

"Adventurer's MK has adopted the principles of Leave No Trace, which are easy to learn and apply. As each principle is learned, it should be applied. Every outing and activity should be conducted with Leave No Trace in mind. As young people mature, we will enjoy an increasingly beautiful environment because of the impact of their training in Leave No Trace. As members of Adventurer's MK, we should be good stewards of our environment through knowledgeable use of resources. We all must take responsibility for our decisions when we use the outdoors, and we should treat the environment with respect so future generations can enjoy the outdoors as we do today."

Brief History of Leave No Trace

The Leave No Trace concept is over 50 years old. Leave No Trace was formally conceived of by the National Forest Service in the 1960's. However, as public land use expanded and land managers witnessed the adverse effects of this use, the Forest Service along with the National Park Service and the Bureau of Land Management developed early wilderness ethics practices. In the late 1970s, the Boy Scouts and other groups began to introduce the concept of "minimum impact camping."

By the mid-1980's, the Forest Service had a formal "No-Trace" program emphasizing the cultivation of new wilderness ethics and sustainable no-trace travel and camping practices. In the early 1990s, the agencies formed an independent nonprofit organization called Leave No Trace, Inc. The organization, now known as the Leave No Trace Centre for Outdoor Ethics (the Center), was incorporated to develop and expand Leave No Trace training and educational resources, and to spread the general program components. Around the middle 1990s, the Boy Scouts began to introduce the language of Leave No Trace into its publications and program.

Introduction

We face countless "Leave No Trace" decisions as part of an active outdoor program. Every new outdoor activity and location adds more interesting challenges as we try to minimize recreational damages while meeting outdoor program goals. Each decision can be as simple as choosing where to pitch a tent or which way to walk across a meadow, but the sheer number of these decisions can be overwhelming to an unprepared unit.

A novice camper needs to understand quite a few simple and very practical guidelines to make Leave No Trace a valid part of their first camping trip. The youth leaders of a busy outdoor adventure program must be able to deal with how Leave No Trace applies to a variety of activities in a variety of environments during a variety of seasons ... all done in the company of a variety of youth and adults who have various levels of outdoor skills, self discipline, and commitment to an outdoor ethic.

The Seven Principles of Leave No Trace

The seven Principles of Leave No Trace provide a framework for the overall Leave No Trace message:

- 1. Plan Ahead and Prepare
- 2. Travel and Camp on Durable Surfaces
- 3. Dispose of Waste Properly
- 4. Leave What You Find
- 5. Minimize Campfire Impacts
- 6. Respect Wildlife
- 7. Be Considerate of Other Visitors

Leave No Trace Principles –

Travel and Camp on Durable Surfaces

- Durable surfaces include established trails and campsites, rock, gravel, dry grasses or snow.
- Protect riparian areas by camping at least 200 feet from lakes and streams.
- Good campsites are found, not made. Altering a site is not necessary.
- Concentrate use on existing trails and campsites.
- Walk single file in the middle of the trail, even when wet or muddy.
- Keep campsites small. Focus activity in areas where vegetation is absent.
- Disperse use to prevent the creation of campsites and trails.
- Avoid places where impacts are just beginning.

The key concept for this principle is that vegetation and substrates vary considerably in their fragility to trampling damage. Outdoor recreationists can minimize their impact by concentrating their traffic, whether hiking, resting, cooking/eating, or sleeping, on the most durable substrate available. Durable surfaces are surfaces that show little sign of your passing. They include existing trails, established campsites, gravel, sand and dry grassy meadows. In canyon country, the best travel surface is often on slickrock or dry washes, while in the alpine zone it may be over snow or ice.

Generally speaking, the best Leave No Trace practice is to stick to trails and established campsites until they have the skills necessary for dispersed travel in pristine areas. Off-trail travel requires education and scrupulous attention to Leave No Trace techniques. Failure to adhere to these practices can cause lasting impacts on the environment.

