Level: Grades K+

Time: 45 minutes to an hour depending on number of groups

Environment: Indoor or outdoor

Size: 2-7 groups of 3-5

Materials:
- What to Do What Not to Do handout (attached) cut into separate scenarios
- Props if desired (some good props include; a backpacking stove, a camera, a backpack, hiking boots, hiking clothes, etc.)

Objective: To learn the seven Leave No Trace™ hiking ethics principles and to understand how those principles are applied in real-life situations.

Procedure:
1. Print What to Do What Not To Do handout and cut so you have seven individual scenarios
2. Review the seven Leave No Trace Principles with your students and why they are important – Principle Handout for information on Leave No Trace™ Principles and check out www.lnt.org
3. Split groups into 2-7 groups of 3-5 students
4. Give each group a scenario
5. Each group come up with a skit to demonstrate how to deal with the scenario. First, they will read their scenario, and then they will act out the best way to act in that situation (how to act according to Leave No Trace™ hiking ethics) and then they will act out the WRONG way to deal with the scenario (the opposite of how a Leave No Tracer would act). Let the students know that they can (and should) be as goofy and creative as possible!
6. Have each group take turns reading their scenario to the class and presenting their skits.
7. After each skit discuss why the correct scenario was good and why the wrong scenario was not.

Extensions:
- Be creative and come up with new scenarios that are more complex or have a local focus. These could illustrate more than one principle.
Cut each out

Principle 1

Plan Ahead and Prepare

You are on a backpacking trip across the summit of Mount Mansfield. When you started hiking it was sunny and beautiful but now, at 2pm, the weather has taken a turn for the worse and it is POURING rain!! Are you prepared for the weather?

Principle 2

Travel and Camp on Durable Surfaces

You are hiking along the Long Trail about to finish your first end-to-end hike, which means you hiked all 272 miles of the trail! However, you come to a place in the trail that is soaked and muddy. You see that it would be possible to walk through the woods around the mud. What do you do?

Principle 3

Dispose of Waste Properly

After hiking all day on the Burrows Trail to Camel’s Hump, you stop to enjoy the well-deserved view and a yummy lunch. At the end of lunch you have some food scraps, dirty plastic bags, and wrappers left over. What do you do to dispose of these items?

Principle 4

Leave What You Find

You are hiking on the summit of Camel’s Hump, one of Vermont’s tallest mountains. The summit is covered with beautiful, small, rare flowers. You know that your mom would love to have these flowers to decorate the table at dinner tonight…what should you do?
Principle 5

Minimize Campfire Impact

You are hiking to Old Job shelter on the Long Trail in southern Vermont. It's getting late and you are SUPER hungry. However, there is no fire ring. What does it look like to be prepared for this situation?

Principle 6

Respect Wildlife

You are hiking on the top of Mansfield and a very curious Gray Jay looks interested in the trial mix you are snacking on – what should you do?

Principle 7

Be Considerate of Others

You are hiking in a large group with your summer camp on the Long Trail heading to Taft Lodge for the night. You notice that there is a family hiking quietly along coming towards you. What does it look like to be considerate of this family?
Principle #1: Plan Ahead and Prepare

Adequate trip planning and preparation helps backcountry travelers accomplish trip goals safely and enjoyably, while simultaneously minimizing damage to the land.

Pre-Trip Planning.
Poor planning often results in miserable campers and damage to natural and cultural resources. Rangers often tell stories of campers they have encountered who, because of poor planning and unexpected conditions, degrade backcountry resources and put themselves at risk.

Why is Trip Planning Important?
• It helps ensure the safety of groups and individuals.
• It prepares you to Leave No Trace and minimizes resource damage.
• It contributes to accomplishing trip goals safely and enjoyably.
• It increases self-confidence and opportunities for learning more about nature.

