



November 21-23, 2014

OUTDOORS

From Trees & Bees to Roots & Boots

Taking our girls outside to explore and learn is a backbone of Girl Guides!

With the increase in children playing video games, a decrease in a child's 'free range' area, safety, and cultural barriers there is less and less contact with the natural world. Taking the time in your weekly meetings to spend time outside, whether you are teaching skills or playing, is an important experience for your unit members. There is more information every year supporting evidence that spending time outdoors increases happiness, healthiness, creativity, decreases stress, and may even help with concentration. Developing a relationship with the outdoors as a child can have lasting effects as an adult so let's take the opportunity to make sure our girls have as many opportunities to pet caterpillars, catch fire flies, track a deer, follow a stream, and build a birds nest!

ACTIVITIES

BIRDS

Instead of bird watching try bird playing!

- David Sobel's bird watching program ideas: <http://www.yesmagazine.org/issues/education-for-life/803>

EXPLORING

- At the beginning of the year have your girls choose a spot outside where they will visit throughout the Guiding year in all seasons (or month or for a specific amount of months)
- Have each girl trace themselves on a large piece of paper or draw themselves on a smaller piece of paper
- Each meeting have the girls go and spend 5-10 minutes in their spot.
 - You can frame each visit to their spot differently:
 - Notice the plant life in and around your spot, try to notice as many details about them as possible. If it is reasonable to do so they can bring artifacts from their spot (without damaging the foliage)
 - Notice the insects and animals you see from your spot (remember people are animals too!)
 - Notice the sounds you hear while in your spot. What might be making that noise? When you leave your spot will you be able to recreate that noise?
 - Notice the smells that may be present there. What might be causing them?
 - What do you feel while in your spot? (wind on your face, emotion, etc.)
 - When your girls come back indoors have them add to their drawing, add drawings of the animals or insects, the sounds, the smells etc. If they heard an animal but can't identify it (eg: "I heard a cawing noise, what made that noise?") work with the girls to see if others had a similar experience and bring in resources to help girls determine what that was. It is best if you do not plant these thoughts of identifying before they go out, let them play and explore without constraint and then have them try to identify it afterwards.
- At the completion of your time period your girls will have a very in depth knowledge of this spot that they have chosen. If you do this periodically throughout the year they will have a good understanding of what seasonal changes may take place. They may notice more subtleties than they would have just playing outside. With the focused attention they will take different knowledge away from this experience.

ECOLOGY



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Oh Deer!

- This game appears in the *Project Wild Activity Guide* and is a great way to introduce and demonstrate the circle of life with girls. <http://www.projectwild.org/documents/projectWILD.pdf>

Divide the girls into two equal teams, and line them up facing each other about 25 feet apart (this distance is an estimate, if this is too close together you'll know). One team are the deer, and the other team is the food, water, or shelter.

Each round the deer must decide whether they are hungry, thirsty or cold. If the deer are hungry they hold their stomachs, if they are thirsty they cup their hands and if they need shelter they hold their hands together over their heads (tenting).

The other team of girls decides whether they are food, water or shelter and they make the same symbols. The deer turn back to the other girls, and on the count of three they turn around with their symbol showing and the food, water or shelter is making their symbol too (they decide as well what they'd like to be.)

The deer then run across the space and catch their food, water or shelter. Only one deer per person. If there are more deer that need water than there are ponds, then the deer die and stay on the side of the necessities. The deer that get what they need, reproduce and take their new deer with them back to the deer's team.

After each round the number of deer is counted, and recorded.

Play the game about 10 times, so that the girls can see how the subsequent generations of deer are dependent on the numbers of the previous generation

HIKING

- Activities to do along the way
 - Camouflage
 - Once you've described the rules, be prepared to play at any time! At any point during your hike, one of the players (doesn't matter who) yells "HIDE!" Everyone except the girl who called "hide" scatters and hides wherever they can, although they must be able to still see the girl who started this round. The girl who yelled "hide" remains where she is, eyes closed, and counts to twenty. Then she opens her eyes and looks around her, trying to find all the hidden people. She must call them out of their hiding spots by name or describing their clothing. When she's found as many people as she can, she holds one hand out and yells "food and water". Those who have not yet been spotted must come out of their spot and touch the outstretched hand of the person who is it (they have their eyes closed), they then run and hide again. The person who is it counts down during this process, they start at 30, then this repeats until there are few people left decreasing by 5 each time. At the final round the person who is it holds her hand over her head and makes a number with her fingers (e.g. three, four, etc.) Players who are still hidden at this point must call out the correct number. The first player to do so, and is closest, wins the round!
 - Paint chip scavenger hunt
 - Using paint chips provide each girl with one strip and challenge them to find objects that are each separate colour on the chip. Depending on the season the colours you select will change the difficulty of this scavenger hunt.
 - Senses hike
 - Choose activities you would like to lead, you may not cover every activity on each hike. Try and make sure you hit most senses.
 - (feel) Hug a tree: in partners one girl is blindfolded and their partner leads them no more than 15 steps to their tree. The girl uses her hands to explore up and down the bark of the tree, she can smell it too but spend the time to get to know the tree. When she is ready and knows her tree, the partner leads her 10 Steps away from the tree and removes her blindfold. The girl then has to go and find her tree again. The partner then switches roles.



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(smell) Timber Wolves scent their territory: Onion Hike, one partner takes the onion and rubs it on trees creating a smelly path that her partner will try to follow. Have there be 6 stops along the path and they need to be along a reasonably straight route. (Send each group in a different direction). The partner follows the path by smelling the tree and finding all 6 spots. When the groups switch, move to a different part of the forest where there won't be any onion smell from the first group.

(hearing) White Tail Deer Ears: Human ears are on the sides of our heads and are not as strong as deer ears, which swivel around and have trumpet amplifiers to get sound in. First I am going to walk backwards down this straight path and talk in a normal voice, when you can no longer hear me, please put up your hands. (Adults will usually stop hearing first). Once most of the group can no longer hear the person who is walking and talking. Have the group cup their hands around their ears, creating deer ears and start the experiment again but the talker will just walk further back, you will be amazed at how far away from the group you are still heard with deer ears.

(smell) Black Bear's Tea Party: Bears depend deeply on their sense of smell, it helps them locate food, and water and live. Today we are going to make tea for the bear, so you and your partner will go out into the woods and find the most beautiful smelling tea possible. Once you choose the smelliest decadent tea possible, put a sample in your tea cup and then share your teas with another group. When you get a chance to smell the tea, please describe what you smell to the owner of the tea so that they can help others describe the tea. When everyone has had a few chances to smell other groups tea, ask the girls to return the tea to the forest, collect the tea cups and move on.

(cooperation) Red Ant Game: Magnifying glasses observe ants. What do you see ants doing? Ants spend a lot of time going to and from colony they follow smell trails and if they lose the trail they may never find their way home. Get the whole group up on a log, have half of them going to the colony and half of them going to the food source but they cannot lose the trail so they will have to cooperate without touching the ground to make sure that all ants get to where they are going without losing the trail and never making it home again. The task is completed when the two groups have switched sides of the log.

(vision) The Red Tailed Hawk is an animal who relies on vision to see what is going on around them and find its food as it soars way above it. I am going to get you to take the magnifying glass and you are going to sit quietly in a spot and see what you can find close around you. You must stay sitting down until you hear me call the group back to this point to discuss what you have seen. We are going to be fairly close together, so please stay quiet and focused on your work so others can focus on theirs.

(hearing) Brown Bats and Moths use hearing to fly at night, their vision is quite poor. They also locate to find their food, like moths. The bat is blindfolded, the moth is not. Both are given shakers and when the bat shakes, the moth must respond. The rest of the group forms a protective ring around the two players and will gently redirect the bat into the middle of the circle if they get off course. Players switch when the bat catches the moth. Can increase the challenge by adding more bats and moths into the circle.

(vision) Snowshoe Hare turns white in the winter to help hide itself against the snow, turns brown in summer to hide in the trees. The forest is teeming with colours and we are going to look around the area to match up some colours. Here are some paint swatches or river rocks, (hand one easier colour out to each group) have the girls go and find the closest match to that colour and then have them come back and give them a more challenging colour. Keep progressing to the more difficult colours. Debrief: how many of you were surprised to find a colour in nature that you thought you would never find? What are the easy colours to find? What are the harder colours to find?

