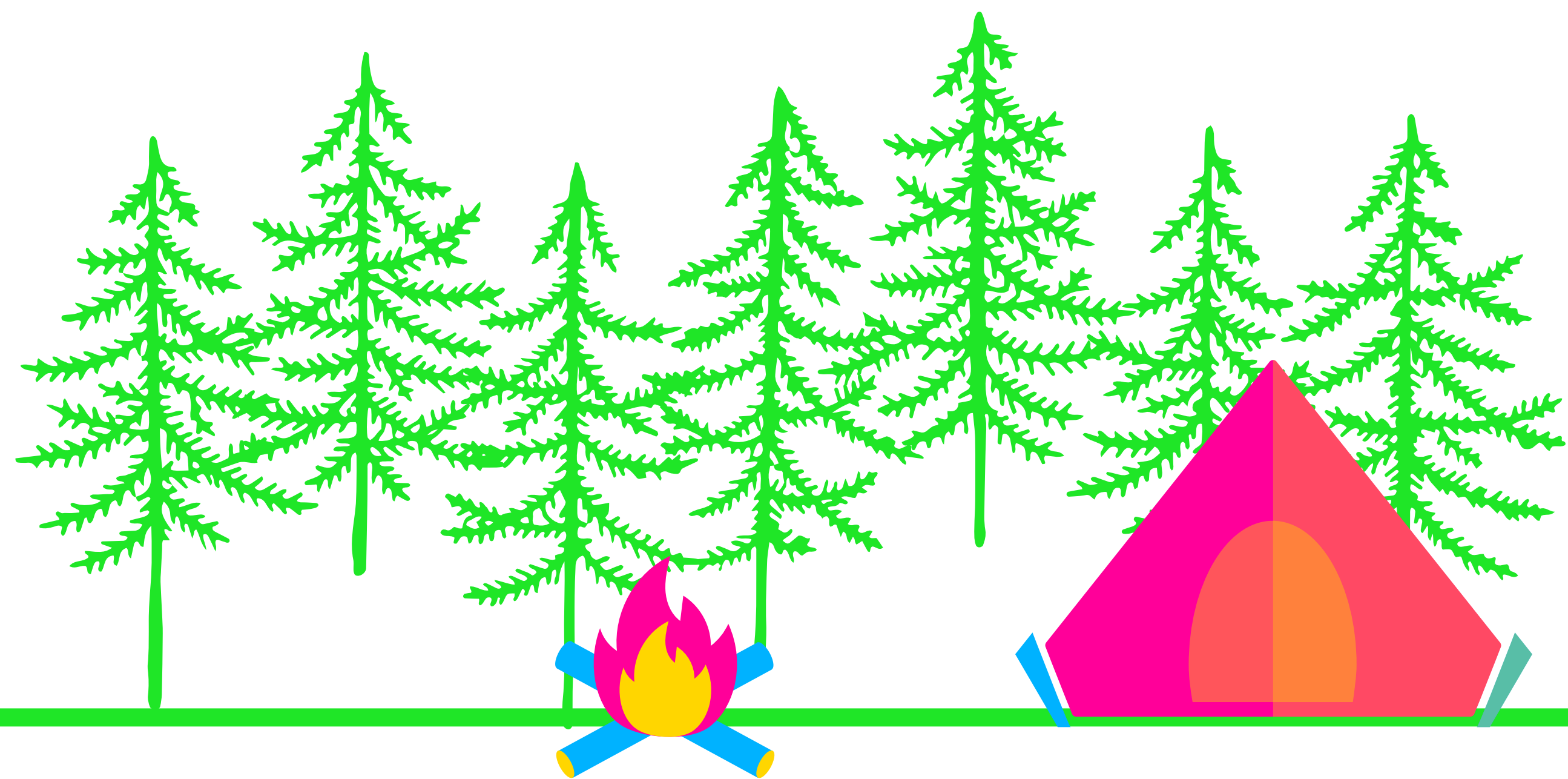


ACTIVITY SHEETS

# Raising Awareness of Leave No Trace Principles

Gold Award Project by Grace Breshears of Troop 9327



## PRINCIPLE 1

# Plan Ahead & Prepare

### OVERVIEW

Adequate trip planning and preparation help backcountry travelers accomplish trip goals safely and enjoyably, while 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 who, because of poor planning and unexpected conditions, degrade backcountry resources and put themselves at risk.