Other Elements to Consider:
• weather
• terrain
• regulations/restrictions
• private land boundaries
• average hiking speed of group and anticipated food consumption (leftovers create waste which leaves a trace!)
• group size (does it meet regulations, trip purpose and Leave No Trace criteria?)
• all Leave No Trace principles

What are Some Examples of the Results of Poor Trip Planning?
• A group that is inexperienced or unfamiliar with the geography of an area may put people at risk by traveling through areas susceptible to flash floods or along ridge tops vulnerable to lightning activity. Groups traveling arid lands often fail to carry adequate water or a way of purifying water from natural sources. Checking with local land managers and studying maps and weather conditions can contribute to a low-risk existence.
• A group that has failed to develop good travel plans may be unable to travel as fast as expected. The terrain may be too steep or the trails too rugged. These groups often resort to traveling late at night, which often leads to unnecessary resource damage. In addition, the group may never even reach their planned destination.

Principle #2: Travel and Camp on Durable Surfaces

Travel on Durable Surfaces: The goal of backcountry travel is to move through the backcountry while avoiding damage to the land. Understanding how travel causes impacts is necessary to accomplish this goal. Travel damage occurs when surface vegetation or communities of organisms are trampled beyond recovery.
The resulting barren area leads to soil erosion and the development of undesirable trails. Backcountry travel may involve travel over both trails and off-trail areas.

**Travel on Trails:** Concentrate Activities When Traveling in Heavily Used Areas. Land management agencies construct trails in backcountry areas to provide identifiable routes that concentrate foot traffic. Constructed trails are themselves an impact on the land; however, they are a necessary response to the fact that people travel in the back country. Concentrating travel on trails reduces the likelihood that multiple routes will develop and scar the landscape. It is better to have one well-designed route than many poorly chosen paths. Trail use is recommended whenever possible. Encourage travelers to stay within the width of the trail and not short cut trail switchbacks (trail zigzags that climb hill sides). Travelers should provide space for other hikers if taking breaks along the trail. The principles of off-trail travel should be practiced if the decision is made to move off-trail for breaks.

**Surface Durability:** The concept of durability is an important one for all backcountry travelers to understand. The following natural surfaces respond differently to backcountry travel.

- Rock, sand and gravel: These surfaces are highly durable and can tolerate repeated trampling and scuffing. (However, lichens that grow on rocks are vulnerable to repeated scuffing).
- Ice and snow: The effect of travel across these surfaces is temporary, making them good choices for travel assuming good safety precautions are followed and the snow layer is of sufficient depth to prevent vegetation damage.

Vegetation: The resistance of vegetation to trampling varies. Careful decisions must be made when traveling across vegetation. Select areas of durable vegetation, or sparse vegetation that is easily avoided. Dry grasses tend to be resistant to trampling. Wet meadows and other fragile vegetation quickly show the effects of trampling. Trampling encourages new travelers to take the same route and leads to undesirable trail development.

**Principle #3: Dispose of Waste Properly**

**Minimize Human Impacts**

**Human Waste:** Proper disposal of human waste is important to avoid pollution of water sources, avoid the negative implications of someone else finding it, minimize the possibility of spreading disease, and maximize the rate of decomposition. If an outhouse is available by all means use it!

If there is not an outhouse in the vicinity, burying human feces in the correct manner is the most effective method to meet these criteria. Catholes are the most widely accepted method of waste disposal. Locate catholes at least 200 feet (about 70 adult steps) from water, trails and camp. Select an inconspicuous site where other people will be unlikely to walk or camp. With a small garden trowel, dig a hole 6-8 inches deep and 4-6 inches in diameter. The cathole should be covered and disguised with natural materials when finished.

**Selecting a Cathole Site:**
1. Select an inconspicuous site untraveled by people. Examples of cathole sites include thick undergrowth, near downed timber, or on gentle hillsides.
2. Try to find a site with deep organic soil. This organic material contains organisms which will help decompose the feces. (Organic soil is usually dark and rich in color.)
3. If possible, locate your cathole where it will receive maximum sunlight. The heat from the sun will aid decomposition.
4. Choose an elevated site where water would not normally during runoff or rain storms. The idea here is to keep the feces out of water. Over time, the decomposing feces will percolate into the soil before reaching water sources.
**Toilet Paper:** Use toilet paper sparingly and use only plain, white, non-perfumed brands. Toilet paper must be disposed of properly! It should either be thoroughly buried in a cathole or placed in plastic bags and packed out. Natural toilet paper has been used by many campers for years. When done correctly, this method is as sanitary as regular toilet paper, but without the impact problems. Popular types of natural toilet paper include stones, vegetation and snow. Obviously, some experimentation is necessary to make this practice work for you, but it is worth a try! Attempting to burn toilet paper in a cathole rarely works and is not recommended.