(smell) Skunks lay smelly trails to fend off predators, other animals who are trying to hurt them. This strong smell lasts a long time and is hard to get off, so it warns other animals not to mess with skunks. We are going to use some strong smells today but these are not unpleasant to lay trails for other groups. The sponges that are soaking in essence of smell in a glass jar. (Extract lemon, peppermint, cherry, vanilla etc). Have each group lay a trail using the sponges soaked in the smell to mark their trail. These trails can be laid close together and can overlap. Each group then swaps trails and follows the trail left by another group. Have each trail start from the same location but initially head off in different directions, only so the groups know where to come back to when they can no longer smell the trail.



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(hearing) Rabbits use their ears to warn them when danger is near; they have an incredible sense of hearing. They stay still when they think danger is approaching and listen to see what will happen. Have the group spread out and lie down and spend 2 minutes just listening to the forest around them. The quieter everyone stays, the more that everyone will be able to hear. Bring the group back together and have them discuss what they heard and what they think was making that noise.

OUTDOOR ADVENTURES

Tracking

- A very simple way to break down animal foot prints for children to be able to identify what kind of animal left their track (Tom Brown tracking exercise from Tom Brown's Field Guide: Nature and Survival for Children)
 - Have children write a recipe card as follows:

Front foot # of toes x back foot # toes	Additional Features	Family
4x4	No claws	Cat
4 x 4	Claws	Dog
4 x 4	Claws + big rear foot	Rabbit
5 x 5	Claws + small heel pad	Weasel family
5 x 5	Claws + flat footed	Raccoon, opossum, and bear
4 x 5	Claws	Rodent
2 x 2	Hooves	Deer

- On the back of the card for advanced trackers you can add walking patterns. Animals instinctively follow these patterns but may deviate from time to time just as sometimes we saunter, stroll, run, or chase. Its important that girls understand this is accurate most of the time but not necessarily all of the time.

Family	Walking Pattern	Examples of Animals
Cat	Diagonal Walker	tiger, lion, jaguar, leopard, cougar, cheetah, lynx, domestic cat
Dog	Diagonal walker	dogs, wolves, foxes, jackals, coyotes
Rabbit	Gallop walkers	Jackrabbit, snowshoe hare, dwarf rabbit
Weasel	Bound walkers	otters, badgers, weasels, martens, ferrets, minks and wolverines
Raccoon, opossum, and bear	Pace walker	Raccoon, Muskrat, Beaver, skunk, Black Bear, Grizzly Bear
Rodent	Gallop walker	Rat, Deer Mouse, House Mouse, Meadow Vole, Pika, Chipmunk, Gray Squirrel, Red Squirrel, Prairie Dog,



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Deer

Diagonal walker



Gopher, Eastern Mole, Porcupine
Whitetail Deer, Bighorn Sheep, Mountain
Goat, Elk, Moose, Caribou, Bison, Wild Boar

- This book contains many games for survival and tracking with kids from learning to walk like a stalking animal to plaster casting of prints.
- Online tracking information: <http://www.princeton.edu/~oa/nature/tracking.shtml>
- Plaster casts of tracks - <http://www.bear-tracker.com/plastertracks.html>
- It can be fun to challenge girls to walk like different animals, try the different walking patterns! This is a little easier when it is winter and you can see the tracks you make.

Animal	Walking Pattern	Notes
Garfield – cat	Diagonal	Direct Register
Weasel	Bound	Rear feet land behind front feet
Peter cottontail – rabbit	Gallop	Rear feet land ahead of front feet
Peppy le peu – skunk	Pacer	Move the same side of the body at the same time (right front and right rear). Indirect register.
Fantastic Mr. Fox	Diagonal	Direct register

Direct register – their rear foot falls exactly where their front foot lifted off.

Indirect register – their rear foot falls slightly off side to where their front foot was.

Compass Activities

Many of us do not have a consistent practice of using a compass for directions. With the advent of GPS technology compasses are becoming less useful, or are they?! Technology has its limitations of battery power and sometimes satellite signal. There are many professions that continue to rely on the basic ability to use a compass. The girls should be familiar with the cardinal directions, a brief review or game is a good idea.

