

Overview of “Stewardship” Curriculum

Day 1

- “What is Stewardship?”
 - Create collages depicting ideas of stewardship.
 - Brainstorm stewardship project appropriate for students and community (to be the culminating activity on the fourth day)

Day 2

- “Making Connections”
 - Food web activity
- “Valuing/Respecting the Land”
 - Play values game

Day 3

- “Pack Your Pack”
 - In groups/teams, students properly plan for recreational outing

Day 4

- “Outing/Field Experience”
 - Implement project developed by students to exemplify environmental stewardship

Optional Day 5

- Assessment/Evaluation Day
 - Read The Lorax by Dr. Seuss
 - Ask: What was the author’s message concerning what one person can do to save or destroy the environment? Discuss as a class.
 - Write a “sequel” to The Lorax either as a class or individually.

What is Stewardship? (Grades 2-6)

Language Arts

Standard 1. Uses the general skills and strategies of the writing process

6. Uses strategies (e.g., adapts focus, point of view, organization, form) to write for a variety of purposes (e.g., to inform, entertain, explain, describe, record ideas)
11. Writes in response to literature (e.g., summarizes main ideas and significant details; relates own ideas to supporting details; advances judgments; supports judgments with references to the text, other works, other authors, nonprint media, and personal knowledge)

Standard 2. Uses the stylistic and rhetorical aspects of writing

1. Uses descriptive language that clarifies and enhances ideas (e.g., common figures of speech, sensory details)
2. Uses paragraph form in writing (e.g., indents the first word of a paragraph, uses topic sentences, recognizes a paragraph as a group of sentences about one main idea, uses an introductory and concluding paragraph, writes several related paragraphs)
3. Uses a variety of sentence structures in writing (e.g., expands basic sentence patterns, uses exclamatory and imperative sentences)

Standard 8. Uses listening and speaking strategies for different purposes

Making Connections (Grades 3-6)

Science

Standard 6. Understands relationships among organisms and their physical environment

1. Knows the organization of simple food chains and food webs (e.g., green plants make their own food with sunlight, water, and air; some animals eat the plants; some animals eat the animals that eat the plants)
2. Knows that the transfer of energy (e.g., through the consumption of food) is essential to all living organisms
3. Knows that an organism's patterns of behavior are related to the nature of that organism's environment (e.g., kinds and numbers of other organisms present, availability of food and resources, physical characteristics of the environment)
4. Knows that changes in the environment can have different effects on different organisms (e.g., some organisms move in, others move out; some organisms survive and reproduce, others die)
5. Knows that all organisms (including humans) cause changes in their environments, and these changes can be beneficial or detrimental

Pack Your Pack (Grades 2-6)

Health

Standard 5. Knows essential concepts and practices concerning injury prevention and safety

1. Knows safety rules and practices to be used in home, school, and community settings (e.g., using a seat belt or helmet, protecting ears from exposure to excessive noise, wearing appropriate clothing and protective equipment for sports, using sunscreen or a hat in bright sunlight)
2. Knows methods used to recognize and avoid threatening situations (e.g., not leaning into a car when giving

directions to a stranger) and ways to get assistance

5. Uses strategies to convey a clear main point when speaking (e.g., expresses ideas in a logical manner, uses specific vocabulary to establish tone and present information)

Civics

Standard 10. Understands the roles of voluntarism and organized groups in American social and political life

1. Understands the importance of voluntarism as a characteristic of American society (e.g., people should volunteer to help others in their family, schools, communities, state, nation, and the world; volunteering is a source of individual satisfaction and fulfillment)

Valuing the Land (Grades 2-6)

Language Arts

Standard 1. Uses the general skills and strategies of the writing process

6. Uses strategies (e.g., adapts focus, point of view, organization, form) to write for a variety of purposes (e.g., to inform, entertain, explain, describe, record ideas)
11. Writes in response to literature (e.g., summarizes main ideas and significant details; relates own ideas to supporting details; advances judgments; supports judgments with references to the text, other works, other authors, nonprint media, and personal knowledge)

Standard 2. Uses the stylistic and rhetorical aspects of writing

1. Uses descriptive language that clarifies and enhances ideas (e.g., common figures of speech, sensory details)
2. Uses paragraph form in writing (e.g., indents the first word of a paragraph, uses topic sentences, recognizes a paragraph as a group of sentences about one main idea, uses an introductory and concluding paragraph, writes several related paragraphs)
3. Uses a variety of sentence structures in writing (e.g., expands basic sentence patterns, uses exclamatory and imperative sentences)

Civics

Standard 8. Understands the central ideas of American constitutional government and how this form of government has shaped the character of American society

4. Understands the focus on "the individual" in American society (e.g., a primary purpose of government is to protect the rights of the individual to life, liberty, property, and the pursuit of happiness; individuals have the right to differ about politics, religion, or any other matter; the vote of one individual should count as much as another's)

DAY 2: BACKGROUND INFORMATION FOR ACTIVITY 1

Respect Animals, Plants, and People

Respect means that you appreciate the value of something or someone. If you care about something you respect it. Sometimes it is hard to respect something you don't understand. The natural world can be like that. Because we live in big cities and warm houses we may forget our connection to nature and our need for a healthy natural world.

