



TOOLBOX



Ten Outdoor Education Activities for Teenagers

Definitions

Environmental education (EE) is a learning process about how natural environments function and, particularly, how human beings can manage their behaviour and ecosystems in order to live sustainably. [It] *increases people's knowledge and awareness about the environment and associated challenges, develops the necessary skills and expertise to address the challenges, and fosters attitudes, motivations, and commitments to make informed decisions and take responsible action* (UNESCO, Tbilisi Declaration, 1978). **Outdoor education** and **experiential education** complement environmental education.

Outdoor education means learning "in" and "for" the outdoors. It is a means of curriculum extension and enrichment through outdoor experiences." (Hammerman, 1980, p. 33)

Experiential education is a process through which a learner constructs knowledge, skill, and value from direct experiences" (AEE, 2002, p. 5) Experiential education can be viewed as both a process and method to deliver the ideas and skills associated with environmental education.

In **psychosocial terms**, outdoor education may be defined as the use of experiences in the outdoors for the education and development of the whole person. In this sense, Outdoor education offers *informal educational opportunities addressing the personal and social development of both communities and individuals*. In **environmental terms**, outdoor education may be defined as education in, for, and about the outdoors. The emphasis is then placed on relationships concerning human and natural resources. (Priest. 1986)

More broadly, outdoor education may be defined as *an emphasis on direct experience of the outdoors for personal, social, educational, therapeutic and environmental goals*. (Neill, 2003). In that case, outdoor education includes environmental education, conservation education, adventure education, school camping, wilderness therapy, and some aspects of outdoor recreation. The Scout Movement for example, use outdoor education for both psychosocial and environmental objectives. It is an **experiential method of learning by doing** involving small groups of people in organised adventurous activities in natural settings and primarily using themselves as the resource for solving problems.

In the following pages, you will find ten examples of outdoor activities :

1. Our Natural World
2. Pack It In & Pack It Out
3. Respect Wildlife
4. Preserving Wildlife Tracks
5. Build a Community Pond
6. Promote Caring For The Earth
7. Build a Birdhouse
8. The Tire Cooker
9. A Tree Nursery
10. An Educational Nature Trail

1. Our Natural World

Source	Leave No Trace, Center for Outdoor Ethics (http://www.lnt.org/training/)
Age group	Late childhood, adolescence
Objective	Discovering our relationships to natural world
Description	<ol style="list-style-type: none"> 1. Begin the activity by an excursion to an outdoor setting such as a park, forest, river, or countryside. 2. Give each participant a piece of paper and a pencil. Invite them to draw three columns with the titles, <i>Things in Nature</i>, <i>Things We Have in Common</i>, <i>How It Helps Me</i>. 3. Invite participants to observe their environment. They must find objects in nature and tell how they are like that object. Make sure they consider less noticeable things such as air, soil, sun. For example: <ul style="list-style-type: none"> • Tree. We both have an outer layer to protect us (bark/skin). A tree gives me oxygen. • Soil. We both contain minerals. Soil helps grow my food. • Ant . We both need shelter. They are fun to watch. 4. Invite participants to share one or more of their connections. Help them to discover that this personal connection is where a commitment to land stewardship begins.
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

2. Pack It In & Pack It Out

Source	Leave No Trace, Center for Outdoor Ethics (http://www.lnt.org/training/)
Age group	Late childhood, first adolescence (8-15)
Objective	Raising awareness on respecting the environment
Description	<ol style="list-style-type: none"> 1. Arrangements for this activity must be made a week or two in advance. Find a location that is littered with garbage. For example, a roadside, a park, or a high school parking lot right after school. This activity can also be conducted during organised cleanup projects sponsored by groups that have "adopted" road segments or recreation sites. If you can not find a littered area near you, simulate one at or near your meeting site. 2. Travel to the site. Have your group observe the littered site and record in writing what they think of this situation and how it makes them feel. Present each member of the group with a garbage bag and with the challenge to make the area look more pleasant. 3. Have a contest to see who can collect the most garbage in 5 to 10 minutes. Instruct the group to use care when picking up sharp, rusty, or unsanitary waste. You may wish to have participants bring light gloves for this activity. 4. Discuss what litter is and the effects of litter in general. Discuss the effects of litter in the backcountry. Divide participants into pairs and have them devise a plan for packing out their garbage on their next trip into the backcountry. Discuss each plan. How do one-pot meals contribute to the creation of less bulk and therefore less garbage? What, if anything, can an individual do about the litter of other backpackers?
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

3. Respect Wildlife

Source	Leave No Trace, Center for Outdoor Ethics (http://www.lnt.org/training/)
Age group	Late childhood, first adolescence (8-15)
Objective	Raising awareness on respecting wildlife
Description	<ol style="list-style-type: none"> 1. Travel to a city park containing wildlife, a wildlife viewing area, or show pictures or slides of wildlife. Ask the group why loud noises and quick movements are stressful to wildlife. Ask if there are particularly sensitive times of the year for wildlife. Have someone explain how they can tell if they are too close to wildlife. Have someone explain how wildlife survive very cold winters or very hot summers. 2. Have the group observe the wildlife in the area and list things that might disturb each type of wildlife. Have them list the things they could do to minimize their impacts to wildlife. 3. Have each of the participants share their observations and things they would do to minimize disturbing wildlife and or wildlife habitat. Discuss the negative effects if they did not observe these precautions with wildlife. Discuss ways to view wildlife without harming them. Encourage the group to observe wildlife from a distance (to include the use of binoculars) so the wildlife are not scared or forced to flee. Remind them to always be kind to wildlife.
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

4. Preserving Wildlife Tracks

Source	New Mexico State University http://aces.nmsu.edu/pubs/_circulars/circ561.html
Age group	Late childhood, first adolescence (8-15)
Objective	Raising awareness on wildlife
Description	<p>Animal tracks are not only beautiful in their own way, they also communicate much about what type of animal made them, what the animal was doing as he moved and what the size of the animal was. Preserving wildlife tracks can be both exciting and informative.</p> <p>What you need :</p> <ul style="list-style-type: none"> • Strips of waxed cardboard (cut from milk carton) to make a collar 2 1/2 inches wide by 12 to 15 inches long • Plaster of paris purchased at hardware stores, drug stores, or hobby shops • A mixing stick • A jar for storing the plaster • Two tin cans (one for water and one for mixing) • Water • Paper clips <ol style="list-style-type: none"> 1. Find a clear track in soft mud, wet ground or snow. 2. Gently brush away excess dirt, small stones or leaves. Do not remove debris that is compressed into the track. 3. Make a circular wall around the track using a cardboard or plastic strip. The strip should be approximately 1.5 inches wide. Use a paper clip to hold the strip into a circle. Press the strip into the soil deep enough so the plaster will not run under it. 4. Make your plaster mixture. Mix Plaster of Paris with water according to the package directions. When in doubt, pour a cup of water in your bowl, then gradually add plaster (stirring constantly) until the mixture is thick and creamy. 5. Tap your mixing bowl on the ground, lightly, to remove any bubbles. 6. Pour the plaster into the frame. To protect the track, gently pour the plaster onto the surrounding ground and let it run inside the track- do not pour directly into the track. 7. Let the cast set until it is firm enough to relocate. This usually takes approximately 30 minutes. 8. Remove the cardboard frame carefully, once the plaster is set. Pick up the cast by digging out some of the mud beneath the cast and then lifting it up. Do not pry it up with a stick. 9. Wrap the cast in newspaper to protect it. Allow the cast to dry several days before painting or cleaning it.
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

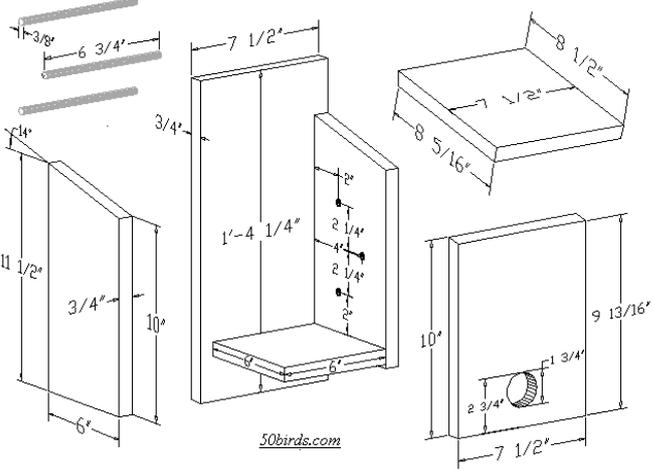
5. Build a Community Pond

Source	The Global Scout, Frank Opie. Maskew Miller Longman (1993)
Age group	Late childhood, first adolescence (8-15)
Objective	<ul style="list-style-type: none"> • Provide opportunity for observing wildlife. • Raising awareness on wildlife and environmental conservation
Description	<p>Build a community pond to attract bird, amphibian and fish life to your area. Such ponds attract water birds and frogs, which help to control snails and insects, and provide a source of water for bees to cool their hives.</p> <ol style="list-style-type: none"> 1. Line a shallow concave earth basin with heavy-duty plastic. A more permanent but still expensive alternative is to use cement (1 part cement mixed with 4 parts sand) and chicken wire. This defeats moles and is less likely to leak. 2. Fill up the basin with water. 3. Stock the pond with indigenous plants, fish and tadpoles. the insects and birds will do the rest. 4. Keep a journal of animal sightings. 5. The pond will soon begin to attract birds that have not been seen in the area for a long time.
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