### SIX ELEMENTS TO CONSIDER WHEN PLANNING A TRIP

- Identify and record the goals (expectations) of your trip.
- Assess the skills and abilities 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?)

### 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.

## Discussion & Game

### DAISIES AND BROWNIES

Ask:

- What do you think we should do before we go on a trip?
- What should we do to be prepared for different weather situations?
- What items should we take with us?

### JUNIORS

Come up with a camping trip gone wrong because something that wasn't planned for. Tell the girls what happened and ask them what they could have done differently while planning.

### CSA

Split girls into groups or have them work together as one big team to plan out a camping trip. Have them discuss each of the elements to consider that are listed above. If you plan on going somewhere and it is not supposed to rain, then how could you prepare in case the weather changes.

### HUMAN KNOT

Arrange girls into a circle, standing shoulder to shoulder. Tell everyone to put their right hand up in the air, and then grab the hand of someone across the circle from them. Repeat the same with everyone's left hand. Check to make sure that everyone is holding the hands of two different people and that they are not holding hands with someone directly next to them. Get them to untangle themselves to make a circle without breaking the chain of hands. If they break the chain they all need to start over.

In this game, if everyone starts moving straight away without planning as a team it is extremely hard to solve. It is important to plan as much as you can before you go on a trip.

### LEARN MORE



<https://lnt.org/why/7-principles/plan-ahead-and-prepare/>

## PRINCIPLE 2

# Travel & Camp on Durable Surfaces

### OVERVIEW

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

### 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).

### 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 people traveling 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.

### CAMP ON DURABLE SURFACES

A decision about where to camp should be based on information about the level and type of use in the area, the fragility of vegetation and soil, the likelihood of wildlife disturbance, an assessment of previous impacts, and your group's potential to cause or avoid impact.

## Discussion & Game

### DAISIES AND BROWNIES

Explain to the girls what durability and frequency means. Ask:

- What do you think would happen if we did not stay on the trails?
- What things might you miss out on if you are making loud noises while hiking?

### JUNIORS

Discuss the importance of keeping areas in their natural state as much as we possibly can. What is erosion and why can it be bad for the environment? Why is it so important to stay on the trail as much possible? What might happen if we didn't?

### CSA

Discuss the importance of traveling and camping on durable surfaces. What affect would we have on the environment if we didn't? What would the outdoors look like if we trampled over every living thing? What can we do to help preserve what nature looks like now?

### PASS THE SHOE

Arrange girls in a circle. Everyone needs to have a shoe in front of them. Each girl takes their shoe in their right hand and passes it to the right in rhythm (on each of the underlined, italicized words). On the first "do", everyone keeps the shoe they have and taps it on the floor to their right. On "what", the same shoe is tapped on the floor to the left. On the second "do", everyone passes their shoe to their right-hand neighbor. Repeat a number of times, getting faster and faster!

You must pass this shoe from me to you, to you.  
You must pass this shoe and do just what I do.

In this game the shoes remind you to travel on durable surfaces.

## LEARN MORE



<https://lnt.org/why/7-principles/travel-camp-on-durable-surfaces/>



## PRINCIPLE 3

# Dispose of Waste Properly

### OVERVIEW

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

### "PACK IT IN, PACK IT OUT"

Any user of recreation lands has a responsibility to clean up before he or she leaves. Inspect your campsite and rest areas for trash or spilled foods. Pack out all trash and garbage. Plan meals to avoid generating messy, smelly garbage. It is critical to wildlife that we pack out kitchen waste, such as bacon grease and leftovers. Don't count on a fire to dispose of it. Garbage that is half-burned or buried will still attract animals and make a site unattractive to other visitors. Overlooked trash is litter, and litter is not only ugly—it can also be deadly. Plastic bags, fishing line and other trash can be harmful to our environment when not properly disposed of. Carry plastic bags to haul your trash (and maybe someone else's). Before moving on from a camp or resting place, search the area for micro-trash such as bits of food and trash, including organic litter like orange peels or pistachio shells.