- Stick to well-established trails when traveling, including areas around campsites. Avoid
 faint trails and off-trail traffic to protect plants and soils. Traveling single file near the
 centre of the trail will avoid trail widening.
- Choose a campsite large enough for your group or divide into smaller groups and use two or three smaller established or otherwise durable campsites.
- Concentrate all activities on the most durable or previously disturbed surfaces and avoid trampling plants.
- Gather as a large group only on durable surfaces.

The trick is to use what we enjoy, while helping to preserve it. Leave No Trace is a national and international program to help us all make good decisions about how to practice and improve our outdoor skills, and the personal enjoyment we earn can be immense. So can our collective impact.

Recreational activities related to the trampling and removal of vegetation cover, dead trees, and woody debris at campsites and along trails constitute the primary impacts to wildlife habitat. Outdoor visitors can minimize these impacts by concentrating traffic on designated trails and campsite, keeping them narrow and small and avoiding the creation and proliferation of expansive networks of informal (visitor-created) trails.

Shortcutting trail switchbacks causes gullying and erosion. When traveling on established trails, hike in single file and stay on the path. Walking outside the tread—in order to travel abreast of your companions or to avoid obstacles such as mudholes, snowbanks and fallen logs—breaks down the trail's edges and leads to widening and to the creation of multiple, parallel trails. If a trail is impassable at a certain point, try to get around the obstacle by walking on rocks, snow, uncrusted sand, downed logs or similar no vegetated footing.

Leave No Trace Principles – Dispose of Waste Properly

- Pack it in, pack it out. Inspect your campsite and rest areas for trash or spilled foods. Pack out all trash, leftover food, and litter.
- Deposit solid human waste in catholes dug 6 to 8 inches deep at least 200 feet from water, camp, and trails. Cover and disguise the cathole when finished.
- Pack out toilet paper, medical wastes and hygiene products.
- To wash yourself or your dishes, carry water 200 feet away from streams or lakes and use small amounts of biodegradable soap. Scatter strained dishwater.

Pack it in, pack it out. This is the primary rule for any group that goes into the outdoors. Groups have a responsibility to the resource and to those who come after them to leave the water and land free of trash and food scraps. These things often attract wildlife or otherwise alter their natural behaviour with serious long-term effects. There is no 'acceptable' waste, not even that which is biodegradable, such as banana peels and apple cores. If your group carried it in, carry it out. If trash is found that someone else left behind, carry it out, too. Medical wastes and personal hygiene products should be packed out, as well. Unscented toilet paper is preferred and is best packed out, but the instructor should assess the group and, if this appears to be unacceptable, then the toilet paper should be completely buried in the cathole.

There are four primary goals behind the proper disposal of human waste:

- 1. Minimize the chances of water pollution
- 2. Minimize the chances that other people, animals or insects could come into contact with the waste and then potentially spread disease
- 3. Minimize any aesthetic issues associated with human waste
- 4. Maximize the decomposition rate

Think carefully about the maturity of your group when considering how you will dispose of human waste. With children and novices, you will need to be extremely diligent about instruction and compliance, and you may want to camp near toilet facilities, trashcans and potable water initially.

Here are some helpful hints:

- A variety of commercial products are available for carrying out human waste. These products minimize odour, leakage and disposal problems.
- In most areas, catholes are another acceptable option for human waste disposal.
 Catholes should be 6-8 inches deep and located 200 feet (70 adult paces) from any water source or intermittent drainages. Instruct your group thoroughly on the appropriate use of catholes and carry trowels for digging.
- Pack out toilet paper in plastic bags. Baby wipes are useful for reducing odour and improving cleanliness.
- Strain dishwater to remove food scraps, pack these out with the rest of your trash. Strained dishwater can be scattered well away from camp.
- Wash dishes or bathe more than 200 feet from water sources and minimize use of soap.
- Inspect your campsite and lunch areas carefully for trash or food scraps before moving
- Reducing the waste you bring into the environment will inevitably mean less waste you
 would need to carry out.