Many people don't have or take the opportunity to spend time in nature. People can forget their places in nature. So when they visit forests or deserts, they may not show the plants, animals, and their homes the respect they deserve. Disrespecting nature might include taking rocks or wildflowers. Rocks

offer shelter for many soil critters and flowers produce seeds so new plants will grow next year. They may feed animals, causing animals to become dependent on humans and not their environment for food. They may walk or ride up a streambed or cross streams at the wrong places. This can stir up sediment damaging aquatic habitat and water quality or weaken stream banks leading to erosion. They can travel off trail—damaging plants, compacting soils, and leaving unsightly scars on the land. **Can you think of anything else that is disrespectful of the natural world?**

Ecosystems are the systems of interactions or connections between living things (plants, animals, and bacteria) and non-living things (soil, air, water, weather, sunlight, etc.) in an environment. One-way to think about an ecosystem is who eats what—the food web. For instance a golden eagle's favorite prey is the cottontail rabbit. The cottontail rabbit

feeds on grasses and flowers. **If for some reason these grasses and flowers are damaged what could happen to the cottontails in that ecosystem? What about the golden eagle?**

Remember all living things need clean air, clean water, good food supply, and shelter to

survive. A healthy ecosystem provides all those things. Sometimes it is hard to imagine how some parts of an ecosystem are connected—but they are. **Can you think of some special ways that soils are connected to animals?**

The most important lesson to remember is that everything you do in the great outdoors has an effect on the ecosystem. The best thing to do is to try to minimize that effect, and respect the ecosystem you are in.

LEARNING OUTCOME

TO BETTER UNDERSTAND OUR CONNECTION TO THE NATURAL WORLD AND HOW TO RESPECT NATURE STUDENTS WILL:

- **MAKE CONNECTIONS WITHIN THE NATURAL WORLD AND BETWEEN HUMANS AND THE NATURAL WORLD.**
- **IDENTIFY ACTIONS THAT SHOW RESPECT AND DISRESPECT.**

DAY 2: ACTIVITY 1

Making Connections

Student Goals

- Demonstrate biological and ecological connections between plants and animals (including humans) within an ecosystem.
- Explain the consequences of losing one or more of these connections.
- Identify human behaviors that influence biological and ecological connections within the ecosystem.
- Identify respectful and disrespectful recreational behaviors.



Activity at a Glance:

Students will construct a web of connected elements in nature and discuss what happens when one or more of these elements are no longer part of the ecosystem.

Grades: 2nd - 6th

Time: 45 minutes to 1 hour

Materials: ecosystem cards, ball of yarn

Activity:

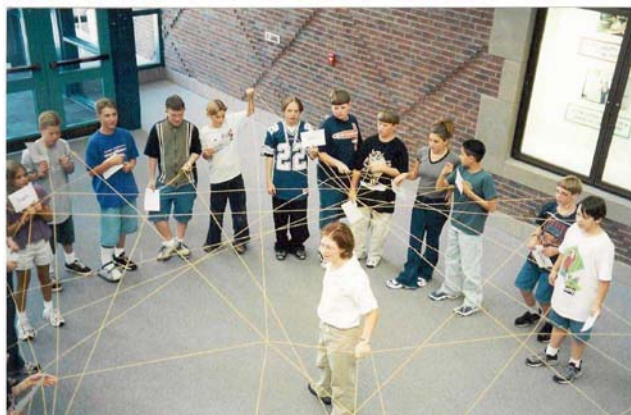
Read Aloud: Who Eats What? By Patricia Lauber

Step 1: Put students in a circle and hand each student an ecosystem card. Each card provides clues to how the element fits into the ecosystem. Instruct the group to look around and find which cards apply to them: something they need to survive or something that needs them. (i.e., If you are soil, you would connect with a tree or a fungus. The tree would connect with a bird or raccoon as food or shelter).

Step 2: The first person holds onto the ball of string and throws the ball to someone who connects with him/her.

That person in turn holds on to the end and throws the ball to someone that he/she connects with. The process continues until each person in the group is holding a section of the string. Some people may be connected to more than one element and are holding more than one section of string. Throughout this process ask students to explain why they have chosen a particular connection. In the end, they have created a web of connections or a web of life.

Step 3: Briefly review the connections within the ecosystem. Next discuss how humans and their activities may interact with various components of the system. What would happen if, for instance, the soil in an area were damaged or destroyed? By pulling on the soil string the group feels the connection to the soil. Have the person who is playing the soil drop his/her section(s) of string. Can they think of anything else that would be affected if the soil were destroyed? Wildflowers and other students should also drop their sections of string.