Cardinal Directions Game:

Instruct the girls to run to an object North, South, East, and West. You can assign a number of steps, use SW, NW, SE, NE as well.

How to Find a Bearing:

1. Turn the compass housing until the bearing you want is oriented at the top arrow, direction of travel arrow.
2. Place the compass in the palm of your hand, level with the ground.
3. Turn your body, not the compass, until you put “red in the shed” the red needle in the red outline on the compass housing.
4. Your direction of travel arrow is now pointing you in the direction of your bearing.



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How to Take a Bearing:

1. Facing a point of interest, eg: the CN tower, lay the compass flat in your hand with the direction of travel arrow pointing at your point of interest
2. Rotate the compass housing so that "red is in the shed"
3. The number aligned with your direction of travel arrow is the bearing number.

How to Follow a Bearing:

Now that the girls know how a compass works you need to show them how to move from point A to point B following that bearing. Most people's instinct is to hold the compass in their hand aligned with the bearing and with their head down walk forward keeping red in the shed. This method has a large margin for error and is not correct. Our human instinct is to walk in circles and this does not combat that instinct. Girls should use a leap frogging technique.

1. Girl takes a bearing and points the directional arrow in the way she wishes to travel.
2. She then sights an obvious object on that bearing (the flagpole, a very distinct tree (warning, these blend in with other trees when you get closer, the stump etc.). If there is no obvious object on that bearing to use as a marker have a partner walk ahead a significant distance on that bearing (tips are for that girl to stay within talking range, and visible to the girl with the compass).
3. Once an object has been chosen or a girl has been sent ahead, the girl with the compass can put the compass down and walk to that object or other person.
4. Repeat the process with the same bearing.

Compass Activities:

1. Take your unit somewhere with a view, for example a field, a beach, a look out point etc. From here you can see many points of interest in the distance. Have a few bearings that you have already calculated in advance. Have the girls in pairs find what is at 180°, 62°, 241°, and 12°. After you have done this have the girls find one for themselves that they will then challenge the group to find. This is a good way to warm the girls up to using a compass for a bearing while standing still.
2. Have your girls make shapes with compass bearings! This activity requires you to have these bearings with you. Provide each girl with a marker of some kind (a pylon, rock, or noticeable item they can place along the way). This is best done in a field.

<p>Square: Each length has equal number of steps. Each bearing is separated by 90 degrees:</p> <p>0 degrees – 10 steps 90 degrees – 10 steps 180 degrees – 10 steps 270 degrees – 10 steps</p>	<p>Rectangle: Two sides of the shape are equal in length, and the other two sides are longer and equal in length. Each bearing is separated by 90 degrees:</p> <p>0 degrees – 10 steps 90 degrees – 30 steps 180 degrees – 10 steps 270 degrees – 30 steps</p>
<p>Triangle: All sides of the shape are equal in length. Each bearing is separated by 120 degrees:</p> <p>40 degrees – 10 steps 160 degrees – 10 steps 280 degrees – 10 steps</p>	<p>Have the girls design their own shape now that they know how to set a bearing. Can they plot out a octagon, a house shape, a star, a trefoil?</p>



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Discuss modern uses for compasses, benefits to compass over technology and vice versa. Visit a local conservation area or park with an orienteering course to practice your skills!

OUTDOOR COOKING

Many of us have experience using a variety of camp stoves. Here are a few alternatives to the sterno stoves, pop can stoves, coal boxes, and whisperlites.

Kelly Kettle

- This is a great item to have with you during any outdoor program. It makes warming up with a cup of hot chocolate easy and fun! <http://www.leevalley.com/en/Garden/page.aspx?p=43901&cat=2,40733,40996&ap=1>

Fire Box

- This keeps your fire off of the ground and with the use of a few sticks found around you can heat up a pot of water for boiling or cook some tasty food on a grill. Using a firebox is a great way to "Leave No Trace" <https://lnt.org/learn/7-principles>
- There are many kinds of fireboxes out there for purchase or plans online to build them. <http://www.fireboxstove.com/>