

Quick Leave No Trace Activities

LNT activities with simple set up and facilitation - materials to be found after lesson outlines.



LNT Audit

Nutshell: This activity is ideal for events such as National Public Lands Day or Black Rock Rendezvous. Participants are introduced to Leave No Trace through a different activity of your choosing, then conduct a friendly audit of campsites.

Objective: This activity emphasizes learning by doing, giving participants a sense of ownership. Participants will be able to list at least five of the seven principles and those who were audited will be able to list at least three of the seven.

Materials: LNT campsite audit forms (Page 10), writing utensils, clipboards

Time Considerations: Depends on how many campsites there are, it can take 30 minutes or longer

Directions: After introducing participants to LNT through another activity, break into groups with a leader in each group. If you have various ages divide them amongst the groups and give older participants a leadership role. Look at each campsite as a group and have participants decide how the campsite rates - remember this is supposed to be a friendly audit, we don't want angry campers - and leave a completed audit slip in a secure place (we don't want to create trash during a campsite audit!).

Extension: To give participants a feeling of authority you can fashion LNT Junior Ranger badges for them. After you do your introductory activity you can have them earn their badge by answering one LNT question. If you really want to have fun, you can swear them in with this oath in the repeat after me style with their right hand raised: "As a Junior Leave No Trace Ranger, I pledge to appreciate, respect and protect all natural resources. I promise to share what I have learned about taking care of our natural lands with others."

Bandana Bonanza

Nutshell: Participants will discover the usefulness and advantages of items that serve multiple purposes on outdoor adventures by coming up with uses for a bandana.

Objective: Participants will be able to name five uses for a bandana when on an outdoor adventure and know the advantage of carrying multipurpose items.

Materials: A bandana

Time Considerations: 10 minutes

Directions: Have your group get into a circle. Start passing the bandana around trying to brainstorm what you could use the item for while camping. Remind participants that there are no bad ideas while brainstorming. See how many times you can go around the circle.

When your group runs out of ideas, stop the group and ask how what they thought of the ideas (a lot, ones they hadn't thought of, etc.). Ask why they think you had them do this activity. Then discuss why it's important to be able to use what you have to serve many purposes (you can't always carry everything and you'll have a lighter pack). Ask what other common items could have been used for this activity besides a bandana (t-shirt, water bottle, backpack, rope, etc).

Camp Ohno!

Nutshell: Teach participants Leave No Trace principles by showing them a first-hand example of a high-impact campsite. This works well for stationed events where participants rotate through various educational stations.

Objective: Participants will be able to list at least four of the seven principles and one way to follow each of them.

Materials: Tent; litter; fake rocks and fire; washing tub, dishes and fake dish soap; blue towel to represent water (if not by actual water); fake flowers; fake axe; Inspiration Point sign (written on); boom box; food scraps; LNT principle signs

Time Considerations: Can be adjusted for station lengths from 15 to 30 minutes

Directions: Have Camp Ohno set up before participants arrive. The list below matches the high-impacts with corresponding LNT principles and the information in parenthesis is what should be done. When participants arrive have the music playing loudly. Turn it off and welcome them to Camp Ohno, tell them to have a look around for a few minutes and try to spot what you've done wrong, then you'll come back together and discuss it.

1. Know Before You Go - don't put rain fly on tent (it could rain, bring just in case)
2. Choose the Right Path - tent set up too close to water (should be 200 ft away)
3. Trash Your Trash - litter (put in trash can), washing tub in creek/lake (should be 200 ft away)
4. Leave What You Find - picked flower (can't pollinate and make more if not there)
5. Be Careful With Fire - if there is a fire ring already set up your fake fire elsewhere (use existing fire ring), litter in fire (can be hazardous, paper products float away and start forest fire), axe in tree (use dead and down wood)
6. Respect Wildlife - food scraps on ground (don't feed wildlife, it damages their health, alters natural behaviors, exposes them to predators and other dangers)
7. Be Kind to Others Visitors - playing music loud (low volume, headphones or leave at home)

Extension: This is a station at Trout in the Classroom Release and Nature Day. For this event, each participant has a journal. In the past, the LNT station's journaling included sketching what participants saw done wrong and then writing how they would fix it. There was also a section to write two new LNT practices participants learned.

Sources: Leave No Trace Center for Outdoor Ethics. (2007). Camp 'oh no'. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 19).

Durable Surface Hopscotch

Nutshell: The activity introduces the Leave No Trace principle - Choose the Right Path via a hopscotch/memory game.

Objective: Participants will be able to define what durable is and categorize common natural surfaces.

Materials: Durable surface cards: snow, grass, rock, sand, established trail, playa, gravel; Nondurable: cryptobiotic soil, wetlands, steep slope, moss, wildflowers (Pages 11-14)

Time Considerations: 15 to 20 minutes

Directions: Ask participants if anyone can define durable. Look around you - point out a durable surface and a nondurable surface, or ask them to! Then have them form a circle and in the middle spread out the surface cards face down(5x5). Make sure there is a possible way to complete the hopscotch! One at a time have participants try to get from start to finish. Participants step on a blank card, flip it over, show the group and judge whether it's a durable surface or not. If it is they can move on to an adjacent card until they make it to the finish. If it's not, they go back to the circle and the next person tries. Encourage them to work as a group - hence once one person makes it across they all have won. As a conclusion discuss what durable surfaces are and review examples.



Sources:

Leave No Trace Center for Outdoor Ethics. (2007). Surface hopscotch. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 53).