Assessment/Extension:

Read What If There Were No Bees? By Suzanne Slade. After finishing the story have students identify

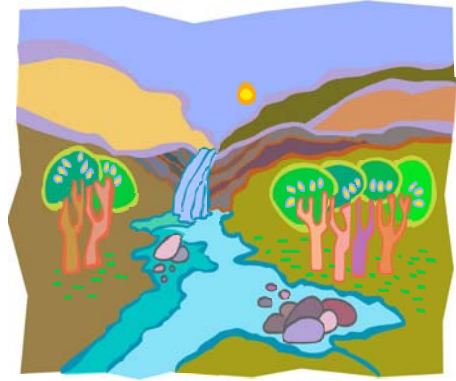
how many parts of nature were affected by the loss of one species. Was this species eliminated as a result of disrespectful behavior? Students could choose another animal/plant and write their own stories about what would happen if that animal/plant no longer existed as a result of disrespectful behavior.

Extension for Older Students:

Have students pick one of the ecosystem cards. Research the item on the card and figure out where it fits in the food web. Determine at least five connections the item has in the food web—they do not have to be direct connections. Take the information and either write a story about the item and its ecosystem connections or draw a picture about the ecosystem connections.



Mushroom



Stream



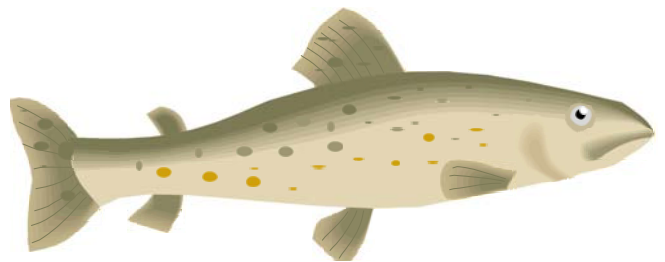
Lake



Pond



Soil



Trout



Porcupine



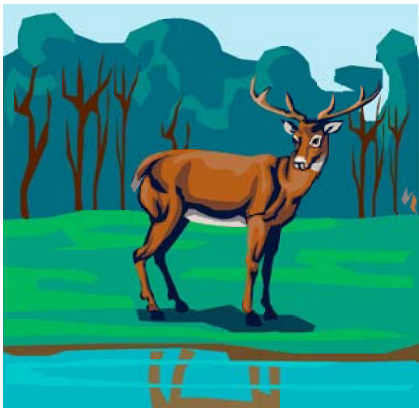
Owl



Mouse



Beaver



Deer



Skunk



Woodpecker



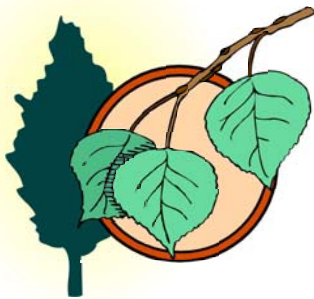
Elk



Aspen Tree



Pine Tree



Cottonwood Tree



Huckleberry



Raspberry



Columbine



Grass



Fir Tree



Squirrel



Rabbit



Eagle



Black Bear



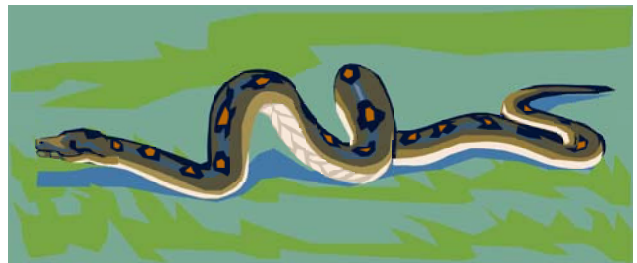
Moose



Termites



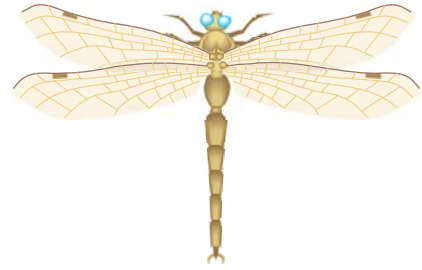
Frog



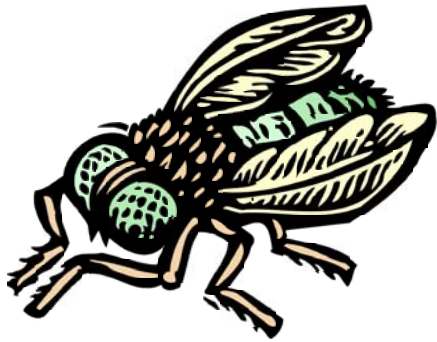
Snake



Butterfly



Dragon Fly



Fly



Bee



Human



Mountain Lion

Every Time You Go Outdoors, Think Safety, Bring A Friend And Be Prepared

One of the easiest ways to minimize your impact in the great outdoors is planning and preparing for each trip. If you bring everything you might need, then you are less

likely to have to rely on natural resources in any situation. If you are prepared, you will be more comfortable on your trip and it will be easier to enjoy the sounds and views on the landscape.

For instance, what would you do if you were camping in a backcountry area and there was no fire ring? If you are prepared then you will have brought a backpacking stove for your cooking. Because you made the choice to use your stove instead of a fire you will leave a smaller impression on the land.

