

Lesson Ten — The Web of Life

Objective: Students will examine the notion of stewardship or guardianship vs. the idea of dominion and ownership. They will also learn about some of the ways their everyday choices affect the balance of life on earth.

Materials Required

Enough copies of the Introduction, Background About Slavery (Activity One), and Stories for each student to have one copy

One Caring Consumer Wallet Card for each student

Introduction

We, humans, are just one strand in the web of life on this planet. Every living thing has its place in maintaining the web's delicate balance. Any change in a single strand affects the entire web.

Scientists are just beginning to understand the many ways in which we are dependent on other animals and plants. When we destroy any part of our environment, we send out ripples of destruction.

Every day, we make choices — about where we will go and how we will get there, what we will do, what we will wear, and what we will eat, for example. Our choices can be based on kindness or lack of caring, on knowledge or ignorance, on the belief that there are always positive alternatives or on the belief that we have no other options. It is impossible to live a life that causes no harm, but we often have the ability to make choices that harm less.

We can only do so if we know more about where the items we regularly use come from and how they were produced, as well as what happens to them when we dispose of them.

When we buy an item or pay for entertainment, we typically only consider its monetary cost but not the cost to our health, other people, other species, and the environment. If a tag showing "the true price" hung from each item, it would have to be very large to include the number of trees, amount of land, hours of human and nonhuman animal suffering, quantity of pollution, type of transportation and distance, and size of landfill area filled to produce, transport, and dispose of the item.

For example, plastic shopping bags are made from petroleum. Transporting the oil not only uses resources, but it often results in spills, which cause wildlife and their habitat to be destroyed. Plastic bags that are not recycled end up in landfills, waterways, and wildlife habitats.

Concern for the planet and a sense of responsibility toward all life can lead us to consider the true cost of products before we purchase them, and to choose products that cause the least harm. Be sure to see the Wallet Card at the end of this lesson.

Definitions

Write the following definitions on the board:

Guardianship/Stewardship: the careful and responsible management of someone or something entrusted to one's care

Ownership: having or holding as property; possessing; having power or mastery over

Dominion: supreme authority over

Story One

In 1926, the last wolves in Yellowstone National Park in the U.S. were hunted and killed. Without wolves to control the elk population, it grew out of balance. The elk overgrazed on aspen and cottonwood trees, leaving nothing for resident beavers to eat, so the beavers left the area.

Beavers are important to an ecosystem. They build and maintain dams in streams and rivers to slow down the water flow and create wetlands and ponds. When the beavers left the park, many water mammals and water birds also left. There were fewer species in the park and lower numbers of each species.

Species diversity is an important measure of the health of an area. When the wolf species was eliminated from the ecosystem of the park, many other species representing many other strands in the web were affected. The park's entire web or ecosystem was weakened.

Wildlife officials realized that removing wolves from the park was a mistake, and in 1995, wolves were reintroduced. The aspen and cottonwood trees grew back, and the beavers returned, followed by water mammals and birds. Balance was restored.

Story Two

A large, clean river full of trout ran through an area where a small town and surrounding farms were located. Many of the farms were dairy farms. People and wild animals came to the river to cool off and drink. Over time, the number of cows at the dairy farms increased, as did the amount of manure going from the farms into the river. The river became so polluted that people could no longer swim in it, much less drink from it.

Story Three

An elephant in Asia was killed, and her baby was taken and raised by an elephant trainer who worked for a circus. To train the baby to obey him, the trainer beat her and kept her hungry.

In the wild, female elephants remain in their family groups for life. This was the first time the baby had ever been alone and in an enclosed space. Disoriented and confused by her new surroundings, she tried to escape from the barn, which had no windows or light and had strange air. When she tried to walk out the door, the trainer beat her so badly that she fell and could not walk for many days.

When she finally stood up, he beat her again, until she fell once more, exhausted and in pain. She was unable to stand for days. Finally, when she stood up again, the trainer was able to make her do things that are unnatural for an elephant, such as stand on her hind legs and dance. The trainer told people he had a good relationship with this elephant.

Story Four

An albatross (bird) was found dead. The bird's stomach was full of plastic from drink containers and shopping bags. A whale was found dead. Her stomach was full of Styrofoam and plastic.

Story Five

A vendor brings heavy watermelons to market using a horse who he does not feed properly. The horse is so weak, he can barely walk, but the vendor overloads the horse and beats him to force him to keep going. He also nails wooden blocks to his feet so he will not slip and fall on the pavement and possibly damage the cart and the watermelons it holds.

Story Six

In the 1950s, Israeli farmers were afraid that bats were eating their crops, so they put slow-acting, painful strychnine poison in caves where the bats lived, to kill them. After they killed the bats, there were more insects than ever before, and they ate more crops than ever before because there were no bats to control their population. Then the farmers realized that the bats had been eating the insects who were actually responsible for the destruction of their crops.