Images:

Balk, T. *The forest*. Retrieved Oct. 25, 2010, from stock.Xchnge: <http://www.sxc.hu/photo/1302080>

Pobiedziński, A. *Grass_field 2*. Retrieved Oct. 26, 2010, from stock.Xchnge: <http://www.sxc.hu/photo/793419>

Stock.Xchnge. *Gravel*. Retrieved Oct. 26, 2010, from <http://www.sxc.hu/photo/1294699>

The rest of the surface card photos were taken by Nevada Outdoor School's Jen Stockton.

Will You Make It?

Nutshell: This activity introduces the Leave No Trace principle - Know Before You Go when participants discover potential trip problems and find their solution in this match game.

Objective: Participants will be able to list two solutions to avoiding problems on the trail.

Materials: Event and solution cards (Pages 15)

Time Considerations: 15 minutes

Directions: Distribute event and solution cards amongst participants, one for each participant, with the goal of having people find their corresponding event or solution card to form a pair. Once all participants are matched have each pair share their event and solution, open discussion to other solutions or personal experiences.

Sources: Leave No Trace Center for Outdoor Ethics. (2007). Will you make it?. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 48-49).

Playa Wildlife Clues

Nutshell: This activity introduces participants to Leave No Trace principle - Respect Wildlife, local wildlife and concludes with how participants can help protect wildlife.

Objective: Participants will be able to name three local wild animals and two ways they can help protect them.

Materials: List of playa wildlife clues, corresponding photos: lizard, mosquito, kangaroo rat, prong-horn antelope, kit fox, desert tortoise (Pages 16-19)

Time Considerations: 15 minutes

Directions: Tell participants you're going to test their wildlife knowledge, you're going to read clues about a local wild animals and once they think they know what it is they simply put their finger on their nose (and don't say anything!). Once you have finished reading the clues for an animal ask one person to answer. If they get it correctly, ask what clue gave it away. After they guess the correct animal show everyone the photo. Once you've gone through all the wildlife tell them we have some exciting and special wildlife around here, so it's important that we do what we can to protect them right? Ask participants to come up with ways we can help them. Here are a few ways to help wildlife:

- Don't feed them - damages their health, alters natural behaviors and exposes them to predators and other dangers
- Rule of thumb - i.e. stay a respectful distance away
- If an animal is changing its behavior you are too close
- Store food and trash securely
- Control pets at all times
- Avoid wildlife during sensitive times including mating, nesting, raising young or winter

Sources:

Bibor, G. *Mosquito bite 1*. Retrieved Oct. 4, 2010, from stock.XCHNG: www.sxc.hu/photo/169548

Durham, M. *Pronghorns*. Retrieved Sept. 17, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=18726>

Foott, J. *Desert kangaroo rat*. Retrieved Sept. 17, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=18786>

Sansone, L. *Kit fox*. Retrieved Sept. 17, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=18694>

Suzio, D. *Desert tortoise*. Retrieved Oct. 4, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=19318>

Virviescas, A. *Lizard*. Retrieved Sept. 17, 2010, from stock.XCHNG: www.sxc.hu/photo/1015014

Ethics Game

Nutshell: Participants will develop a greater appreciation and understanding of their own personal outdoor ethic and how that relates to others.

Objective: Participants will be able to describe what outdoor ethics are and their importance.

Materials: Ethics situation cards (Pages 20-21)

Time Considerations: 15 to 20 minutes

Directions: Have participants think of one of their favorite outdoor places and what it means to them. Share your favorite place then have some, or all, share theirs. Have them think - what if their favorite place was ruined? In order to have outdoor ethics, people have to have that connection to nature. But what are ethics? Ask for a definition (what you do when no one is looking).

Tell participants they're going to have two situations to choose from each round. They will pick the situation that most offends or disturbs them. Read the two situations, direct one group to go to your right and the other to your left. Have participants make their choice, go stand with that group and discuss why they chose that situation to come up with a brief reasoning as a group, then they will share it with the class. Have a representative from each group share their perspective. Ask if anyone wants to switch which situation offends them most now that they heard the other group's reasoning. Set aside the situation card that the most people chose. Repeat this for a few rounds. At the end bring out the worst situations and narrow it down to the "worst-of-the-worst" and see what situation is deemed the absolute worst. Explain how different people can have different reactions to various impacts that they may find outdoors; it's important to respect that so they will return the favor.

Sources: Leave No Trace Center for Outdoor Ethics. (2007). The ethics game. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 20).

Campfire Impact Trivia

Nutshell: This activity introduces the Leave No Trace principle - Be Careful With Fire through a campfire trivia game.

Objective: Participants will be able to list five important considerations for an LNT fire.

Materials: List of questions (Page 22), scraps of paper, writing utensils

Time Considerations: 15 minutes

Directions: Break participants up into groups. Each group should designate a runner. Read a question about campfires. The groups need to decide the correct answer, write it down and have the runner place it in the designated spot - make sure this spot is the same distance from all of the groups. The first group with the correct answer gets three points, the second - two and the third - one. At the end the group with the most points wins.

Adaptations: If you're lacking paper and writing utensils, you can simply quiz participants.

Sources: Leave No Trace Center for Outdoor Ethics. (2007). Campfire impact game. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 82-83).

Cat Hole Relay

Nutshell: This activity introduces the Leave No Trace principle - Trash Your Trash when participants discover the proper method of digging a cat hole in a relay.

Objective: Participants will be able to demonstrate the proper method of digging a cat hole.

Materials: Trowels, tennis balls, plastic bags, toilet paper, ruler - the amount needed depends on group size

Time Considerations: 10 to 15 minutes

Directions: Discuss the proper way to dig a cat hole: where, how far from water/camp/trail, what to do with waste, etc. Demonstrate the proper method. Break into teams (so they all have one of each of the materials). Depending on the number of participants in each group break up the tasks: dig the hole, deposit ball and toilet paper, toilet paper into bag and fill cat hole. Then have a cat hole relay! The rulers are to be sure that holes are the proper depth and width before teams continue in the relay - note if they stick the ruler in the cat hole after covering the "poop" it helps in the recovery of the tennis ball.