Safety is a very important consideration when preparing for a trip. Not only do you need to take the appropriate safety gear for the activity

in which you are participating, but you also need to prepare for the unexpected. For example, when you are hiking you want to wear good sturdy boots or hiking shoes to

protect your feet and ankles and provide good traction on the trail. This is your safety gear. Still, it doesn't completely protect you. You can still slip, fall, and cut yourself. You may also step on a rock or in a hole and roll your ankle. How would

you prepare for those situations?

Good preparation is essential for successful outdoor adventures. The easiest way to prepare is to create a list of essential items for your trip. Remember depending on how you are traveling you don't want to over pack. What problems could over packing lead to?

LEARNING OUTCOME

TO BETTER UNDERSTAND HOW PLANNING RELATES TO SAFE AND RESPONSIBLE RECREATION STUDENTS WILL:

- **IDENTIFY SPECIFIC ITEMS NECESSARY FOR SAFE OUTDOOR RECREATION.**
- **PARTICIPATE IN PLANNING AN OUTING FOR A SPECIFIC OUTDOOR RECREATION ACTIVITY.**

DAY 3: ACTIVITY 1

Pack Your Pack

Scenarios for hiking, camping, All-Terrain Vehicles and Off-Highway Motorcycles, snowmobiling, and personal watercraft

Student Goals

- Given a basic scenario to plan, pick from a list the essential items for a safe outdoor adventure.
- Determine if the items students picked from the list will prepare them for specific unexpected situations.



Activity At A Glance:

Students will plan for a recreational outing given a particular scenario and equipment to choose from (choose outing that is most appropriate for age and actual life experience). Then they will be given an event card to see if they are prepared for the unexpected.

Grades: 2nd - 6th

Read Aloud: The Earth and I by Frank Asch

Time: 45 minutes to 1 hour

Materials Needed: event travel cards and equipment cards

Activity:

Step 1: From the scenarios below, choose one that best fits the needs of your class. Hiking works best with younger students. The motorized activity scenarios should be directed towards age groups that are eligible to be certified and/or ride motorized vehicles (i.e. ATV or dirt bikes). Each state has different requirements and laws about who can ride and at what age.

You have two options on how to run this activity. **Option 1:** Work with the entire class, making sure you get input from each student. This works best with younger students. **Option 2:** Divide students into groups of four. Have each group determine their list of essential items. This works better with older students.



Hiking Scenario: You are going on a long 8-mile day hike in the Wasatch Mountains in early July. What type of weather might you encounter?

Backpacking Scenario: Your group is going on a backpacking trip into the Uinta Mountains of Utah. You are going in August and will be gone for three days, camping on two nights. Ask the group what type of weather they might encounter. They will hike about 20 miles in three days.



Snowmobiling Scenario: Your group is going snowmobiling in area that has both groomed trails and cross-country riding opportunities. It is February. The area is fairly remote with mountains and wide valleys. What type of weather and snow conditions might you encounter?

ATV/Off-Highway Motorcycle Scenario: Your group is going ATV/OHM riding in an area that has many multi-use trails. Some of the trails are not open to motorized use and you must stay on the trail. The area is located in Montana and it is late spring. What type of weather and trail conditions might you encounter?



Personal Watercraft Scenario:



You and your friends are going to the lake for a day of water recreation with your PWCs. You know of a secluded beach that you can get to by dirt road. Two of you will launch the PWCs in the marina and ride to the beach and meet the others who will drive to the beach in cars.

Step 2: Ask the group to identify which of the items they want to pack in their pack. As they decide, pack the pack using the equipment cards. Don't ask questions; just pack. Discuss how much the pack weighs for those scenarios that require individuals to carry packs.

Step 3: Divide the students into groups, and hand out the event travel cards. Have them discuss if they are prepared and what they could have brought that would have been more effective. Have them read their situations to the class and discuss how the scenario affected their trip. Were they prepared? How did the class do as a whole? Analyze what the group did or didn't pack and talk about each item and why it was a good or poor choice to pack.

Step 4: End with discussion with ways to pack that minimize impact on the body as well as the environment.






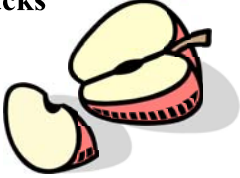
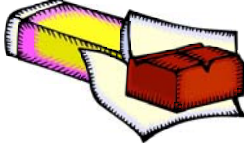

Assessment/Homework (with family members):

Have students create a planning and packing checklist for their favorite outdoor recreation. Have them pick the location and length of their trip so that they can create a better plan. Do they remember all the items they need to meet both the expected and unexpected challenges of their trip?

