Deer Crossing

Objective: Students will identify the many factors involved in wildlife management and evaluate alternative plans in a complex issue involving wildlife. Students will describe cause and effect relationships that help and hinder wildlife in their community and recommend changes that could benefit wildlife.

Materials Story and *Community Wildlife Scorecard* included in packet.

Procedure: Provide groups of four students with copies of the story *Deer Crossing*. Tell the students that this is based on a real situation in Idaho. As a class, or in-groups, read the information. In the groups, have the students discuss and evaluate options they think are available to resolve the situation in the best possible manner. Have the students present and explain their recommendation to the class.

When you have finished with the class presentations, as a homework assignment, ask the students to look for "**cause and effect**" relationships in their neighborhood or community that seem to affect wildlife – either help wildlife or harm it. Encourage students to explain their basis for identifying "cause and effect." Such as **cause** – "dogs running free", **effect** – "sometimes will chase deer or other small mammals", or "neighbor planted shrubs/provided habitat." Ask every student to come back to school the next day prepared to share at least one example.

Get a sampling of information from the students in a brief class discussion of what they found. Consider the following:

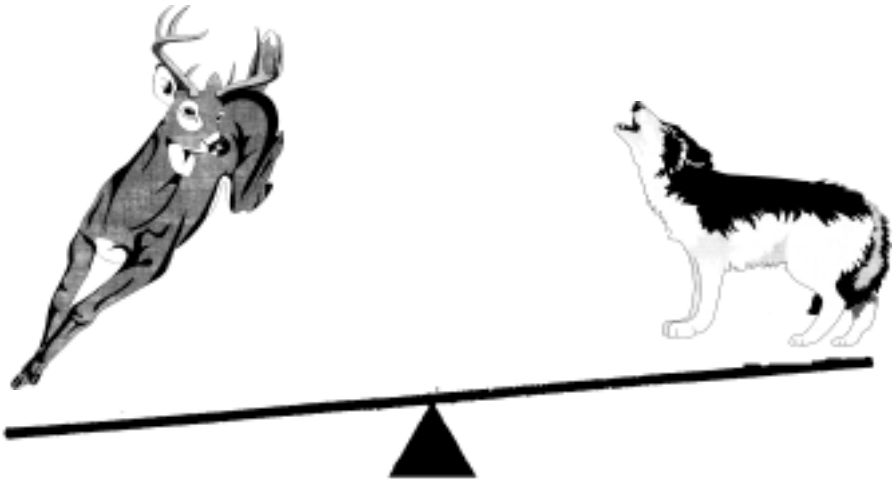
1. What were some of the most surprising observations you made?
2. What kinds of actions are people taking that directly affect wildlife? Which are helpful? Harmful? Which have no effect on wildlife?
3. How did you identify that this was or was not a problem? Will the situation get better or worse in the future? Are there any actions that can be taken – by individuals or the community – to reduce or get rid of the problem?

Ask the students to work in their groups and share what they have identified as a cause and effect relationship (harmful, helpful, or no effect). They should make a list of these relationships in a form similar to the enclosed "scorecard." They can add examples of relationships that they know of even if they did not see them.

As a class, pool the ideas from all of the groups, putting them on master "Community Wildlife Scorecard." You might want to reproduce the "Scorecard" on the blackboard and provide each team with a copy of it. Read the scorecard together making sure the student are clear about what they have identified. Ask them to consider solutions to the problems and how they can help wildlife in their community.

As a class, keep the "Community Wildlife Scorecard" for a week or so. Decide where the students will do their observing and scorekeeping. It might be on the school grounds or in their neighborhood. Ask the students to keep a tally of all the

things they notice – good and bad. At the end of the week, ask the students to tally and score their sightings. Subtract one point for every sighting of a cause and effect relationship that hurts wildlife; add one point for every sighting that helps wildlife; zero points for sightings with no impact. Based on what they observed and recorded, ask the students what they think of the health of their community's relationship to wildlife. Ask what actions they think they could take as individuals and as a community to improve their *Community Wildlife Score*. If the score is excellent already, what actions, if any, need to be taken to maintain the quality of their environment?



Deer Crossing

A major highway was to be built in an area previously served by an old road. Building the new highway would make it possible for auto travelers to get to a nearby town approximately six minutes faster than they could by the old road. The new highway would pose a major problem for a herd of deer in the area. The old road skirted a migration route used by the deer in moving between summer and winter feeding ranges, the new highway would lie directly in the path of the deer's migration.

The new highway was built, and it did block the deer's migration. The deer tried to cross the highway, but many were killed in the process in collisions with autos and trucks. People were also injured and some were killed. A large fence was built along both sides of this highway in hopes of preventing the animals from trying to cross. Even so, some deer were able to cross. Some collisions and fatalities continued to happen.

Most of the deer, however, were not able to jump the fence that was built. Instead, the majority of the herd bunched up on one side of the fence without being able to cross. The problem was particularly critical each winter. The deer were trying to move out of the high mountains where they spent the summer months to get to lower feeding areas for the winter. There was not enough food for the deer if they could not get to their winter feeding area. They bunched up by the fence, ate any food in the area quickly, and began damaging the remaining vegetation and soil structure as they looked for more food.

Every year since the highway was built, the state wildlife agency has brought in food for the hungry deer. Even so, some deer die from starvation each winter while more than 1,500 are fed a pellet food. Deer being fed under these crowded conditions in a central feeding area are more apt to contract and spread disease. They also become accustomed to being fed by humans.

The wildlife agency has taken several approaches to relieve this situation. A seven and one-half mile long fence was constructed to the north and east of the highway. This has helped to hold the deer farther north and helps to disperse the animals to minimize damage to the watershed in the vicinity of the feeding area.

The U.S. Bureau of Land Management initiated a project to plant saltbush and bitterbrush on several hundred acres of land adjacent to this fence. An additional 1,500 acres has been seeded aerially. These bushes are now three to four feet high and provide natural winter range for the deer herd. Plans call for seeding another 3,000 to 4,000 acres, the acreage calculated as necessary to support a herd of 2,000 deer.

Consider the following possibilities — including costs and benefits of each — and any others that you think would be effective or appropriate. Prepare a presentation for the class listing your suggestions.

- Issue hunting permits to reduce the size of the herd in the area.
- Live-capture and transplant deer to areas where there is sufficient room and food for them to live.
- Persuade the highway department to build underpasses or overpasses the deer can use to move from one feeding area to the other.
- Keep feeding the deer artificially.
- Let the deer starve.
- other

Community Wildlife Scorecard

date	Cause	Effect	hurts	Helps	Neithe	A Subtract 1	B Add 1	C No Impact
						Subtotals		
(Subtract Column A from Column B for						Total Wildlife Score		