Sources: Leave No Trace Center for Outdoor Ethics. (2007). Cat hole Olympics. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 67).

LNT Beach Ball

Nutshell: Participants are introduced to Leave No Trace or review LNT with a fun beach ball toss.

Objective: Participants will be able to list at least four of the seven LNT principles and one way to follow each of them.

Materials: LNT Beach Ball - ball with LNT questions and tasks written on it (Pages 23-24)

Time Considerations: 10 to 15 minutes

Directions: Have the group form a circle and tell them you're going to test their LNT knowledge. Show the participants the LNT beach ball. Tell them that there are some questions and some tasks related to LNT on the ball. The goal is to keep the ball aloft for three bounces. On the third bounce, the person who would have bounced the ball will catch it. The person will read the question or task that their right index finger is touching and answer it or complete the task. If that item was already done, have them spin the ball and try again. Continue for 10 minutes or until their attention starts to fade - whichever happens first.



Adaptations: You can also have participants answer a question on each bounce instead of on the third bounce.

Source: Leave No Trace Center for Outdoor Ethics. (2007). Beach ball. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 9).

Pet Peeve Role Reversal

Nutshell: Participants discover motivations for outdoor pet peeves and determine alternatives to offer for better behavior.

Objective: Participants will be able to constructively offer suggestions against two negative habits.

Materials: Pet peeve cards (Pages 25-26)

Time Considerations: 15 to 20 minutes

Directions: Give each participant, or in pairs, a pet peeve or bad habit. Have them think of an argument of why someone would think they would benefit from that action. Then have them think of a solution. Have them share both with the group.

Example: Playing loud music. Argument for: I play my music loud because it helps me not feel so alone and scared in nature when by myself, I listen to good music so others will appreciate it, plus it helps scare away bears. Solution: The loud music is taking away the serene experience for others, the music is scaring away all of the wildlife, plus if you're camping properly you shouldn't need to scare away bears. If you really need to have your music bring headphones.

Source: Tread Lightly!, Inc. (2009, Winter/Spring). Why would they do that?. *NEWS: tread trainer*. pp. 3.

What Motivates You?

Nutshell: This activity introduces the Leave No Trace principle - Be Kind to Other Visitors when participants compare what motivates them to participate in their favorite outdoor activity and find similarities in other recreational activity groups.

Objective: Participants will be able to identify three similarities in values of different recreational activity groups.

Materials: Post-it notes and writing utensils

Time Considerations: 15 to 20 minutes

Directions: Give each participant three Post-it notes. On the sticky side, have them write their favorite outdoor activity; the same activity should be written on all three - be sure to keep it a secret! On the non-sticky side have them write three reasons they love doing this activity - one on each Post-it. A good way to get them thinking is have them finish the sentence: I enjoy this activity because...could be solitude, adventure, scenery, etc.

Once they are finished have everyone post their notes on a board or flat surface. Once all of the Post-its are up, without talking, have the group organize and group the common values. Then look at each group and see what activities are in each value group.

Discussion questions:

- Are there common values among different types of recreationists?
- Was anyone surprised about a type of recreationist in a value group?
- What can we do with those common values to address conflicts between recreationists?

Source: Tread Lightly!, Inc. (2010, Fall). Post it note values?. *NEWS: tread trainer*. pp. 3.

Respect Wildlife

Nutshell: This activity introduces participants to local wildlife while illustrating how people can affect that wildlife.

Objective: Participants will be able to name three local wild animals and four ways we can help protect them.

Materials: Wildlife cards and habitat cards (Pages 27-32)

Time Considerations: 10 to 15 minutes

Directions: Have participants think about going on an adventure in the local area. Ask them what kinds of wildlife they would see. As they name various types of wildlife give them the corresponding wildlife card, or one that is similar, until all participants have a card; participants may need to work in groups. Then have each participant select three habitat cards: food, water and shelter, but don't have them look at those yet. Note - if you have an antsy group, wait until after they've shared their animal to give them the habitat cards. Go in a circle and have each participant read about their animal and show the photo to the rest of the group, then have them read each habitat card and find out how people affected their wildlife. After everyone has shared ask participants how they can respect wildlife. Here are a few ways to respect wildlife:

- Don't feed them - damages their health, alters natural behaviors and exposes them to predators and other dangers
- Rule of thumb - i.e. stay a respectful distance away
- If an animal is changing its behavior you are too close
- Store food and trash securely
- Control pets at all times
- Avoid wildlife during sensitive times including mating, nesting, raising young or winter

Sources:

Leave No Trace Center for Outdoor Ethics. (2007). Who will survive?. In *Leave no trace 101: 101 ways to teach leave no trace* (pp. 92-93).

Images:

Durham, M. *Pronghorns*. Retrieved Sept. 17, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=18726>

Foott, J. *Desert kangaroo rat*. Retrieved Sept. 17, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=18786>

Lambert-Gorwyn. *Mule deer series 1*. Retrieved Dec. 15, 2010, from stock.XCHNG: <http://www.sxc.hu/photo/706639/>

Leeson, Pat and Tom. "Northern Goshawk." eNature. Web. 15 Dec 2010. <<http://www.enature.com/fieldguides/enlarged.asp?imageID=17636>

Nevada Department of Wildlife. *Little brown myotis bat*. Retrieved Dec. 15, 2010, from http://www.ndow.org/wild/animals/facts/bat_brown_myotis.shtm

Nafis, G. *Great Basin rattlesnake*. Retrieved Dec. 15, 2010, from CaliforniaHerps: <http://www.californiaherps.com/snakes/images/cvlutosus.jpg>

Small, B. *Mountain quail*. Retrieved Dec. 15, 2010, from All about birds: http://www.allaboutbirds.org/guide/Mountain_Quail/id

Summers Jr., C. *Mountain lion*. Retrieved Dec. 15, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=18686>

Suzio, D. *Desert tortoise*. Retrieved Oct. 4, 2010, from eNature: <http://www.enature.com/fieldguides/enlarged.asp?imageID=19318>

LNT Magical Number

Nutshell: Leave No Trace's magical number is 200, but how many people can judge 200 feet by sight alone? Participants will learn their own personal LNT magical number.

Objective: Participants will discover their pace count for 200 feet.

Materials: Survey tape, string, rope, etc that is 100 feet long

Time Considerations: 10 minutes

Preparation: NOS has a length of string that is 100 feet long. This equation is written on the can it is wrapped around: $LNT\ Magical\ Number = Pace\ Count \times 2 = 200\ feet$.

Directions: Discuss the importance of 200 feet when it comes to LNT: campsite, cooking area, cat hole choice - all 200 feet away from water and the trail. Lay out the LNT magical number string in an area that allows. Have participants line up, either shoulder-to-shoulder or in a line starting at the beginning of the string. Describe how to count pace - if you start walking with your right foot, you count every time your left foot hits the ground, make sure to use your normal stride. Have them count out their pace as they walk the length of the string. Once they have that number have them multiply it by two and that is how many paces they have to travel to cover 200 feet - LNT's magical number!

LNT History

Nutshell: Participants discover the history of Leave No Trace with a match game.

Objective: Participants will have a general idea of the development of the Leave No Trace Center for Outdoor Ethics.

Materials: LNT history cards, key (Pages 33-37)

Time Considerations: 10 minutes

Directions: As a group, have participants match up the year and the LNT milestone. Once they have matched all of the cards, go through the answers with them, rearranging any milestones that need to be moved. Tell participants it's important to know the background of organizations you are involved in so you know the purpose of the organization and are knowledgeable when talking to the public.

Source: Leave No Trace Center for Outdoor Ethics. (2008). *Leave no trace history*. Retrieved Jan. 14, 2011, from <http://www.lnt.org/aboutUs/history.php>

Leave No Trace Campsite Audit



LNT Master
LNT Savvy
LNT Wanna Be

1. Know Before You Go prepared for weather water supply			
2. Choose the Right Path campsite on durable surface parked on durable surface			
3. Trash Your Trash litter picked up clean campsite			
4. Leave What You Find artifact free free of nature's nick-knacks			
5. Be Careful With Fire fire attended elevated campfire			
6. Respect Wildlife food scrap free pets in control			
7. Be Kind to Other Visitors music at a low volume friendly campers			

Greetings! In an effort to teach our youth about Leave No Trace, you have been campsite audited by Nevada Outdoor School's kids camp. Thank you for joining us in our efforts to take care of public lands.

Leave No Trace Campsite Audit



LNT Master
LNT Savvy
LNT Wanna Be

1. Know Before You Go prepared for weather water supply			
2. Choose the Right Path campsite on durable surface parked on durable surface			
3. Trash Your Trash litter picked up clean campsite			
4. Leave What You Find artifact free free of nature's nick-knacks			
5. Be Careful With Fire fire attended elevated campfire			
6. Respect Wildlife food scrap free pets in control			
7. Be Kind to Other Visitors music at a low volume friendly campers			

Greetings! In an effort to teach our youth about Leave No Trace, you have been campsite audited by Nevada Outdoor School's kids camp. Thank you for joining us in our efforts to take care of public lands.

Leave No Trace Campsite Audit



LNT Master
LNT Savvy

1. Know Before You Go prepared for weather water supply			
2. Choose the Right Path campsite on durable surface parked on durable surface			
3. Trash Your Trash litter picked up clean campsite			
4. Leave What You Find artifact free free of nature's nick-knacks			
5. Be Careful With Fire fire attended elevated campfire			
6. Respect Wildlife food scrap free pets in control			
7. Be Kind to Other Visitors music at a low volume friendly campers			

Greetings! In an effort to teach our youth about Leave No Trace, you have been campsite audited by Nevada Outdoor School's kids camp. Thank you for joining us in our efforts to take care of

Snow



Grass



Rock



Established Trail



Playa



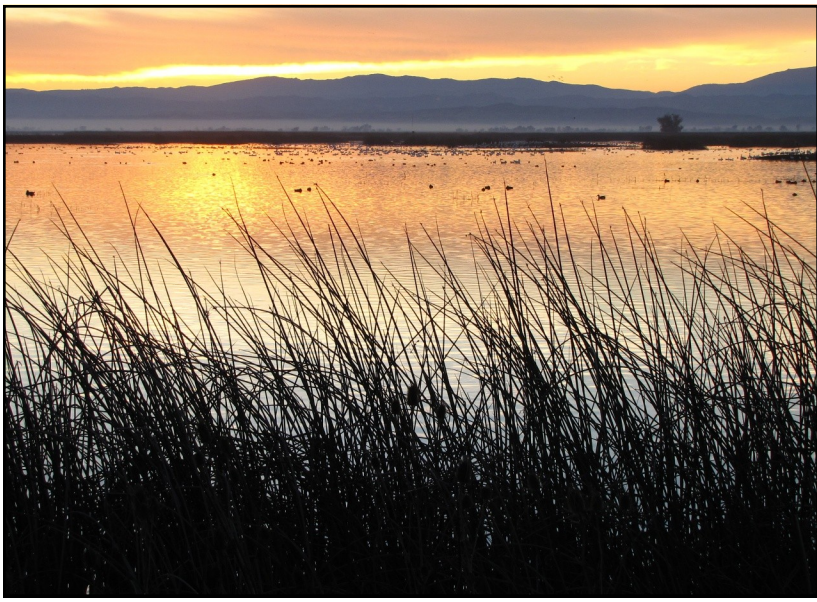
Steep Slope



Cryptobiotic Soil



Wetlands



Sand



Moss



Wildflowers



Gravel



<p>Event Card: Blisters! You have a nasty blister and can no longer carry your pack. You are not even sure that you can walk to your campsite.</p>	<p>Solution Card: An adhesive felt-like material acts like a second skin and can be applied to the feet or other areas of human skin to prevent rubbing. Always carry this with you and break in new footwear BEFORE a trip.</p>
<p>Event Card: Lightening! A storm is quickly blowing into your area. From your vantage point high on the trail you can see a lot of lightening. You estimate you have about five minutes before the storm reaches you.</p>	<p>Solution Card: Before your trip, you researched lightning safety. You remember that lightning is attracted to the highest point and that water and metal conduct an electrical charge. You take off your metal-frame pack, stay away from water and the tallest tree, choose a low spot to crouch in on your jacket and stay 20 feet from your fellow hikers.</p>
<p>Event Card: Pack weight! Your pack did not feel heavy when you left, but now you can hardly move. You're so tired you would just as soon sit down and not walk another step.</p>	<p>Solution Card: The weight of your pack should generally be no more than 1/4 of your body weight. Weigh your pack before you leave and leave some items behind if necessary. Some things like food and cooking supplies can be shared by several people in the group.</p>
<p>Event Card: Fire restrictions! You were planning on cooking with a small fire, but when you get to the trailhead you discover fire restrictions are in place. Those dehydrated meals aren't going to taste very good...</p>	<p>Solution Card: Call ahead to the area you're going and find out about restrictions and regulations. Bring a backpacking stove for cooking or bring food that doesn't require cooking.</p>
<p>Event Card: Bear country! You are traveling in bear country and planned on hanging your food to keep it and the bears safe; unfortunately, there aren't any suitable trees. You hang your food on a branch that's too close to the tree and your food gets eaten.</p>	<p>Solution Card: Bear canisters are a great solution to food storage issues, no need to hang them from a tree, simply place them 200 feet from camp in a spot where it won't roll away.</p>
<p>Event Card: Pack out your poop! You are backpacking in canyon country when you run into a ranger who tells you there are regulations regarding packing out waste. You aren't prepared and have to pack out your poop in a grocery bag. Don't forget about all the low hanging branches ready to tear at your pack!</p>	<p>Solution Card: Call ahead to the area you're going and find out about restrictions and regulations. There are a few options for packing out waste - wag bags, poop tube, etc. Be sure to dispose of it properly once you are out of the wilderness.</p>

Playa Wildlife Clues

Lizard

1. I can be found running around on sagebrush, gravelly areas and even sand dunes.
2. I lay eggs to reproduce.
3. I love to eat insects.
4. I can be spotted doing pushups on a regular basis.
5. If my tail detaches I can regenerate a new one out of cartilage.

Mosquito

1. Many kinds of fishes and birds depend on me for their food.
2. Without me there wouldn't be as many animals inhabiting the sky and water as there are now.
3. I fly slowly, especially after I've just eaten.
4. Only the female of my kind will bite you.
5. My bite gives you an itchy red bump.

Kangaroo Rat

1. My hind feet are larger than my front feet.
2. In order to escape from predators I can jump up to nine feet in one leap.
3. I can't lose water by perspiring because I have no sweat glands.
4. I weigh two to five ounces and am 12 to 14 inches long including my tail.
5. I can go my whole life without a drink of water, getting moisture from my food.
6. I have the most concentrated urine of all mammals and only pass a few drops per day.

Pronghorn Antelope

1. I have horns.
2. I like to hang out in herds with up to 100 of my friends and family.
3. I can detect movement from four miles away, giving me plenty of time to flee from a predator.
4. Instead of jumping over a fence like a deer, I crawl under them.
5. I have been clocked at 70 mph, making me the fastest animal in the Northern Hemisphere.

Kit Fox

1. I am nocturnal (I like to come out of my den at night).
2. I weigh three to five pounds and have very large ears.
3. I eat small animals including kangaroo rats, cottontail rabbits, insects, fish and small birds.
4. I am a member of the canine/dog family.
5. I need your help to protect my habitat at Coyote Dunes on the Black Rock Playa.

Desert Tortoise

1. Most of the water I get is from the vegetation I eat.
2. I am on the Endangered Species List as a threatened species.
3. My average lifespan is 30 to 45 years, but can reach 80 years or more.
4. I am Nevada's state reptile.
5. I have a shell.







Footsteps Evident In Cryptobiotic Soil

Human Waste Piles Along A Trail or Riverway

Toilet Paper Flowers

Person Picking Wildflower While Hiking

Cigarette Butts Along The Trail

Names Carved On Trees

Evidence of Wilderness Trespass By Motorized Vehicles

People Getting Close To Wildlife For A Photo

Dogs Running Loose

Litter On The Side Of The Trail

Multiple Trails Through A Single Meadow

Bicyclists Not Yielding To Hikers On Trails

Fire Scars On The Ground

Livestock Wading In A Water Source

Several Fire Rings In One Area

People Going Off Trail And Cutting Switchbacks

Soap Bubbles In A Lake

People Feeding Wildlife

Cultural Area Devoid of Artifacts

Pet Waste On A Trail

An Unattended Campfire

Food Remains In A Campground Area

Create Your Own For Your Unique Area!!

Campfire Impact Trivia

Campfire Impact Trivia

1. The best surface to place a fire pan is on:
 - a. Rocks
 - b. Sand
 - c. Inorganic Soils
 - d. Any of the above (*any will have minimal impact*)
2. A campfire can be constructed:
 - a. When wind and weather are a problem
 - b. Against a large rock
 - c. Above tree line
 - d. None of the above (*rocks will be blackened and weather-sensitive environments should always be considered*)
3. Which of the following should you not have ready before starting a fire?
 - a. Trowel or shovel
 - b. Water
 - c. Supply of dry wood broken in proper lengths (*wood should not be broken into smaller pieces until fed into the fire so that any remaining pieces can be returned to the forest floor, the way they were found*)
 - d. Wood gathered from a wide area
4. Which of the following will have the most impact on wildlife?
 - a. Burning food or trash (*burning food can attract animals*)
 - b. Using existing fire ring
 - c. Using downed, dry wood
 - d. Singing around the campfire
5. Which campfire has the most impact? Least?
 - a. Mound fire
 - b. Fire pan
 - c. Candle (*least*)
 - d. Existing fire ring (*most*)
6. For a fire pan, the sides of the pan need to be:
 - a. Sloping outward
 - b. At least 3" high (*at least 3" high to contain the fire properly*)
 - c. Sloping inward
 - d. None of the above
7. To build a mound fire, which is not needed?
 - a. Rocks (*rocks are not necessary*)
 - b. Trowel
 - c. Mineral soil and sand
 - d. Ground cloth or plastic bag
8. Mineral soil is:
 - a. Rich in organic material
 - b. Full of minerals
 - c. Sand or dirt which contains little or no organic matter (*either obtained from under the roots of a large, fallen tree or from a streambed*)
 - d. Easily damaged by heat
9. To properly build a fire on sand or gravel, you must:
 - a. Scoop out a shallow pit and line it with sand or gravel
 - b. Leave the charcoal for the next flood to wash away
 - c. Situate your fire well below the water line
 - d. Both a and c (*never leave any remains to be washed away*)
10. Which of the following is the best source of firewood?
 - a. Small pieces of dead and downed wood (*only dead and downed wood should be used*)
 - b. Standing dead tree
 - c. Branches broken off a dead tree
 - d. Fallen tree

LNT Beach Ball Questions and Tasks

- Why might you want to keep your dog on a leash in a park?
- Tell a friend/classmate a cool fact about LNT.
- Write a short poem/story about respecting wildlife.
- Name one land management agency.
- How old do you have to be to follow LNT practices? (any age)
- Take only pictures, leave only _____. (footprints)
- What are two alternative ways to remember a pretty flower (other than picking it)?
- How many feet away from water should you camp and dig cat holes? (200 ft)
- Principle #7: Be _____ to Other Visitors! (kind)
- Is snow a durable surface? Why? (yes, the effect of travel is temporary if there's enough depth to prevent vegetation damage)
- If there is a puddle on the trail should you walk through it or around it off trail? (through it)
- Name one way you can minimize your campfire impacts?
- What is your outdoor ethic?
- What does LNT stand for? (leave no trace)
- What is your most memorable outdoor experience?
- Name one sponsor of LNT. (REI, Coleman, Subaru, Keen, L.L. Bean, etc)
- If wildlife begins to change its behaviors you are probably too _____. (close)
- Pack it in, pack it _____. (out)
- How long does it take for a glass bottle to decompose? a) 100 years b) 1,000 years c) 100,000 years d) 1,000,000 years (d)
- Principle #1: _____ Before You Go! (know)
- Name two animals you may see on a nature hike close to your home?
- What is an alternative to a campfire when camping?
- How many principles of LNT are there? Name two?
- Why is it important to LNT when enjoying the outdoors?
- Name two of the seven principles of LNT.
- What are two things you should always bring with you on a hike?
- What is a cat hole? (a means of waste disposal)
- Principle #4: Leave what you _____! (find)
- It is illegal to take cultural artifacts from public lands: T/F? (true)
- What is a non-durable surface: gravel or native grasses? (native grasses)
- Why should you leave what you find?
- How deep should you dig a cat hole? (six to eight inches)
- Where might you find cryptobiotic soil? (desert environments)
- You should wash your dishes directly in a stream: T/F? (false)
- Continued...

LNT Beach Ball Questions and Tasks Continued...

- Principle #3: Trash Your _____! (trash)
- Snow and ice are durable surfaces: T/F? (true)
- The best campsites are found not _____? (made)
- Principle #6: _____ Wildlife! (respect)
- What is one way you can respect wildlife?
- What is the magic number of LNT? a) 100 ft b) 200 ft c) 300 ft d) 400 ft (200 ft)
- When should you leave a campfire unattended? (never!)
- Do an LNT cheer!
- Show us your LNT boogie!
- Principle #2: Choose the Right _____! (path)
- Act out the principle: Be considerate of other visitors
- Pick a friend and make the shape of the LNT logo with your bodies (draw LNT logo)
- Draw some rock art. Tell us why and how we can protect it.
- What is cryptobiotic soil? (living soil that can be destroyed by one footprint)
- Dig a cat hole to the best of your ability.
- Principle #5: Be _____ With Fire! (careful)
- Describe your favorite outdoor place.
- What's your biggest LNT pet peeve?
- What is your favorite outdoor activity? Why?
- How long does it take for a banana peel to decompose? a) up to 2 years b) up to 3 years c) up to 4 years d) up to 5 years (a)
- For campfires use _____ and down wood. (dead)
- When crossing a meadow off-trail should you spread out or travel single file? (spread out)
- Name two things you should do before an outdoor adventure.
- Why is it bad to feed wildlife?
- You are supposed to pack out toilet paper: T/F? (true)
- LNT is just for backpackers: T/F? (false)
- Can you name all seven LNT principles?
- Why is it important to stay on designated trails?
- How do you walk through a meadow that doesn't have a trail? a) single-file b) spread out (b)