Backpacking Event Cards

<p>You run out of fuel for your stove. Are you prepared?</p>	<p>You find out from a ranger that the trail you were planning on using is closed for repairs. You pick a new hike, but it is known for its beaver population. What can you do to minimize your impact on these animals? Are you prepared?</p>
<p>You are backpacking in an area where all the campsites have pit toilets. However, while hiking to your next site you have to go to the bathroom. You know it won't wait till you get to your next campsite. What do you do? Are you prepared?</p>	<p>WATER! Your group brought two quarts of water per person, but your hike has been very hot and everyone is low on water. What do you do? Are you prepared?</p>
<p>One of the meals you planned requires that you boil water. What could you use? Are you prepared?</p>	<p>You are in bear country. After dinner, as you and your friends sit around and talk, a ranger comes and tells your group that you need to bag your food/ smellables and hang them at least 10 feet up and 4 feet in on the bear poles in your camp. What is the best way to do this? Are you prepared?</p>
<p>The only available campsite is near a water source, and the mosquitoes are terrible. Are you prepared?</p>	<p>Lightning!! A storm is quickly blowing into your area. You are still two miles from your camp and it is starting to rain. You are going to have to get off the trail and find shelter. What else might you need? Are you prepared?</p>
<p>BLISTERS!! You have a nasty blister and can no longer carry your pack. With the way your feet feel, you are not sure you can even make it to camp. What can you do to take care of your blisters? Are you prepared?</p>	<p>When you go to the ranger station to obtain your permit, you find out that fires are prohibited for the trip. Are you prepared?</p>

<p>For Backpacking Scenario</p>	<p>GPS</p> 	<p>Hat</p> 	<p>Map</p> 
<p>Book</p> 	<p>Raincoat</p> 	<p>Headlamp</p> 	<p>Pocket Tool</p> 
<p>Gloves</p> 	<p>Flashlight</p> 	<p>Warm Clothes</p> 	<p>Hair Dryer</p> 
<p>Camp Chair</p> 	<p>Compass</p> 	<p>Pan</p> 	<p>First Aid Kit</p> 
<p>Water Bottle</p> 	<p>Stove</p> 	<p>Tent</p> 	<p>Water Filter</p>
<p>Pot</p> 	<p>Backpack</p> 	<p>Sleeping Bag</p> 	<p>Toilet Paper</p> 
<p>Matches</p> 	<p>Video Game</p> 	<p>Bug Spray</p> 	<p>Extra Socks</p> 
<p>Rope</p> 	<p>Trowel (shovel)</p> 	<p>Cards</p> 	<p>Sunscreen</p> 

Whistle 	Duct Tape 	Football 	Sleeping Mat 
Dinner 	Snacks 	Energy Bars 	Breakfast 

Hiking Event Cards

<p>Your hike is taking longer than expected. You notice that the sun is going down and it will soon be dark, but you still have a ways to go. Are you prepared?</p>	<p>It's a hot summer day, and you are running out of water. What can you do? Are you prepared?</p>
<p>You are hiking high in the mountains. You are now above the tree line and it is windy and cooler. You are getting chilled. Are you prepared?</p>	<p>You are hiking in open country. It is high noon, and the sun is strong. You know if you're not careful you will get sunburned. Are you prepared?</p>
<p>You are hiking and you get separated from your group. What should you do? Are you prepared?</p>	<p>It is mid-afternoon and you notice dark clouds forming overhead. It was sunny when you left on your hike. Are you prepared for rain?</p>
<p>You're on a long day hike. There are no restroom facilities in the area you are hiking. Are you prepared?</p>	

<p>Hiking Scenario</p>	<p>Water Bottle</p> 	<p>Sunscreen</p> 	<p>Trowel (shovel)</p> 
<p>Toilet Paper</p> 	<p>Matches</p> 	<p>Headlamp</p> 	<p>Rain Jacket</p> 
<p>Bug Spay</p> 	<p>First Aid Kit</p> 	<p>Map</p> 	<p>Water Filter</p>
<p>Lunch</p> 	<p>Compass</p> 	<p>GPS</p> 	<p>Warm Clothes</p> 
<p>Pot</p> 	<p>Energy Bar</p> 	<p>Snacks</p> 	<p>Dinner</p> 
<p>Football</p> 	<p>Space Blanket</p> 	<p>Day Pack</p> 	<p>Whistle</p> 
<p>Stove and fuel</p> 	<p>Tent</p> 	<p>Video Game</p> 	<p>Sleeping Bag</p> 


Snowmobiling Event Cards

<p>It has been snowing all day and the trails are not packed. Your dad's snowmobile gets stuck in a snowdrift. How do you get him out? Are you prepared?</p>	<p>You are snowmobiling with friends and family in mountainous terrain. Your friends see a steep slope they want to ascend to see who can go the highest. Is this a good idea? Why or why not? If you do decide to go are you prepared and how should you proceed?</p>
<p>Your machine has an unexpected breakdown. Are you prepared to fix your machine on the trail? Are you prepared if you can't fix your snowmobile?</p>	<p>Your family wants to snowmobile cross-country—through snowy meadows, fields, and open forests. Are you prepared? For what? To say no or with equipment?</p>
<p>You have misjudged your gas usage; both you and your dad have run out of gas. It is almost dark. Are you prepared to spend the night?</p>	<p>You are snowmobiling at a high elevation and the ground is completely snow covered. You want to continue to your final destination but you can't see the trail. Will you be able to continue? Are you prepared?</p>