### WASTEWATER

Hand sanitizers that don't require rinsing allow you to wash your hands without worrying about wastewater disposal. For dishwashing, use a clean pot or other container to collect water, and take it to a wash site at least 200 feet away from water sources. This lessens trampling of lakeshores, riverbanks and springs, and helps keep soap and other pollutants out of the water. Use hot water, elbow grease, and soap if absolutely necessary. Strain dirty dishwater with a fine mesh strainer before scattering it broadly. Do this well away from camp, especially if bears are a concern. Pack out the contents of the strainer in a plastic bag along with any uneaten leftovers. In developed campgrounds, food scraps, mud and odors can accumulate where wastewater is discarded. Contact your campground host for the best disposal practices and other ways to Leave No Trace at your campsite.

### SOAPS AND LOTIONS

Soap, even when it's biodegradable, can affect the water quality of lakes and streams, so minimize its use. Where fresh water is scarce, think twice before swimming in creeks or potholes. Lotion, sunscreen, insect repellent and body oils can contaminate these vital water sources.

## Discussion & Game

### DAISIES AND BROWNIES

Ask:

- How far away from a water source do we need to be to wash dishes?
- What kind of trash do you think we might have from a camping trip?
- What should we do with our trash?

### JUNIORS

Talk about the importance of taking your trash with you. How could you keep down the amount of trash that you might produce on a hike or camping trip? What do we do on camping trips that might affect the water quality of nearby water sources?

### CSA

Think about the camping trip you've been planning as you have walked along the trail. Discuss ways that you could minimize the amount of waste you would produce. What would happen if everyone left their trash? Think of somewhere where environmental waste impacted a city or area?

### TRASH SONG (TUNE: LONDON BRIDGE)

Trash is blowing all around,  
All around, all around.  
Trash is blowing all around,  
All around the town.  
Let's get busy and pick it up,  
Pick it up, pick it up.  
Let's get busy and pick it up,  
All around the town.  
Put the trash in a big trash bag,  
Big trash bag, big trash bag.  
Put the trash in a big trash bag,  
All around the town.

### LEARN MORE



<https://lnt.org/why/7-principles/dispose-of-waste-properly/>

## PRINCIPLE 4

# Leave What You Find

### OVERVIEW

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

### LEAVE NATURAL OBJECTS AND CULTURAL ARTIFACTS

Natural objects of beauty or interest such as antlers, petrified wood, or colored rocks add to the mood of the backcountry and should be left so others can experience a sense of discovery. In national parks and many other protected places, it is illegal to remove natural objects. The same ethic is applicable to cultural artifacts found on public lands. Cultural artifacts are protected by the Archaeological Resources Protection Act. It is illegal to remove or disturb archeological sites, historic sites or artifacts such as pot shards, arrowheads, structures, and even antique bottles found on public lands.

### AVOID DAMAGING LIVE TREES AND PLANTS

Avoid hammering nails into trees for hanging things, hacking at them with hatchets and saws, or tying tent guy lines to trunks—thus girdling the tree. Carving initials into trees is unacceptable. 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 "I'll just take a few," a much more significant impact might result. Take a picture or sketch the flower instead of picking it. Experienced campers may enjoy an occasional edible plant, but they are careful not to deplete the surviving vegetation or disturb plants that are rare or are slow to reproduce.

### MINIMIZE SITE ALTERATIONS

Leave areas as you found them. Do not dig trenches for tents. If you clear an area of surface rocks, twigs or pine cones replace these items before leaving. 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.