Now bats and bat caves in Israel are protected, and farmers understand that bats, as well as bees, play an important role in the web of life. They pollinate plants and disperse seeds. Agriculture could not survive without them.

Extensive use of chemicals on agriculture in Israel in the late 1900s killed many barn owls in the Bet She'an and Hula Valleys. Because the barn owls were not controlling the rodent population, there was a huge increase in the number of rodents damaging crops, which led to even greater use of chemicals that are harmful to human health and to the environment.

Having learned from the mistakes of the past, some farmers now reduce or eliminate the use of chemicals by encouraging barn owls to nest on their land, even building nest boxes for them in trees. The barn owls control the rodent population in place of chemicals. "This has ensured a reduction in the damage pesticides cause to people, soil, water, wildlife, and migrating birds," said one farmer.

Activity One

Hand out copies of the stories above and background information below to students and call on a different student to read each paragraph out loud in class.

Background About Slavery:

Slavery was abolished in the United Kingdom in 1833. The government compensated slave owners for the loss of these workers who had been held against their will.

Slavery was abolished throughout the United States in 1865, although it had already been abolished in many individual states by that time.

Slavery still exists in Haiti, India, southern Pakistan, the Sudan, Thailand, and other countries. The oldest human rights organization, Anti-Slavery International, estimates that worldwide, there are currently over 20 million people who are enslaved in various ways. For more information, see <http://www.infoplease.com/spot/slavery1.html>

Questions for Discussion:

- What are the benefits for humans, nonhuman animals, and the environment of making choices according to the four concepts defined at the beginning of this lesson (dominion and ownership vs. guardianship/stewardship)
- Which terms fit each of the stories above and why? That is, were people in the stories acting as guardians and stewards of animals and the environment or were they acting as owners and as having dominion over animals and nature?
- Which principles do you think cause the least suffering to others? Which principles do you think result in the least damage to the animals and the environment?
- Can you think of an example in your own community of each of these terms in action?
- How would you feel about having an owner and why?
- In what countries were people owned by other people (slavery) and has this changed over time? Are there places where slavery still exists today?

Activity Two

IMPORTANT NOTE: The goal of the following activity is not to make students feel it is wrong or bad to use a particular item. Rather, this lesson provides an opportunity for students to see the impact even our smallest choices have on others and on the planet. It also shows them how to consider the effect of their daily choices before making them, at the point of purchase.

Ask students to keep a journal for one day of all the products they use, eat, or purchase in a day. Remind them to include transportation (bike, car, bus, taxi), clothing, books, magazines, cell phones, and so on.

Ask them to bring their journal to class and analyze each item they listed, using the questions below. To help them determine what each item is made of, write columns on the board, such as petroleum product, plant source, animal source, mineral source. List

each product in the category where it belongs.

Analyze each item using the following questions:

- Where was it made?
- What is it made of? (including its packaging)
- Did the product exist 100 years ago?
- If not, what was used instead?
- What is an alternative to using this product? For example: what is an alternative to all the plastic shopping bags that are produced, used, and thrown away? (reusable shopping bags or baskets that last for many years)

Discuss how little we know about our choices and the products we use.

Here is an example of how to analyze a plastic bottle of cola:

- About 265 million liters of soda are consumed around the world every day.
- The soda itself is basically sugar, water, and carbon dioxide. Sugary soda causes dental and other health problems.
- The bottle is plastic, which is derived from petroleum. Demand for petroleum products is largely responsible for oil spills. Manufacturing plastic causes toxic gases to enter the atmosphere and contributes to air pollution.
- Bottles discarded by individuals and communities harm wildlife and end up in streams, lakes and oceans. Whales, dolphins, and water birds have been found dead, their stomachs full of plastic bottles and caps. They cannot digest plastic and die of starvation or of blocked digestive systems.
- What are alternatives to soda? What did humans drink 50 years ago? (water or locally produced, healthier drinks in refillable containers)

Activity Three

Ask students:

For each of the stories above, what choices might a consumer make? (to buy plastic or not, to go to the circus or not, and so on) For each story, name a less harmful alternative.

If less harmful alternatives are not available in your area, is it possible to choose not to attend an activity or event that is cruel to animals, like a zoo, for example, or to choose to use less of a product that harms the environment?

Activity Four

Explain to students that every time we purchase something, we are adding to the demand for that item. We are casting a vote that says "Keep making this product."

Give each student a Caring Consumer Wallet Card and explain that if they ask themselves the questions on the card before making a purchase, they will be more likely to make choices that reflect the values of compassion and respect for others.

Tell students they can make copies of the card, keep it in their pocket, and share it with others. Encourage them to make and promote choices that care for the earth, all people, and all animals.

CARING CONSUMER WALLET CARD

1. Is this a want or need? Is it necessary to make this purchase?
2. Will having this make my life better?
3. Is this purchase the best way to care for myself and all life on the planet?
4. What is the true cost of the item to: My own health? Other species? The environment? Other people/cultures?
5. Is there something more important/caring I could do with my money?