<p>Snowmobile Scenario</p>	 <p>Probe</p>	<p>Whistle</p> 	<p>Helmet</p> 
<p>Cell Phone</p> 	<p>Mirror</p> 	<p>Space Blanket</p> 	<p>Tool Kit</p> 
<p>Snowshoes</p> 	<p>Energy Bar</p> 	<p>GPS</p> 	<p>First Aid Kit</p> 
<p>Map</p> 	<p>Water Bottle</p> 	<p>Duct Tape</p> 	<p>Gloves</p> 
<p>Hat</p> 	<p>Headlamp</p> 	<p>Flashlight</p> 	<p>Pocket Tool</p> 
<p>Extra Fuel</p> 	<p>Day Pack</p> 	<p>Toilet Paper</p> 	<p>Avalanche Transceiver</p> 
<p>Rope</p> 	<p>Matches</p> 	<p>Boots</p> 	<p>Snow Suit</p> 

ATV and Off-Highway Motorcycle (OHM) Event Cards

<p>Your friend's family has ATVs/OHMs sized for kids. Did you remember all the right gear so you can go ride with your friends? Are you certified?</p>	<p>You are traveling in rough terrain? Are your ATVs/OHMs getting stuck? Do you have the right equipment to get yourself out?</p>
<p>Your machine has an unexpected breakdown. Are you prepared to fix your machine on the trail? Are you prepared if you can't fix your ATV/OHM?</p>	<p>You have misjudged your gas usage; both you and your dad have run out of gas. It is almost dark. Are you prepared to spend the night?</p>
<p>It's a hot summer day and you are running out of water. What can you do? Are you prepared?</p>	<p>The only available campsite is near a water source, and the mosquitoes are terrible. Are you prepared?</p>
<p>You come to a junction in the trail. You are unsure if the trail you want to take is open to ATVs/OHMs. There are no signs. What should you have that will tell you if it's a designated trail? What should you do if you are still unsure?</p>	<p>You're on an all-day ATV/OHM trip. There are no restroom facilities in the area in which you will be riding. Are you prepared?</p>

<p>ATV/OHM Scenario</p>	<p>Cell Phone</p> 	<p>Whistle</p> 	<p>Helmet</p> 
<p>Toilet Paper</p> 	<p>Energy Bar</p> 	<p>Map</p> 	<p>Day Pack</p> 
<p>Tool Box</p> 	<p>Mirror</p> 	<p>GPS</p> 	<p>First Aid Kit</p> 
<p>Rain Jacket</p> 	<p>Water Bottle</p> 	<p>Space Blanket</p> 	<p>Duct Tape</p> 
<p>Safety Gear (padding)</p> 	<p>Rope</p> 	<p>Extra Fuel</p> 	<p>Pocket Tool</p> 
<p>Registration</p> 	<p>Headlamp</p> 	<p>Trowel (shovel)</p> 	<p>Water Filter</p> 
<p>Certification</p> 	<p>Matches</p> 		

Personal Watercraft Event Cards

<p>You are riding out in the middle of the lake and you smell smoke. You realize it is coming from your machine. What can you do? Are you prepared?</p>	<p>You are about a mile away from the beach. Your PWC has broken down. What can you do? Are you prepared?</p>
<p>The water temperature is colder than you thought. Are you prepared?</p>	<p>You and your mom ride to a remote beach. There are no restroom facilities and you need to go to the bathroom. You know that you can't ride to your group's beach site? What can you do? Are you prepared?</p>
<p>The Coast Guard is doing routine registration checks. Are you prepared?</p>	<p>It is high noon and the sun is strong. You know if you're not careful you will get sunburned. Are you prepared?</p>
<p>You arrive at the boat dock and you do a once over on your machine to make sure it is ready for the trip. Are you prepared?</p>	

<p>PWC Scenario</p>	<p>Sunglasses</p> 	<p>First Aid Kit</p> 	<p>Map</p> 
<p>Toilet Paper</p> 	<p>Tool Kit</p> 	<p>Towel</p> 	<p>Wet Suit</p> 
<p>Hat</p> 	<p>Mirror</p> 	<p>Whistle</p> 	<p>Water Shoes</p> 
<p>Duct Tape</p> 	<p>Sunscreen</p> 	<p>Rope</p> 	<p>Pocket Tool</p> 
<p>Water Filter</p> 	<p>Energy Bar</p> 	<p>Headlamp</p> 	<p>Trowel (shovel)</p> 
<p>Registration</p> 	<p>Certification</p> 		

DAY 1: BACKGROUND INFORMATION FOR ACTIVITY 1

Always Leave It Better Than You Found It

When you clean your room, wash the dishes, or take the garbage out you are being a good steward of your own home. **Stewardship** is taking care of possessions and property with consideration for others. The word stewardship is often associated with the environment and natural resources. In this regard, stewardship is related to the management of **natural resources** so they are available and in good condition for future generations.