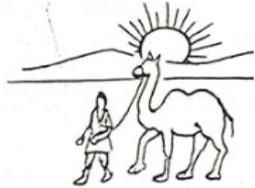
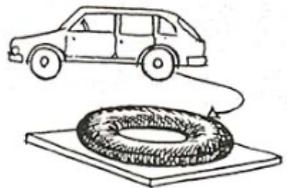
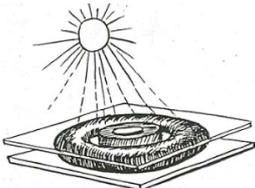
6. Promote Caring for the Earth

Source	The Global Scout, Frank Opie. Maskew Miller Longman (1993)
Age group	Late childhood, adolescence (8-18)
Objectives	<ul style="list-style-type: none"> • Raise awareness on environmental conservation • Improve the environmental quality of the neighbourhood • Involve young people in community development actions
Description	<p>A. CLEAN_UP CAMPAIGN</p> <ol style="list-style-type: none"> 1. Survey the hot spots where litter collects, and also the placement of litter bins. 2. Prepare posters which stress the need for a cleaner community and display them in shop windows. 3. Photograph the worst spots before the cleaning-up. 4. Display these photographs or take them along when you do a door-to-door survey to establish which households are willing to help clean up their own street. 5. Advertise the date of the clean-up in the local press and send a group in advance of the clean-up team to remind the householders of their promise to help. 6. Photograph the clean-up process and advertise the cleaned areas in a local shop window. 7. Invite other streets to participate in a second clean-up campaign. 8. Consider bin placements, bin decorating, car stickers, and community wall murals which passers-by can help to complete. <p>B. CAR-BOOT SALE</p> <ol style="list-style-type: none"> 1. Get your friends and families to find items at home that are of value but for which they have no further personal use. 2. Organise a car-boot sale or auction and sell these items for cash. 3. Decide how to use the money in a way that promotes caring for the earth of your community. For example, buy a set of tools with which to renovate furniture or replace worn washers in taps, and provide this service in your community.
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

7. Build a Birdhouse

Source	50 birds (http://www.50birds.com/)
Age group	Last childhood and first adolescence (8 -15)
Objectives	<ul style="list-style-type: none"> • Raise awareness on bird protection • Provide opportunity for bird watching
Description	<div style="text-align: center;">  </div> <p>Chickadees and maybe other species that remain in winter climates will gather together and cuddle in these warmers. The Winter Warmer birdhouse is constructed with Red Cedar.</p> <ul style="list-style-type: none"> • Wood stock is rough-cut on both sides so birds can grip interior and exterior surfaces. • It has a 6" by 6" floor, 9" inside ceiling, 1 3/4" diameter entrance hole located at floor level. • Hinged roof provides easy access for monitoring and cleaning. Shutter hooks secure roof in closed position. • Assembled with corrosion resistant screws. Pilot holes in both primary and secondary work pieces makes for easy assembly with screwdriver in minutes. <p>Mount in the sun on a tree, post, or wall between chest level or just out of reach. Check regularly for cleaning.</p> <div style="text-align: center;">  </div>
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>