Carving Name on Trees	Not Packing Out Toilet Paper
Feeding Wildlife	Cutting Switchbacks
Taking an Arrowhead	Washing in Lake with Soap
Starting New Fire Ring	Picking a Wildflower
Talking on Phone while Hiking	Camping in a Meadow
Not Yielding to Hikers when on Bicycle	Walking on Cryptobiotic Soil

Setting Up Tent Close to Another Group	Using Bright Equipment and Clothes while Hiking
Getting Close to Wildlife for a Photo Opportunity	Not Packing Out Trash
Riding Bicycle in Wilderness Area	Having your Dog Off Leash
Camping on Lake Shore	Using Branches from Standing Trees for a Fire
Taking a Break Right Next to the Trail	Throwing Banana Peel on Ground to Decompose
Relying on Others for Extra Supplies	Not Washing Equipment Between Trips



Mule Deer



Mountain Quail



Little Brown Myotis Bat



Mountain Lion



Great Basin Rattlesnake



Desert Tortoise



Pronghorn Antelope



Kangaroo Rat



Northern Goshawk

<p>Mule Deer</p> <ul style="list-style-type: none"> • Life span: 10 to 12 years • Occupy almost all types of habitat; bucks prefer rocky ridges for bedding, while the doe is more likely to bed down in the open. • Most active in mornings, evenings and moonlit nights • Herbivores • Give birth May to August • Mule deer are good swimmers! 	<p>Mountain Lion</p> <ul style="list-style-type: none"> • Life span: 12 to 15 years • Prefer dense cover or rocky, rugged terrain; in Nevada, habitat is associated with pinyon pine, juniper and mountain mahogany • Eat small mammals, mule deer, elk • Prefer to hunt in early morning and evenings • Can breed at any time but peak birth months are April through July 	<p>Pronghorn Antelope</p> <ul style="list-style-type: none"> • Life span: 5 to 10 years • Prefer gentle rolling terrain with low sagebrush and northern desert shrubs • Eat 150 different species of grasses, forbs and browse plants • Mate in early fall; gestation period of 250 days • The fastest running hoofed animal in North America!
<p>Mountain Quail</p> <ul style="list-style-type: none"> • Life span: less than 3 years • Found in grasslands, brush and in open country at high altitudes • Diet consists primarily of plants that are seasonably available and insects • During the spring, found in dense cover where they build their nests, which consist of shallow depressions in the ground 	<p>Great Basin Rattlesnake</p> <ul style="list-style-type: none"> • Has thin neck and large triangular head • Inhabits dry and barren areas; found on hills, summits, rocky hillsides, open deserts, valley floors, grassy plains • Eats small mammals; also birds, lizards, snakes, frogs and insects • Born alive from mid-summer to fall • The Great Basin Rattlesnake will not attack, but if disturbed will defend itself! • Does not always rattle in warning! 	<p>Kangaroo Rat</p> <ul style="list-style-type: none"> • Eat seeds, leaves, stems, buds, some fruit and insects • Occupy grasslands or sandy to rocky soils in desert locations with little vegetation; • Their burrows enter the ground at an angle • May go a whole lifetime without a drink of water, getting moisture from their food • They are listed as a threatened species under the Endangered Species Act
<p>Little Brown Myotis Bat</p> <ul style="list-style-type: none"> • Weigh 1/4 to 1/3 ounce • Can live more than 20 years • Found in coniferous forests at higher elevations near water • Range covers most of the United States and Canada, but primarily inhabits northern Nevada • Feed on a variety of insects – mainly aquatic insects, but likes mosquitoes too! 	<p>Desert Tortoise</p> <ul style="list-style-type: none"> • Average lifespan is 30 to 45 years, but can reach 80 years or more • Found in desert shrub-land habitat in the Mojave Desert • Dig burrows in the ground, where they spend the major portion of their lives • Most of the water they obtain is from the vegetation they eat since water is rarely available to drink • They are listed as a threatened species under the Endangered Species Act 	<p>Northern Goshawk</p> <ul style="list-style-type: none"> • Maximum lifespan in the wild is 11 years • Habitat is mixed forests; in Nevada, nest primarily in aspen, riparian habitat • Prey consists of small mammals, birds, other vertebrates and occasionally insects • In Nevada, over 85% of nests are found in aspen and nearly all are located near water • “Sensitive species;” illegal take of young at nest sites is a concern in Nevada

<p>SHELTER</p> <p>Hikers stayed on established trails.</p>	<p>SHELTER</p> <p>Campers used an existing campsite instead of making a new site.</p>	<p>SHELTER</p> <p>Campers set up their tent too close to your home.</p>
<p>SHELTER</p> <p>Hikers watched from a distance and then kept on walking.</p>	<p>SHELTER</p> <p>Hikers collected natural items that you use to build your home.</p>	<p>SHELTER</p> <p>Citizens protect wildlife habitat and are respectful to wildlife during sensitive times (i.e. mating and birthing seasons, etc.)</p>
<p>SHELTER</p> <p>Campers were careless with matches and started a forest fire.</p>	<p>SHELTER</p> <p>Campers broke branches off the tree you live in for firewood.</p>	<p>FOOD</p> <p>While on a hike, a girl scout leader taught her scouts why it's bad to feed wildlife.</p>
<p>FOOD</p> <p>You ate an apple core that hikers left behind because they thought it would decompose.</p>	<p>FOOD</p> <p>Campers packed out all their garbage and left you with no food.</p>	<p>FOOD</p> <p>Citizens decreased the use of herbicides and pesticides.</p>