Who thinks they know what a natural resource is? (Record answers on board)

Natural resources are the materials the environment provides necessary for our survival. They include water, air, trees, and many other resources. **Can you think of other natural resources?**

What can we do to be good stewards of our natural resources? Simply leave the environment in better condition than you found it. This might mean a little bit of work on your

part, but the payoff is priceless. To start, think about how the things you do affect natural resources. **Do you let the water run when**

you brush your teeth? At a park do you sometimes toss trash towards the garbage can and if it misses not bother to pick it up? Do you clean up after your dog in parks or along sidewalks? Are there other bad habits that you could change to become a better steward of the environment? One of the best habits you can

acquire to be a good steward is to simply follow the rules set by land managers.

The next step involves more effort. It is not just changing your habits but also correcting the damage made by others. These types of stewardship projects include education programs such as recycling or water conservation, cleaning up parks and recreation areas, repairing damaged trails, etc. It is this type of stewardship that truly leaves resources in better shape and provides continued opportunities to enjoy our natural resources in the future.

LEARNING OUTCOME

TO BETTER UNDERSTAND THE IMPORTANCE OF STEWARDSHIP OF OUR NATURAL RESOURCES STUDENTS WILL:

- DEFINE STEWARDSHIP AND NATURAL RESOURCES THROUGH ART.
- BRAINSTORM A STEWARDSHIP SERVICE LEARNING PROJECT RELATED TO NATURAL RESOURCES.

DAY 1: ACTIVITY 1

What is Stewardship?

Student Goals

- ✿ Define stewardship of natural resources by using pictures to create a themed collage.
- ✿ Brainstorm a stewardship project to be implemented as a culminating activity.



Activity At A Glance:

Students will create collages with magazine pictures depicting their idea of natural resource stewardship. They will then describe their idea to classmates. Upon completion of this activity, students will brainstorm a stewardship project.

Grades: 2nd - 6th

Time: 45 minutes to 1 hour

Materials Needed: glue, paper, scissors, many different magazines, and markers

Activity: What is Stewardship?

Read Aloud: Care for Our World by Karen Robbins

Part 1: Stewardship Collage

Part –Step 1: Review the list from the background info to define environmental stewardship with your class. Have your class brainstorm ideas and examples of environmental stewardship and why environmental stewardship is important.

Part 1—Step 2: Provide students with magazines, preferably with outdoor pictures including recreation, natural landscapes, etc. Have students create a collage that defines what environmental and natural resource stewardship means to them.

Part 1—Step 3: When students have completed their collages have them explain their reasoning for their picture choice either to the class or to a small group of students.

Part 2: Stewardship Project

Part 2—Step 1: Discuss natural resource issues in your community. Determine what issues are important to your community. For younger students you may want to provide the information for discussion. As a class choose an issue to focus on.

Part 2—Step 2: Once the class has picked an issue, learn more about the issue: whom it affects, and what is being done to alleviate the problem. Then, brainstorm ideas about the type of stewardship project the class could do relative to the issue. Have the class decide on the project, determine actions and goals, and choose a project name.

Project Ideas:

- ▶ Pick up trash around your school or along a local road, and reuse the trash to create signs about the consequences of littering.
- ▶ Work with local park or land managers to clean up a recreation area.
- ▶ Work with local park or land managers to plant trees.
- ▶ Write proposals, persuasive speeches, letters, and/or essays to promote community involvement in natural resource issues.

- ▶ Design informational posters to educate the public about a natural resource issue.
- ▶ Start a recycling program in your school.
- ▶ Work in a community garden, or create a garden at your school.

Part 2—Step 3: Create a plan, discuss the date of implementation, and assign responsibilities.

Discover How Fun The Outdoors Can Be When You Tread Lightly!

What is a value (or something that is valued)? A value is a belief or a characteristic of something that is important to you. Because these ideas or things are precious to us we treat them with respect; they guide our practices and actions. These behaviors often lead to rewarding outcomes as we are dealing with things we care about. What are some things you value? What are the associated rewards?

Values drive ethics. An ethic is a body of moral beliefs associated with a particular culture or group. Ethical pertains to what is right or wrong in conduct (behavior) and ethics are the rules of conduct

(behavior) important to a particular culture or group. What are some ethics in American culture?

Ethics apply to all parts of lives including natural resources. Environmental ethics focuses broadly on how we use our natural resources. This includes sustainable practices in grazing, forestry, water use, and mineral/oil extraction as well as pollution remediation and protecting ecosystems. A land ethic is an environmental ethic that focuses on how recreationists use the land for enjoyment while protecting it from damage. What type of values would drive a land ethic? What type of behaviors may be associated with a land ethic

LEARNING OUTCOME

TO BETTER UNDERSTAND THE REWARDS OF RESPONSIBLE RECREATION STUDENTS WILL

- UTILIZE BRAINSTORMING TO IDENTIFY THE VALUES AND REWARDS OF RESPONSIBLE RECREATION.
- WRITE A PARAGRAPH OR DRAW A PICTURE DESCRIBING THE REWARDS OF TREADING LIGHTLY.

DAY 2: ACTIVITY 2

Valuing The Land



Student Goals

- ✿ Through brainstorming, students will write their own definition of ethic and land ethic, as well as identify rewards related to ethics.
- ✿ Through the Values Game students will recognize that people value different things and it is important to respect those values.