Pack out every scrap of your own litter plus as much of that left by others as you can find room for (litter attracts more litter). Spruce up the wilderness on the way out, when your pack is light.

Leave No Trace Principles – Leave What You Find

- Preserve the past: examine, but do not touch, any cultural or historic structures and artefacts.
- Leave rocks, plants and other natural objects as you find them.
- Avoid introducing or transporting non-native species.
- Do not build structures, furniture, or dig trenches.

Young people love to build dams and stick shelters and take home turtles as pets. Adults often catch a "collecting bug" and load their packs with interesting rocks, feathers, seashells, flowers, potshards and arrowheads. In the outdoors, these activities change the aesthetics of a site and generally have a lasting impact on the ecology and the cultural or historical record. Consider the cumulative impact if everyone took home a memento.

Help your group recognize the magic of unaltered nature. Keep people active so they don't get bored and start elaborate construction projects. Inspect your campsite before you leave and do your best to restore the site. Here are some helpful hints:

- Make sure all members of your group know the law. In many places, collecting everything from fossils to wild plants—is illegal.
- Before you approach a cultural or historic site, sit down with your group and tell them the story of the site. Help them recognize its value and the need to leave it untouched so it can be enjoyed by others in the future.
- Supervise your group around sensitive plants, animals or cultural sites. A crushed plant
 or collapsed wall can happen very quickly with energetic youth, no matter how well
 meaning they are.

The practice of people is picking up a "hiking sticks" when they go for a walk has been with us forever. But is it good environmental practice? Most often, instead of being used as a tool – They are being misused whacking trees, bushes (and other youth) and are dumped far from their original location. What about the trees that has been plucked of its leaves? or the habitat that is disturbed during these activities?

Remember everything we disturb has a lasting effect of the environment. What may seem like just a stick is habitat and food for small mammals and bugs. Every living thing is connected in one way or another.

Grant those who come after you a sense of discovery by leaving rocks, plants and other natural objects as you found them. Enjoy an occasional edible plant, if you choose, but be careful not to deplete the vegetation in any one area, or to disturb plants that are rare or don't reproduce in abundance (such as many edible lilies).

In searching for a campsite, your goal is to find an area that will not be damaged by your stay. Since fire rings and other evidence of previous visitation tend to attract more of the same, camp at a pristine site only if you are willing and able to leave absolutely no sign of your stay. Avoid critical wildlife habitats and fragile terrain such as lake shores and stream banks. When possible, it's always better to camp at established sites where your stay will cause no additional damage.

Leave No Trace Principles – Minimize Campfire Impacts

- Campfires can cause lasting impacts to the backcountry. Use a lightweight stove for cooking and enjoy a candle lantern for light.
- Where fires are permitted, use established fire rings, fire pans, or mound fires.
- Keep fires small. Only use sticks from the ground that can be broken by hand.
- Burn all wood and coals to ash, put out campfires completely, and then scatter cool ashes.

Fires have their role. Many groups bond by telling stories, roasting marshmallows, or just hanging out around a campfire, but campfires have been over used in many places. It's easy to find campfire pits overflowing with charcoal and trash, damaged and felled trees and areas stripped of all available wood. Use this information to reinforce the use of minimum-impact fires or to encourage your group to forgo fires altogether.

Here are some helpful hints:

- Carry and use stoves, minimize campfire use.
- Substitute candle lanterns for campfires or enjoy the night time without any artificial lighting.
- Select and use only pre-existing fire sites, or use fire pans or mound fires in areas with durable surfaces, especially if it's to serve as a gathering area.
- Leave axes, saws, and hatchets at home. Collect only dead and downed wood that can be broken by hand.
- Keep campfires small and burn them for a short time to conserve wood.
- Tend to fires and ensure they don't get out of control.
- Burn all wood and charcoal completely to ash before putting the fire out.