## Discussion & Game

### DAISIES AND BROWNIES

Ask:

- What things do you think we should leave and not touch?
- What could we do instead of taking things with us?
- What might happen if everyone took something with them?

### JUNIORS

Have the girls discuss what trails would look like if everyone took something they found. What would a flower garden look like if everyone picked a flower? What would a shoreline look like if everyone took a "pretty" rock?

### CSA

Have girls discuss environmental consequences, such as erosion, that are caused by not leaving what you find. Discuss what we should and should not do to regarding this principle. How could you teach younger girls or others this principle? What activities could you do to help them remember.

### TELEPHONE

Arrange girls into a circle or a line. The first person should whisper a phrase to the person beside them. Each person only whisper the phrase once to the person beside them. Continue around the circle or down the line until the phrase has reached the last person. Have the last person say the message out loud and notice how much the phrase has changed from what the first person said.

In this game, each person has an impact on the phrase as it gets told to the next. By altering or taking something that is found instead of leaving it, you have impacted the environment in a small way, but over time a bunch of small changes add up to a big change. So remember to leave what you find.

## LEARN MORE



<https://lnt.org/why/7-principles/leave-what-you-find/>



## PRINCIPLE 5

# Minimize Campfire Impacts

### FIRES VS. STOVES

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.

### FIREWOOD AND CLEANUP

- Avoid cutting or breaking branches from standing or downed trees. Dead and down wood burns easily, is easy to collect and burning it makes less impact.
- Use small pieces of wood, no larger than the diameter of an adult wrist, that can be broken with your hands.
- Gather wood over a wide area away from camp. Use dry driftwood on rivers and seashores.
- Don't bring firewood from home. Either buy it from a local source or gather it responsibly where allowed.
- Burn all wood to white ash, grind small coals to ash between your gloved hands, thoroughly soak with water, and scatter the remains over a large area away from camp. Ashes may have to be packed out in river corridors.
- Pack out any campfire litter. Plastic items and foil-lined wrappers should never be burned in a camp fire.

### SAFETY

- Provide adequate supervision for young people when using stoves or fires.
- Follow all product and safety labels for stoves.
- Use approved containers for fuel.
- Never leave a fire unattended.
- Keep wood and other fuel sources away from fire.
- Thoroughly extinguish all fires.

### LESSENING IMPACTS

Camp in areas where wood is abundant if building a fire. 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.

## Discussion & Game

### DAISIES AND BROWNIES

Ask:

- Why should we use small pieces of wood instead of big pieces?
- Where is the best place to build a fire?
- What should we do after we are done with the fire?

### JUNIORS

Discuss how to build a fire properly and the importance of fire safety. What things should we make sure to do when building and cleaning up after a fire? How do we lessen our impacts when we do choose to build a fire?

### CSA

Think about how much fires have affected different areas such as the fires in Australia that started in 2019. What programs are there in the U.S. to help raise awareness of fire safety? Have you heard about Smokey the Bear? How can you make sure to stay safe when having a fire?

### SPARKS AND STICKS (SHARKS AND MINNOWS)

Identify who will be the spark(s), either a player or the leader. Everyone else will be sticks. The spark stands in the middle of the play area and says, "Time to build a fire." The sticks slowly walk towards the sparks. At any time, the spark can yell, "Wildfire!" and the sticks must run to the opposite boundary line without being tagged by the spark. If a stick is tagged, they also become a spark. When there is only one or two sticks left, they become the sparks in the next round.

In this game, when a spark gets tagged it becomes another spark and then pretty soon you will have a wildfire. Make sure to put the fire all the way out before leaving it.

### LEARN MORE



<https://lnt.org/why/7-principles/minimize-campfire-impacts/>

## PRINCIPLE 6

# Respect Wildlife

### LEARN 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. Considerate campers observe wildlife from afar, give animals a wide space, store food securely, and keep garbage and food scraps away from animals. Remember that you are a visitor in their home.

### SICK OR WOUNDED

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.

