

Leave No Trace – The Seven Principles

The Seven Principles of Leave No Trace provide an easily understood framework of minimum impact practices for anyone visiting the outdoors. Although Leave No Trace has its roots in backcountry settings, the Principles have been adapted so that they can be applied anywhere — from remote wilderness areas, to local parks and even in your own backyard. They also apply to almost every recreational activity. Each Principle covers a specific topic and provides detailed information for minimizing impacts.

The Seven Principles are well established and widely known, but they are not static. The Leave No Trace Center for Outdoor Ethics continually examines, evaluates and reshapes the Principles. The Center's Education Department conducts research — including publishing scholarly articles in independent journals — to ensure that the Principles are up to date with the latest insights from biologists, land managers and other leaders in outdoor education.

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. 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.

Seven Elements to Consider When Planning a Trip

Identify and record the goals (expectations) of your trip.

Identify the skill and ability of trip participants.

Gain knowledge of the area you plan to visit from land managers, maps, and literature.

Choose equipment and clothing for comfort, safety, and Leave No Trace qualities.

Plan trip activities to match your goals, skills, and abilities.

Evaluate your trip upon return note changes you will make next time.

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?)

2. Travel and Camp on Durable Surfaces

The goal of travel in the outdoors is to move through natural areas while avoiding damage to the land or waterways. 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

Land management agencies construct trails to provide identifiable routes that concentrate foot and stock traffic. Constructed trails are themselves an impact on the land; however, they are a necessary response to the fact that people travel through natural areas.

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 shortcut trail switchbacks (trail zigzags that climb hillsides).

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. Hikers in the same group should periodically stop to rest and talk. Avoid shouting to communicate while hiking. Loud noises usually are not welcome in natural areas.

Travel Off-trail

All travel that does not utilize a designed trail such as travel to remote areas, searches for bathroom privacy, and explorations near and around campsites is defined as off-trail. Two primary factors increase how off-trail travel affects the land: durability of surfaces and vegetation, and frequency of travel (or group size).

Durability refers to the ability of surfaces or vegetation to withstand wear or remain in a stable condition.

Frequency of use and large group size increase the likelihood that a large area will be trampled, or that a small area will be trampled multiple times.

3. Dispose of Waste Properly

The Center encourages outdoor enthusiasts to consider the impacts that they leave behind, which will undoubtedly affect other people, water and wildlife.

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.

4. Leave What You Find

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

Minimize Site Alterations

Leave areas as you found them. Do not dig trenches for tents or construct lean-tos, tables, chairs or other rudimentary improvements. If you clear an area of surface rocks, twigs or pine cones replace these items before leaving. For high-impact sites, it is appropriate to clean up the site and dismantle inappropriate user-built facilities, such as multiple fire rings and constructed seats or tables. Consider the idea that good campsites are found and not made.

In many locations, properly located and legally constructed facilities, such as a single fire ring, should be left in place. Dismantling them will cause additional impact because they will be rebuilt with new rocks and thus impact a new area. Learn to evaluate all situations you find.

5. Minimize Campfire Impacts

Fires vs. Stoves: The use of campfires, once a necessity for cooking and warmth, is steeped in history and tradition. Some people would not think of camping without a campfire. Campfire building is also an important skill for every camper. Yet, the natural appearance of many areas has been degraded by the overuse of fires and an increasing demand for firewood. The development of lightweight efficient camp stoves has encouraged a shift away from the traditional fire for cooking. Stoves have become essential equipment for minimum-impact camping. They are fast, flexible and eliminate firewood availability as a concern in campsite selection. Stoves operate in almost any weather condition—and they Leave No Trace.

Should You Build a Fire?

The most important consideration when deciding to use a fire is the potential damage to the backcountry.

What is the fire danger for the time of year and the location you have selected?
Are there administrative restrictions from the agency that manages the area?
Is there sufficient wood so its removal will not be noticeable?

Does the harshness of alpine and desert growing conditions for trees and shrubs mean that the regeneration of wood sources cannot keep pace with the demand for firewood? Do group members possess the skills to build a campfire that will Leave No Trace?

Lessening Impacts When Campfires Are Used

Camp in areas where wood is abundant if building a fire. Choose not to have a fire in areas where there is little wood at higher elevations, in heavily used areas, or in desert settings. A true Leave No Trace fire shows no evidence of having been constructed.

Existing Fire Rings

The best place to build a fire is within an existing fire ring in a well-placed campsite. Keep the fire small and burning only for the time you are using it. Allow wood to burn completely to ash. Put out fires with water, not dirt. Dirt may not completely extinguish the fire. Avoid building fires next to rock outcrops where the black scars will remain for many years.

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. (One exception is in bear country where it is good to make a little noise so as not to startle the bears.) In hot or cold weather, disturbance can affect an animal’s 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 animals in trouble you should notify a game warden.

Considerate campers 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.

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, uncontrolled pets and damaged surroundings take away from the natural appeal of the outdoors.

The feeling of solitude, especially in open areas, is often 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.

Technology continues to shape the outdoor experience. Personal preferences range from high-tech outdoor travelers, who might want to listen to music and collect images on their devices, to an anti-tech perspective that favors a minimal use of gadgets. Different strokes for different folks, but be sure to thoroughly consider how your experience is affecting the way someone else enjoys the outdoors. For example, earbuds may be a less obtrusive way to enjoy music than external speakers, but if you have the volume turned so high that you can't hear someone behind you who wants to pass, your personal preference for music will negatively affect other people.

The general assumption on a narrow trail is that hikers headed downhill will step aside to allow an uphill foot traveler to easily pass. In many places, there's an expectation that hikers will yield to equestrians, and that bicyclists will yield to both hikers and equestrians on trails. Stay in control when mountain biking. Before passing others, politely announce your presence and proceed with caution.