

## 10. Interpretive Hikes

**Sources:** Adapted from *The Junior Environmental Club Manual*, Halton District School Board and Youth Services Canada; *Outdoor and Environmental Education: Starter Package*, Halton District School Board; and Diane Lawrence, Queen’s University. (adapt for Intermediate grades)

### Description

Exploring local places can help students to feel a connection to the natural world and develop a “sense of place.” This exposure can sensitize students and help to lay the foundation for an ethic of care and stewardship for the natural world. Through the use of their senses and a variety of trailside activities, students will gain an appreciation for wildlife and its natural settings.

*All school grounds or local parks, even those in urban areas,  
have the ability to be a playground for interpretive hikes.  
Never underestimate the imagination and playfulness of students.*

### Background Information

As our daily lives move further and further away from the natural world, children no longer develop a sense of their place or a connection to the land around them. This creates a separation from the Earth that leads to individuals being oblivious to the large environmental impacts of their actions. When possible, environmental education should take place in natural settings. To understand our impact on the Earth and why it matters, children need opportunities to reconnect with “the outdoors” and develop a familiarity with it that is often no longer a part of their lives.

### Hints for success

Guided hikes need to have structure and set themes (e.g., exploring our senses, outdoor detective). If a walk does not have a clear purpose, students will quickly lose interest. Appendix E supplies a wide range of activities for your hike. Your choice of hike will be dependent upon the age and experience of your class, the type of natural space you will be exploring (schoolyard, park, conservation area, etc.), the duration of the hike and your specific learning goals for the session. Taking all of these variables into consideration, you should make an enjoyable experience in the outdoors the main focus for any hike. Children must learn to appreciate and love the outdoors, and ultimately the Earth, before they are likely to become its advocate. If there are any variables that may hinder the success of the hike (cold, rain etc.), consider adjusting the activities you have selected or postpone your hike. If it is wet, bring extra raincoats and plastic bags as ‘sit-upons.’

## Set up

First, check your Board policy on field trip teacher-student ratios. The utopian hiking situation would include a teacher and an 8:1 ratio of students to adult volunteers. If you have enough capable individuals, the most effective way to organize the hike is to divide the class into three groups with three different hike leaders. Only do this if individuals are comfortable and/or experienced with leading youth on hikes.

## Materials

Dependent upon specific activities chosen and the area you hike in:

- ▶ small first aid kits for scrapes and minor cuts
- ▶ communication device if you are far away in the schoolyard (school radio) or off school property (cell phone)
- ▶ whistle

## Time Allotment

Hike: 40 minutes

## Teaching/Learning Strategies

1. Ask students to form a circle and introduce the hike as a special opportunity to explore the environment. Expect that students will be somewhat distracted because of the change in setting from the typical classroom.
2. Setting an adventurous tone will make the hike compelling for your students. The more excitement, anticipation and engagement you model, the more they will feel.
3. Once this tone is established (one great technique is to crouch and talk in a whisper, which helps students to settle down and focus on your voice), clearly present your expectations for the hike and the consequences for inappropriate behaviour.
4. Include safety expectations (staying away from streams, etc.).

## Follow-up Discussion Questions

- ▶ After certain activities, especially those that ask students to use their senses to explore the natural world, ask students to share their thoughts and insights.

## Extensions for additional classroom projects/activities

- ▶ Students could have an opportunity to design their own interpretive hike to share what interests them most about the particular setting with a group of fellow students.
- ▶ Create a curriculum-based outdoor scavenger hunt if your class enjoys these activities.

# INTERPRETIVE HIKE ACTIVITIES

## A. Focus On Nature!

- ▶ Can be used to focus the attention of children (in the school yard; on a field trip; waiting for the bus!)
- ▶ Uses skills of observation; assessing similarities and differences; finding patterns; classifying; seriating

### 1. LET'S GET STARTED

**Materials:** