

Outdoor Skills Challenge Activity

Leave No Trace

Girl Scouts will learn the principles of Leave No Trace such as leaving what you find, respecting wildlife, being considerate of others, and being a sustainable nature-goer.

By completing the level-appropriate activities in this guide (see chart below), you'll earn your Leave No Trace Rocker!

Watch this video to
learn what the
7 principles of Leave
No Trace are!



Earn this
rocker this
month!



	Daisy	Brownie	Junior	Cadette	Senior	Ambassador
Leave what you find	★	★	★	★	★	★
Know before you go		★	★	★	★	★
Respect wildlife			★	★	★	★
Be considerate of other visitors				★	★	★
Durable Surfaces					★	★
Trash your trash						★

Leave No Trace

Leave What You Find

MATERIALS

3 small puzzles (6-10 pieces)

Three bins (Rubbermaid containers, wash basins, baby pools, etc.)

Sand

OBJECTIVE

Girl Scouts will be able to identify the Leave No Trace principle of “Leave What You Find.”

Dino Dig

1. Set up three digs. Put sand in each bin and put puzzle pieces in each. In one, put all the pieces of the puzzle, in the second put all but a couple pieces, and in the last only put one or two pieces.
2. Split the Girl Scouts into three teams.
3. Explain to the Girl Scouts that they are going to be archaeologists. They should carefully dig to find pieces of their puzzle.
4. When they feel they have found all the pieces in their sand, have them put the puzzle together and look at what the pieces tell them.
5. Have them share out the story of what is happening in their puzzle, based on their pieces.

Discussion

1. Ask the Girl Scouts how easy it was to put their puzzle together.
 - a. Discuss the importance to scientists of finding fossils or artifacts where they were originally deposited.
 - b. Discuss the impacts of intentional vandalism or theft of fossils or artifacts. Ask the group if they can think of other ways in which fossils and artifacts can be lost or damaged.
 - c. Discuss the effects of unintentional impacts, i.e.; driving off-road, hobby collecting, campsite construction.
2. Ask the group ways artifacts can be viewed and enjoyed on-site without damage. Remind the group that it is against the law to remove or destroy these resources!
3. Now ask what other things the Girl Scouts should leave where they find. Examples could include: plants, wildlife, nests, etc.

Adapted from Leave No Trace Curriculum.

Leave No Trace

Know Before You Go

MATERIALS

Each Girl Scout should bring a backpack* full of things they would take on a hike such as a water bottle, sunscreen, snacks, and gear for specific weather

Print pictures of realistic locations where you could go hiking and brief description of weather and terrain

OBJECTIVE

Girl Scouts will be able to apply the Leave No Trace principle of “Know Before You Go.”

Imaginary Hike

1. Have Girl Scouts sit in small groups with their backpacks.
2. Ask Girl Scouts to discuss in their groups where they might go on a hike, while unloading their packs, so everyone can see the contents.
3. Now give each group a picture and description of the location and have them read it.
4. Ask the Girl Scouts, if they feel they are properly prepared for this hike.
 - a. Ask them if they have everything they need to stay safe on a hike to that location.
 - b. Ask them if they are prepared to leave no trace as they hike.
5. Talk about the importance of preparing before you go on a trip.
6. Ask the Girl Scouts if it matters where they are going when they pack. Will they pack different items based on different conditions?
7. Ask the Girl Scouts what information they need to know about their travel destination in order to be prepared. Answers may include:
 - Weather
 - Terrain
 - Group size
 - Length of trip
8. Ask the Girl Scouts why they should have a plan before they go.

Adapted from Leave No Trace Curriculum.

Ralph Stover State Park



Photo by Andrew Gnias via Wikimedia Commons

1 mile of trails

The easy walking trails pass through many habitats near the millrace, along the Tohickon Creek and historic bridge, and Works Progress Administration-era structures.

Average Weather in March High: 50°F Low: 27°F
Rainfall: 3.8 inches
Snowfall: 4.1 inches
Daylight: 12 hours

Hickory Run State Park



Photo by Mtruch via Wikimedia Commons

Boulder Field Trail

3.5 miles, more difficult hiking

The trail runs between Boulder Field and PA 534. A modest elevation change and the rocky nature of the trail near Boulder Field makes the 3.5 miles seem longer in distance. This trail runs through sections of hemlock, spruce, and beech forests. Bears, owls, white-tailed deer, turkeys, snowshoe hares, and ruffed grouse are sometimes encountered along the trail. Hikers should allow 4 to 5 hours for a roundtrip trek.

Average Weather in March High: 44°F Low: 22°F
Rainfall: 2.8 inches
Snowfall: 8.8 inches
Daylight: 12 hours

French Creek State Park

35 miles of trails



Photo by Richard Bonnett via Wikimedia Commons

Boone Trail

6 miles, blue blazes, more difficult hiking

This loop trail connects all major attractions of French Creek, making it an excellent route to see the park. Start your trip at Hopewell Lake Boat Launch parking lot, Group Tenting Areas 13-18, campground contact station, or Hopewell Furnace Visitor Center (using connector trails). Several portions are steep and rocky, so wear sturdy shoes. It is closed to mountain bikes around Hopewell Lake.

Average Weather in March High: 49°F Low: 30°F

Rainfall: 4.1 inches

Snowfall: 4.0 inches

Daylight: 12 hours

Ridley Creek State Park



Photo by Dough4872 via Wikimedia Commons

13 miles of trails

The trails pass through a variety of habitats throughout the central portion of the park.

Average Weather in March High: 51°F Low: 35°F

Rainfall: 3.4 inches

Snowfall: 0.9 inches

Daylight: 12 hours

Leave No Trace

Respect Wildlife



MATERIALS

Markings for safe zones (two ropes, four cones, a couple backpacks, etc.)

OBJECTIVE

Girl Scouts will understand the effects of impacting wildlife, to help identify the importance of respecting wildlife.

Discussion:

1. Ask the Girl Scouts what are some things that humans do that impact wildlife. Answers could include:
 - Being too close to wildlife
 - Feeding wildlife
 - Leaving the garbage out
 - Leaving food out
 - Letting your dog off the leash
 - Being too loud
 - Walking through a habitat

Tag Your Impact!:

1. Set up two end zones that are safe zones with the markers.
2. Have all other Girl Scouts stand in one end zone and each choose a local animal to be.
3. Now choose one Girl Scout to be “it.” Assign them a specific impact, using those discussed at the beginning.
4. When the person who is it yells “impact,” all the Girl Scouts try to run or walk to the other end zone without being tagged.
5. If tagged, they become a different impact, and join the first impact.
6. Play until all or the majority of Girl Scouts are tagged.

Debrief:

1. Talk about the difference from running with no impacts to running when there were many. Was it easy? Difficult? How did you feel?
2. Discuss how animals are impacted and how it is harder for them to live in an area when there are many impacts.
3. Discuss why it is important to respect wildlife.

Adapted from Leave No Trace Curriculum.

Leave No Trace

Be Considerate of Other Visitors



OBJECTIVE

Girl Scouts will be able to apply the Leave No Trace Principle of “Be Considerate of Other Visitors.”

Campsite Interruptions:

1. Split the Girl Scouts into three groups. One group of campers and two groups of visitors.
2. The group of campers should role play that they are enjoying nature at a campsite. Quietly watching birds, reading a book, listening to nature, etc.
3. Give quiet instructions to each of the other groups.
 - a. One group should come through quietly and respectfully, quietly saying hello, and passing through the campsite.
 - b. The other group should come through loudly singing songs and carrying on, tromping through the campsite.
4. Discuss with the group and ask the campers how they felt with each group passing through.
5. Discuss other ways which might be disruptive to other visitors:
 - Blocking the water access with a campsite
 - Cleaning dishes in the water
 - Playing music too loudly
 - Putting litter in the fire
6. Talk about the importance of being considerate to others when in the outdoors.

Remember to be respectful to non-humans while enjoying the outdoors. Give animals space, don't pick wildflowers, and appreciate the land you are on.

Leave No Trace

Travel and Camp on Durable Surfaces



MATERIALS

Surface Cards

OBJECTIVE

Girl Scouts will be able to identify durable surfaces that are safe to hike and camp on.

Observation:

1. Discuss what makes a surface durable. Durability refers to the ability of surfaces or vegetation to withstand wear or remain in a stable condition.
2. Have the Girl Scouts take a few minutes outside and look around, identifying at least five different surfaces.
3. Have the Girl Scouts rate the surfaces in order of how durable they are.

When recreating,
try to use on existing
trails and campsites.

Surface Card Game:

1. Show the Girl Scouts the eleven surface cards.
2. Have them take a few minutes and decide which they think are durable for hiking and camping and which are not.
3. Reveal the answers.
4. Talk about how the effects of numerous individuals on a surface would have an impact.

Don't forget to walk
single file in the middle
of the trail, even when
wet or muddy.

Durable

- Snow
- Grass
- Rock
- Sand
- Established Trail
- Gravel

Non-Durable

- Slope
- Moss
- Wildflowers
- Wetlands
- Cryptobiotic Soil (arid and semi-arid soil that has very small micro-organisms growing on it)

Adapted from Leave No Trace Curriculum.

Slope



Wetlands



Moss



Cryptobiotic Soil

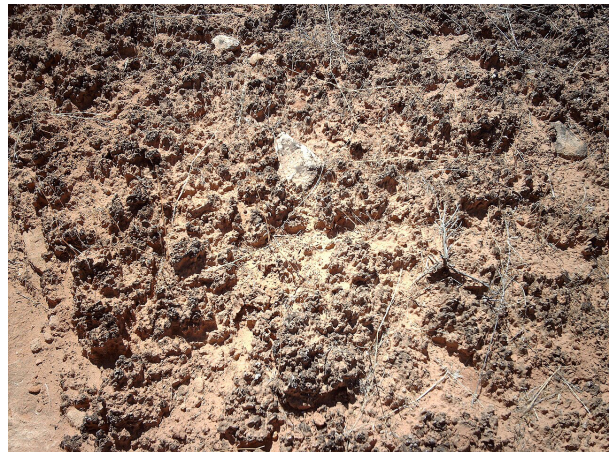


Photo by Nationalparks via Wikimedia Commons.

Wildflowers



Snow



Sand



Grass



Rock



Gravel



Established Trail



Leave No Trace

Dispose of Waste Properly A

MATERIALS

Measuring tape or ruler

Flag or cone

OBJECTIVE

Girl Scouts will recognize the appropriate distance from water to dispose of human waste and clean dishes.

How Far is 200 Feet?:

1. Have the Girl Scouts all start at one place. Mark the starting place with a flag or cone.
2. Have the Girl Scouts estimate two hundred feet from the starting point and walk that distance.
3. Mark where each Girl Scout stopped, by them either staying standing there, or putting a shoe down, etc.
4. Now measure two hundred feet from the starting point with a measuring tape and see how accurate they were.
5. Explain that on average 200 feet is between seventy and eighty adult steps.

Discussion:

1. Ask the Girl Scouts what types of activity should be done at least 200 feet from water. Answers should include:
 - Setting up camp
 - Washing dishes
 - Using the bathroom
2. Ask the Girl Scouts if anyone has ever tasted a drink from a glass that didn't have all the soap rinsed out. Explain that is what the streams and other water sources taste like to animals when we wash our dishes directly in the water.
3. Ask if anyone has ever stepped in a pile of animal poop. Explain that is why we need to dispose of human feces properly in the back country. Disposing of human waste is done in the backcountry in a cathole.
 - a. A cathole is 6-8 inches deep and 4-6 inches wide, and of course at least 200 feet from water sources.
 - b. Discuss that everything but the feces gets packed out, toilet paper, pads, tampons, etc.

Adapted from Leave No Trace Curriculum.