**Tampons:** Proper disposal of tampons requires that they be placed in plastic bags and packed out. Do not bury them because they don’t decompose readily and animals may dig them up. It will take a very hot, intense fire to burn them completely.

**Urine:** Urine has little direct effect on vegetation or soil. In some instances urine may draw wildlife which are attracted to the salts. They can defoliate plants and dig up soil. Urinating on rocks, pine needles, and gravel is less likely to attract wildlife. Diluting urine with water from a water bottle can help minimize negative effects.

### Principle #4: Leave What You Find

Allow others a sense of discovery by leaving rocks, plants, archaeology artifacts and other objects of interest as you find them.

The activities for this Leave No Trace principle deal with cultural artifacts; however, leave what you find involves many aspects of outdoor use. The following information addresses a variety of ways to respect natural settings.

Picking a few flowers does not seem like it would have any great impact and, if only a few flowers were picked, it wouldn’t. But, if every visitor thought it was acceptable to just take a few, a much more significant impact might result. Take a picture or sketch the flower instead of picking it.

### Principle #5: Minimize Campfire Impact

Campfires can be an exciting part of a hiking trip however they can create the most damage to an area and danger for a group. Because of different local regulations, seek out information regarding campfires because they may be prohibited. Campfires cause lasting impacts to the backcountry and are discouraged along the Long Trail and side trails. In order to minimize campfire impact, use a portable stove for simple one pot meals instead of a fire. Where permitted, if you choose to build a fire, use only pre-existing fire rings. It is important to keep fires small and to only burn small dead, downed wood. Before you leave a fire, extinguish completely, then scatter the cool ashes.

### Principle #6: Respect Wildlife

Learn about wildlife through quiet observation. Do not disturb wildlife or plants just for a “better look”. Observe wildlife from a distance so they are not scared or forced to flee. Large groups often cause more damage to the environment and can disturb wildlife so keep your group small. If you have a larger group, divide into smaller groups if possible to minimize your impacts.

Quick movements and loud noises are stressful to animals. Travel quietly and do not pursue, feed or force animals to flee. In hot or cold weather, disturbance can affect an animals ability to withstand the rigorous environment. Do not touch, get close to, feed or pick up wild animals. It is stressful to the animal, and it is possible that the animal may harbor rabies or other diseases. Sick or wounded animals can bite, peck or scratch and send you to the hospital. Young animals removed or touched by well-meaning people may cause the animals parents to abandon them. If you find sick animals or animal in trouble, notify a game warden.
Considerate hikers observe wildlife from afar, give animals a wide berth, store food securely, and keep garbage and food scraps away from animals. Remember that you are a visitor to their home.

**Principle #7: Be Considerate of Other Visitors**

One of the most important components of outdoor ethics is to maintain courtesy toward other visitors. It helps everyone enjoy their outdoor experience. Many people come to the outdoors to listen to nature. Excessive noise, unleashed pets and damaged surroundings take away from everyone’s experience. So, keep the noise level down while traveling and if you bring a radio, tapes or CDs, use headphones so you will not disturb others. Also keep in mind that the feeling of solitude, especially in open areas, is enhanced when group size is small, contacts are infrequent and behavior is unobtrusive. To maximize your feeling of privacy, avoid trips on holidays and busy weekends or take a trip during the off season. Take rest breaks on durable surfaces well off the designated trail. Keep in mind that visitors to seldom used places require an extra commitment to travel quietly and lightly on the land.

Keep pets under control at all times. Bowser is not in the wildlife category. Dogs running free can be unwelcome, frightening people or leaving behind unwanted "presents". Please pick up dog feces from camps and trails. Some areas prohibit dogs or require them to be on a leash at all times.