SHELTER	SHELTER	SHELTER
SHELTER	SHELTER	SHELTER
SHELTER	SHELTER	SHELTER
FOOD	FOOD	FOOD

<p>FOOD</p> <p>Hikers disturbed natural vegetation.</p>	<p>FOOD</p> <p>Campers buried their garbage in a pit; you dug it up and had a snack.</p>	<p>FOOD</p> <p>Campers left their food sitting out while they went for a hike and you had a wonderful dinner.</p>
<p>FOOD</p> <p>Hikers were having a snack near the trail and dropped some food, but they picked it up and packed it out.</p>	<p>WATER</p> <p>Hikers put a fresh layer of sunscreen on and then jumped in the river.</p>	<p>WATER</p> <p>Visitors set up camp 200 feet away from the river and you were able to get a drink.</p>
<p>WATER</p> <p>Citizens prevent the construction of water projects that will degrade, destroy or alter waters' natural and beneficial functions.</p>	<p>WATER</p> <p>Curious campers visit water holes at night.</p>	<p>WATER</p> <p>Hikers followed proper waste burial techniques.</p>
<p>WATER</p> <p>Hikers and/or boaters tossed empty wrappers and cans into the river.</p>	<p>WATER</p> <p>Campers did their dishes in the river, but used biodegradable soap.</p>	<p>WATER</p> <p>Hikers swim in the lakes and rivers in the mountains, but avoid scarce water holes in the desert.</p>

FOOD	FOOD	FOOD	FOOD
FOOD	WATER	WATER	WATER
FOOD	WATER	WATER	WATER

1960s

Wilderness Manners, Wilderness Ethics, Minimum-Impact Camping and No-Trace Camping originated in backcountry and federally-designated Wilderness areas.

1970s

Educational brochures were developed around this slogan-based program.

1980s

The USDA Forest Service formed a “No-Trace” program. In cooperation with the National Park Service and the Bureau of Land Management, developed a “Leave No Trace Land Ethics” pamphlet.

1991

The National Outdoor Leadership School taught the first Master Educator Course in the Wind River Range and helped produce educational materials.

1993

At an Outdoor Recreation Summit in D.C. the creation of a nonprofit called Leave No Trace, Inc. was recommended.

1994

Leave No Trace, Inc., the nonprofit was created to guide development, establish partnerships, distribute educational materials and conduct fundraising.

1999

Leave No Trace, Inc. partnered with Subaru to create the Traveling Trainer Program, which are teams of field educators who provide LNT outreach and education to diverse audiences across the country.

2000

Leave No Trace, Inc. entered into the first of a series of Memorandums of Understandings with four primary federal land management agencies: Forest Service, Bureau of Land Management, Fish and Wildlife Service, and National Park Service.

2001

Leave No Trace, Inc. partnered with REI to create the PEAK program, which educates youth ages 6-12 about LNT through hands-on activities.

2003

Leave No Trace, Inc. became the Center for Outdoor Ethics.

2010

The Bigfoot Challenge was established to encourage simple acts of environmental activism and teach LNT principles. The LNT Hot Spots program was also created to increase awareness about how to enjoy the outdoors responsibly by helping recreation places in need.

2011

The Center for Outdoor Ethics has continued educational outreach with emphasis on youth, local, and front country efforts. By this time, programs in Canada, Ireland, and New Zealand had already joined the efforts.

LNT History Key

1960s - Wilderness Manners, Wilderness Ethics, Minimum-Impact Camping and No-Trace Camping originated in backcountry and federally-designated Wilderness areas.

1970s - Educational brochures were developed around this slogan-based program.

1980s - The USDA Forest Service formed a “No-Trace” program. In cooperation with the National Park Service and the Bureau of Land Management, developed a “Leave No Trace Land Ethics” pamphlet.

1991 - The National Outdoor Leadership School taught the first Master Educator Course in the Wind River Range and helped produce educational materials.

1993 - At an Outdoor Recreation Summit in D.C. the creation of a nonprofit called Leave No Trace, Inc. was recommended.

1994 - Leave No Trace, Inc., the nonprofit was created to guide development, establish partnerships, distribute educational materials and conduct fundraising.

1999 - Leave No Trace, Inc. partnered with Subaru to create the Traveling Trainer Program, which are teams of field educators who provide LNT outreach and education to diverse audiences across the country.

2000 - Leave No Trace, Inc. entered into the first of a series of Memorandums of Understandings with four primary federal land management agencies: Forest Service, Bureau of Land Management, Fish and Wildlife Service, and National Park Service.

2001 - Leave No Trace, Inc. partnered with REI to create the PEAK program, which educates youth ages 6-12 about LNT through hands-on activities.

2003 - Leave No Trace, Inc. became the Center for Outdoor Ethics.

2010 - The Bigfoot Challenge was established to encourage simple acts of environmental activism and teach LNT principles. The LNT Hot Spots program was also created to increase awareness about how to enjoy the outdoors responsibly by helping recreation places in need.

2011 - The Center for Outdoor Ethics has continued educational outreach with emphasis on youth, local, and front country efforts. By this time, programs in Canada, Ireland, and New Zealand had already joined the efforts.