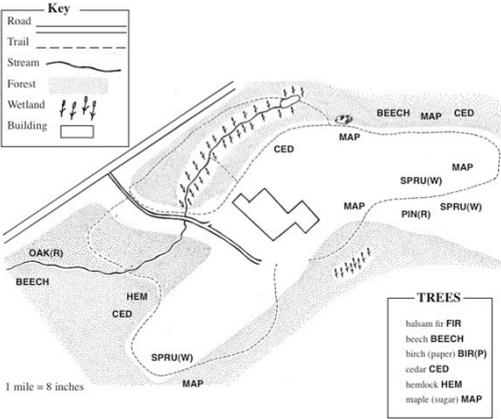
8. The Tire Cooker

Source	solarcooking.org/plans/	
Age group	Late childhood - early adolescence (8-15)	
Objectives	<ul style="list-style-type: none"> • Raise awareness on solar energy 	
Description	<p>1. There is a tremendous shortage of wood, kerosene and fuel for cooking. But can we use the tremendous heat of the sun to cook food?</p>	
	<p>2. Take an old car tube. If the tub is punctured, get it patched. Inflate the tube and keep it on a wooden board.</p>	
	<p>3. Take an aluminium cooking vessel with a lid. Paint it in black from the outside. Put all the ingredients for cooking (for example: the Indian Khichdi - rice, daal, salt, water, etc.) in the cooking pot</p>	
	<p>4. Place the cooking vessel inside the tube. Cover the tube with a piece of plain glass. Within three hours the Khichdi will get cooked.</p>	
	<p>5. What happens? The space in the well of the tube is like a closed cavity. Air can neither go out nor go in. The rays of the sun enter the glass and get trapped. Slowly, the temperature of the cooking vessel rises and the Khichdi gets cooked.</p>	
Evaluation	<p>After having conducted the activity, note here your observations : <i>how did it work? How did the participants react? What were the outcomes?</i></p> <p>How could you improve the activity next time?</p>	

9. A Tree Nursery

Source	The Global Scout, Frank Opie. Maskew Miller Longman (1993)
Age group	Adolescence (12-18)
Objectives	<ul style="list-style-type: none">• Raise awareness on environmental conservation
Description	<p>Trees provide shelter and shade for animals and smaller plants. Trees can make a garden 5°C cooler than would have been the case without them. We should all plant at least two trees a year, because that is what we use in one way or another. Fruit trees are especially worthwhile. So, it is quite important to involve young people in growing, planting and protecting trees. Developing a tree nursery can be a very important service for a local community.</p> <p>Materials</p> <ul style="list-style-type: none">• Large plastic bottle (2 litres)• Scissors• Heavy duty tape• Soil or potting mix• Seeds• Water <p>How to do</p> <ol style="list-style-type: none">1. Involve young people in looking at the trees that grow well in your area.2. Ask permission from the owners to collect seeds.3. Collect old two-litres plastic bottles4. Prepare mini-terrariums  <ol style="list-style-type: none">a. Cut a bottleb. Fill the bottom with soilc. Plant the seedd. Water without soaking the soile. Carefully tape the top of the bottle back. <ol style="list-style-type: none">5. Your terrarium is ready, put it in a nice sunny place.6. Water lightly once a week.7. The seed should take four weeks to grow8. After three weeks of growth, report into a plastic bag filled with good soil.9. When the tree is 30 cm tall, give it to someone who promises to care for it, and plant it in the ground with lots of compost. New trees need to be watered for the first two years of growth

10. An Educational Nature Trail

Source	Exploring Nature Educational Resources (http://www.exploringnature.org)
Age group	Adolescence (12-18)
Objectives	<ul style="list-style-type: none"> • Raise awareness on environmental conservation • Involve young people in community development actions
Description	<div style="text-align: center;">  </div> <p>Young people can be involved in designing and building Nature trails. This may be a fantastic educational activity.</p> <p>Nature Trails are a great way to get people outside looking, exploring and discovering the natural environment.</p> <p>City parks, youth centres, Scout camp sites or schools offer opportunities for young people to can create nature trails for the benefit of the community.</p> <ol style="list-style-type: none"> 1. Start by involving young people in doing an extensive study of the forest or wetland where the trail will travel. It will help you determine the eventual route of the trail if you find interesting sites you wish to have the trail go by. 2. Ask experts to help you choose educational stations, i.e. places where groups can gather to observe interesting things such as : trees, wildflowers and interesting plants, animal signs, forest succession, streams and ponds, soil profile, competition between species, habitats within an ecosystem, life cycles, etc. 3. Prepare a project and raise funds and technical support to help you implement it. 4. Clean up and arrange your trail in order to make it easy to walk : it should follow a gentle slope in the terrain and avoid steep areas that will erode and create treacherous footing. Add signs to show the directions and indicate stations (with panels giving the necessary explanations for observation). Look at potential hazards and dangers (poison ivy, wild bees and wasp nets, hanging branches, etc.). The trail underfoot should still be safe to walk on even in heavy rain. 5. Make a Nature Trail Guide with a map indicating the various stations and the necessary "should NOT do" and "should do" lists. 6. Promote your Nature Trail: Inauguration day, documentation in schools and youth centres, etc. <div style="margin-top: 20px;">  </div>