for each adult wolf was \$400 — a large amount at the time. In Montana alone, more than 80,000 wolves were destroyed between 1883 and 1918. The bounty is no longer in place, and the wolf is considered an endangered animal, protected from hunting.

The effects of the removal of the wolves, however, were dramatic. The disappearance of the wolf was followed by a dramatic increase in the population of the next dominant predator, the coyote. The coyote, a close relative of the wolf, is smaller and rarely forms packs. Bison and elk are much too large for single coyotes to hunt. The coyote eats mostly small mammals, such as mice, voles, and ground squirrels, and the eggs and fledglings of ground-nesting birds. It competes with foxes, badgers, and martens, who eat similar things. As the number of coyotes grew, the numbers of these smaller predators declined.

Wolves frequently left remains from their kills. These leftovers were taken by scavengers such as magpies, ravens, and vultures. Without the wolf, these species began to decline. Even grizzly bears, who frequently scavenge wolf kills, were deprived of an easy source of food.

Meanwhile, large herbivores such as the elk were safe. No predator, except for an occasional bear, could kill them, and they began to multiply. The population of elk grew so large that they stripped the hills of plants. Diseases spread rapidly within their large herds.

The Return of the Wolf

The wildlife managers of Yellowstone saw all these signs and recognized that something was seriously wrong. In 1987 they put together a plan: they were going to import wolves from Canada.

Despite continuing resistance from local ranchers, who feared for their sheep and cattle, 35 wolves were transplanted from Alberta, Canada, in 1996. More have since been added. Signs of change are already evident. Where wolves have been introduced, elk have moved from open fields (where they are more vulnerable), and now stick to tree-covered areas. Vegetation is recovering, and the number of small predators, such as the kit fox, is increasing. As ranchers feared, some of the new wolves have killed livestock. Five cows and 53 sheep were killed by wolves in Idaho in the spring of 1997. Ranchers are compensated for losses to wolves, but they are not happy about the reintroduction of wolves, which add to their problems.

Understanding the Issue

1. Classify the at-risk status of the wolf in and around Yellowstone National Park
 - (a) before European settlers arrived.
 - (b) during the bison hunt.
 - (c) after ranchers arrived.
 - (d) in 1996.
2. Native American hunters lived on bison long before European hunters arrived. When they killed a bison, they would use the entire animal for food, clothing, and medicines. Many European hunters killed only for the animal's skin. How might the views of Native Americans about hunting the wolf lead them to treat wolves differently than European settlers and hunters?
3. Make a concept web showing how the removal of the wolf caused problems in the local ecosystem.

Take a Stand

Perspectives on the Value of Wolves

Below are three views on what should have been done about wolves in Yellowstone Park.

The Frontier View: To feed ourselves and the hungry of the world, we must open up, clear, and claim wilderness areas for ranching and other forms of agriculture. Wolves endanger that effort. They kill cattle and sheep. They must be removed wherever they interfere with farming and ranching, and they should not be reintroduced.

The Stewardship View: Humans are the most intelligent animals on the planet. It is our duty to take care of other species and preserve our world. Once we recognize that we have damaged an ecosystem, we must try to repair the damage using whatever resources are available to us. Wolves must be preserved in all ecosystems where they are now found, and reintroduced to ecosystems where they once lived.

The Ownership View: We do not own wild animals or plants just because they live in our country. We have no right to move them around whenever we feel like it. It may have been a mistake to kill the wolves of Yellowstone, but we have no right to take Alberta wolves and move them to a place they've never been before. It is better to let the ecosystem in the park find a new balance. Perhaps one day wolves will find their own way to the park.

Taking a Position

1. Should wolves have been captured in Canada and shipped to Yellowstone National Park?
 - F** After a group discussion, decide which views you support, or develop an alternative view.
2. Using libraries, the Web, and CD-ROMs,
 - J** research to find information that will support your position and write a report on the results of your research.