Activity At A Glance:

Students will first identify things they value and the rewards and behaviors associated with them in a brainstorming activity from which they will come up with a group definition of ethic. Then they will play the Values Game to identify differing views individuals have related to ideas or items and how to respond to differences with respect. Finally, they will brainstorm values and ethics related to natural resources and recreation. Using that information they will write a story or draw a picture depicting their land ethic.

Time: *Part 1:* 30 minutes *Part 2:* 30 minutes *Part 3:* 30 minutes

Materials Needed: paper, pen/pencil, art supplies, and values game cards

Activity: Valuing The Land

Read Aloud: Care for Our World by Karen Robbins

Part 1: Values Brainstorm:

Part 1—Step 1: Let students brainstorm to determine what they care about or value. Give them several minutes to write down their ideas. Remind them that it can be ideas, activities, items, or people.

Part 1—Step 2: Now, brainstorm as a class. Have each student describe the most important items on his/her list. Write them on the board. Ask them why they value it and what are some of their behaviors associated with the item.

Part 1—Step 3: Now have students look for ideas that they have in common with their classmates. Write down those items. This is also a good time to ask students for ideas about what Americans value.

Part —Step 4: At this point bring in the word ethic. Let them know that the behaviors they have been talking about are sometimes called ethics. As a group come up with a definition for ethic.

Part 2: Values Game

Part 2—Step 1: Get out the Values Game cards. Have all students stand together in one location of the room.

Part 2—Step 2: Hold up one pair of cards, one in each hand. The students are to decide which item or topic they value more and to stand on the side you are holding the card on. For example: The teacher is holding the word Cat on the right and the word Dog on the left. If the student prefers dogs he/she should stand on the left side of the room. (*Note: The card pairs are ordered in the bottom right corner. All card pairs don't have to be used and you may create your own cards to better fit your group.*)

Part 2—Step 3: Once all the students have moved to the side for the topic they value most, the instructor asks one student from each side to tell why they value that item and what actions or rewards may result from its importance. The other group, upon hearing the reply is to say together "That's Cool." Then the other group, in turn, repeats why they value that item and the first group replies together, "That's Cool."

Part 2—Step 4: This activity should proceed in the same manner until the set of cards is completed.

Part 2—Step 5: Once the game is completed have the students return to their seats. Ask them to think about why they had to listen to each other without any reply other than “That’s Cool.” (*The response you are looking for is to respect others beliefs, values, and possessions even if they are not their own. We can still get along even if we have different values.*)

Part 3: Land Ethic (for grades 5 & 6)

Part 3—Step 1: Brainstorm with students about the value of our natural resources and some of our actions related to natural resources. You may have to define natural resource for your students. (*Natural Resource is something (actual and potential) supplied by nature i.e. soil, forests, air, water, oil, or minerals.*)

Part 3—Step 2: Ask students about the different types of recreation that are enjoyed on public or private lands and how they may affect natural resources. What types of behaviors protect natural resources or damage natural resources? Now bring the discussion back to ethics. As a group come up with a definition of land ethic.

Part 3—Step 3: Discuss the following examples with students and the land ethics associated with each example.

Example 1: *You are camping in a backcountry area where fires are permitted. There is no fire ring at your campsite. **What would be a behavior that indicates a land ethic?** Answer: Either not building a fire or building a fire ring and a fire, making sure the fire is completely out before leaving, dismantling the fire ring and burying or scattering the ashes. **What would be a behavior that would indicate lack of a land ethic?** Answer: Building a fire without a fire ring or with a fire ring and not removing the evidence.*

Example 2: *An ATV rider is on a designated trail and arrives at an open meadow with no trail through it. **What would be a behavior that indicates a land ethic?** Answer: Staying on the designated trail. **What would be a behavior that would indicate lack of a land ethic?** Answer: Traveling off trail through the middle of the meadow.*

Example 3: *An off-highway motorcycle rider is riding on a designated trail. He approaches a hill climb area that he was not aware of and is not sure if it is a designated climbing area. There are tracks all over the hill. **What would be a behavior that indicates a land ethic?** Answer: Traveling with a trail map and checking with authorities before your trip to avoid this situations but if you are still unsure it is best to Stay on the known designated trail and check later with a land manager as to the status of the hill climb area. **What would be a behavior that would indicate lack of a land ethic?** Answer: Climbing the hill without checking first.*

Example 4: *While hiking in the mountains you see many beautiful wild flowers. **What would be a behavior that indicates a land ethic?** Answer: Taking photographs and enjoying the view of the flowers. While some areas allow the picking of flowers, in many places it is illegal and unless you are certain of its legality its best to leave the flowers for others to enjoy. **What would be a behavior that would indicate lack of a land ethic?** Answer: Picking flowers without knowledge or regard to its legality. (Most wildflowers won’t even last the hike out.)*

Assessment: Option 1: Write a poem using the five senses about the parts of nature/natural resources the student values (i.e. I see the river dancing through the canyon. I hear the falcon calling out in delight. I smell... I taste... I touch...). Option 2: Draw a picture to illustrate the rewards of responsible recreation and protecting natural resources using an event you experienced or a natural place you care about.