### GIVE FREE ACCESS TO WATER SOURCES

Allow animals free access to water sources by giving them the buffer space they need to feel secure. Ideally, camps should be located 200 feet or more from existing water sources. This will minimize disturbance to wildlife and ensure that animals have access to their precious drinking water. By avoiding water holes at night, you will be less likely to frighten animals because desert dwellers are usually most active after dark. With limited water in arid lands, desert travelers must strive to reduce their impact on the animals struggling for survival.

### WASHING AND WASTE DISPOSAL

Washing and human waste disposal must be done carefully so the environment is not polluted, and animals and aquatic life are not injured. Swimming in lakes or streams is okay in most instances—but in deserts and other very arid areas it’s best to leave scarce water holes undisturbed and unpolluted so animals may drink from them.

## Discussion & Game

### DAISIES AND BROWNIES

Ask:

- Why should we keep our distance from animals?
- What might happen if we get too close?
- Should we feed or pick up animals that we see? Why or why not?

### JUNIORS

Discuss the effect we have on wildlife and the importance of keeping our distance. Why is it important that we protect water ways? What might happen to the animals if we touch them or move them? How can we protect animals?

### CSA

Come up with and perform a skit showing the do’s and don’t’s when around animals. What should you do if there is a sick or wounded animal? What should you do if an animal is on the trail you are walking on? What should you do to not negatively affect their water sources?

### SECRET AGENT

Begin in a circle. Explain that someone in the group is their secret agent (who is out to get them) and another person in their group is a bodyguard (who is there to protect them). Each individual is to choose their secret agent and their bodyguard - but should not share this information with anyone else. Once everyone has chosen, allow them to move freely around the space. Let them know that they must keep their bodyguard between themselves and their secret agent at all times.

In this game, you are making sure that you are keeping your body guard between you and your secret agent just like you need to keep space between you and the animal.

### LEARN MORE



<https://lnt.org/why/7-principles/respect-wildlife/>



## PRINCIPLE 7

# Be Considerate of Others

### OVERVIEW

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.

### TECHNOLOGY IN THE OUTDOORS

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.

### TRAIL AND CAMPSITE ETIQUETTE

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. Talk quietly to the riders as they pass, since horses are spooked easily. When selecting a campsite, choose a site where rocks or trees will screen it from others view. Keep noise down in camp so as not to disturb other campers or those passing by on the trail.

### VISUAL IMPACT AND PETS

Bright clothing and equipment, such as tents, that can be seen for long distances are discouraged. Especially in open natural areas, colors such as day-glow yellow may contribute to a crowded feeling; consider earth-toned colors (ie. browns and greens) to lessen visual impacts. Keep pets under control at all times. Please pick up dog feces from camps and trails. Some areas prohibit dogs or require them to be on a leash at all times.

## Discussion & Game

### DAISIES AND BROWNIES

Ask:

- What does considerate mean?
- How can we be considerate of others?
- How can we be considerate of others while camping?

### JUNIORS

Discuss what would happen if we were not considerate of others while in the outdoors. Discuss how technology could positively or negatively affect your and others' experiences in the outdoors.

### CSA

Split girls into two groups and have them take turns acting out different scenarios of people not being considerate of others in the outdoors. Have the group not acting to point out what they were doing wrong and then tell how the person could act differently to be considerate of others.

### SILENT BIRTHDAY

Draw a straight line on the ground and line up on it. Everyone must line up in order of their birthdays but cannot talk to each other at all and must keep their feet on the line.

This is to show that even if you want to chat to each other sometimes you can't, just like when you are out hiking and you really want to go faster but someone in your group can't you have to consider them and if you are at a campsite at nighttime you have to consider other people around you and not be too loud so that they can sleep if they are trying too.

## LEARN MORE



<https://lnt.org/why/7-principles/be-considerate-of-other-visitors/>

Visit <https://lnt.org/get-involved/training-courses/> and take the PEAK course (ages 7-12) or take the online awareness course (older girls and adults).