Another issue is where are we getting the fuel for our fire? Collecting wood in an area that has already been devoured of deadfall can have a serious impact on the ecological status of the site you are using, not to mention the impact on the wildlife and bugs that have been deprived of a habitat from that very wood.

Substituting stoves and candle lanterns for campfires can preserve woody debris and brush that provide habitat for insects and the wildlife that feed on them. If campfires are burned, collecting dead and downed wood that can be broken by hand will preserve the standing dead trees so important to cavity nesting wildlife, insects, and forest nutrient cycles.

Lightly impacted sites—those that have obviously been used a time or two but which remain largely undamaged—should always be avoided; such sites, if left alone, might eventually recover, but will deteriorate rapidly with further use. (Before passing by such a site, though, take a minute to pick up any bits of litter lying about, break up fire rings and bury or scatter the coals, and do anything else you can to repair the damage.)

Leave No Trace Principles – Respect Wildlife

- Observe wildlife from a distance. Do not follow or approach them.
- Never feed animals. Feeding wildlife damages their health, alters natural behaviours, and exposes them to predators and other dangers.
- Protect wildlife and your food by storing rations and trash securely.
- Control pets at all times, or leave them at home.
- Avoid wildlife during sensitive times: mating, nesting, birthing, raising their young, or in winter.

Helping wildlife stay wild is an important Leave No Trace concept. Wildlife around the world face threats from loss and fragmentation of habitat, invasive species, pollution, over-exploitation, poaching and disease. Protected lands offer a refuge from some, but not all, of these problems. Consequently, wildlife need recreationists who will promote their survival rather than add to the difficulties they already face. Here are some helpful hints:

- Investigate wildlife concerns prior to your trip. Carry the equipment you need to store
 your food out of reach of animals. This may require bear canisters, ropes for hanging
 food, or simple plastic food containers to keep rodents away.
- Don't disturb animals, especially during mating or birthing season. If you see their behaviour change due to your presence, you are too close. Change your travel path, move away and lower your voice.
- Observe animals from a distance. Carry binoculars, a telephoto camera lens or a spotting scope to enhance your viewing.
- Pick up all food scraps, even tiny crumbs, and pack them out with your garbage so animals don't come to associate humans with food.
- Supervise youth around wildlife. Educate them about the rationale for not chasing, disturbing, feeding or getting too close to animals. Get group members excited about observing animals without disturbing them.

When out in nature, consider how your presence impacts on the local wildlife – How would you feel if you were suddenly approached by a pack of wolves or a herd of cows? Most animals will avoid humans if they hear them coming, and some animals such as bears, are not welcome within close proximity.

Visitors who approach wildlife too closely, often to view or photograph them, frequently cause them to stop feeding or resting, and to flee the area. Such impacts can be significant when wildlife are nesting, raising young, or trying to survive a long harsh winter. These impacts are avoided when visitors alter their own behaviour to avoid disturbing wildlife. If an animal stops feeding, resting, or moves off then you were too close or loud. Using binoculars and telephoto lenses can help visitors observe wildlife from a safe distance.

Feeding wildlife is a particularly inappropriate and harmful activity. Wildlife that obtain human food and trash suffer nutritionally, become dependent on unreliable food sources, and are susceptible to predators and vehicle collisions. Even food scraps from dishwater and micro-trash are enough of an attraction to bring bears, raccoons, and mice into our campsites where they can harm us, our food, and our gear. Not feeding wildlife intentionally is insufficient, we must also keep a very clean camp and store our food safely out of reach of wildlife.

Leave No Trace Principles – Be Considerate of Other Visitors

- Respect other visitors and protect the quality of their experience.
- Be courteous. Yield to other users on the trail.
- Step to the downhill side of the trail when encountering pack stock.
- Take breaks and camp away from trails and other visitors.
- Let nature's sounds prevail. Avoid loud voices and noises.

One of the primary arguments land managers use for limiting group size is that large groups have profound social impacts on other visitors. This impact can be mitigated by behaviour. A courteous, well-behaved group can do wonders to minimize the potential negative issues associated with large groups. Here are some helpful hints:

- Be aware and considerate of others. Move off the trail to a durable surface for breaks or to allow faster travellers to pass.
- Advise group members that voices carry long distances and that many visitors attach great importance to finding solitude.
- Break into smaller groups for travel. Camp and meet in larger groups only in locations out-of-sight and earshot from other visitors. Avoid camping in large groups near shelters and other popular camping spots. Save those areas for individuals or smaller groups.
- Remember, a group size limit of 10 means that your group never congregates in numbers greater than 10. If your group is larger than the area's group size limit, break into smaller sub-groups to travel and camp—if this approach is allowable under local rules and regulations.
- Visit and enjoy, but don't monopolize, water sources, viewpoints or other areas of interest.

When taking a break, move off the trail and look for a durable rest area—such as a rock outcropping or a dry, grassy clearing. By taking a few extra steps, you'll enjoy more natural surroundings and also avoid being disturbed by (and disturbing) other hikers on the trail.

Should you meet horses on a trail, move aside and allow them plenty of room to pass. Since horses and mules are skittish, your entire party should move off to the same side of the trail—if possible, the downhill side—and stand quietly until the animals have passed. Sometimes it helps to speak, in a calm voice, to the first rider, giving polite notice of your presence.

Leave No Trace Principles – Plan Ahead and Prepare

- Know the regulations and special concerns for the area you'll visit.
- Prepare for extreme weather, hazards, and emergencies.
- Schedule your trip to avoid times of high use.
- Visit in small groups. Split larger parties into groups of 4-6.
- Repackage food to minimize waste.
- Use a map and compass to eliminate the use of temporary trail markers

Group leaders: Choosing your co-leaders can be challenging. If possible, select leaders experienced in outdoor skills, teaching and Leave No Trace practices. Ideally, you'd like to have sufficient leadership to break the group into small, independent teams to travel and camp. Check with local land management agencies to find out what the group size limits are for the areas you plan to visit. Train your co-leaders in Leave No Trace skills and ethics and be specific about the traveling and camping techniques you will be using. Introduce the Leave No Trace principles to the entire group before you head into the out-of-doors so everyone understands what is expected of them. Remember to plan realistically. Match your group's goals and skills with your trip objectives. Here are some helpful hints:

- Check with local land management agencies regarding permits, group size requirements and area-specific rules, regulations, and Leave No Trace practices before you leave for your trip.
- A group size limit of 10 means that your group never congregates in numbers greater than 10. If your group is larger than the area's group size limit, break into smaller subgroups to travel and camp—if this approach is allowable under local rules and regulations.
- Avoid the most popular and congested areas, or visit them during times when they are less crowded.
- Check with land managers about campfire policies. Leave axes, hatchets, and saws at home. They are unnecessary for a fire during an outing, when only "dead and down" wood smaller than your wrist and broken by hand should be used. Land managers actively discourage the use of these woods tools for camping. We should respect their preferences. If you need to teach axe, hatchet or saw safety and use for advancement or conservation purposes, do so during unit meetings, service projects, or at areas, such as Scout camps, where such use is appropriate.
- Reduce trash by repackaging food and plan your meals so you don't have leftovers.
- Check with local land management agencies on recommended routes and suitable camping locations. If possible, scout the route yourself to find the best and most durable travel corridors, lunch sites and camping spots for your group.
- Bring equipment that facilitates low-impact practices: trash bags, camp stoves, trowels for digging catholes and strainers for dishwater.

Proper planning is essential when venturing out in the great outdoors – wearing the correct clothing appropriate to the weather and carrying the right equipment for your needs eliminates the need for any negative impact caused by the creation on personal comforts from natural resources.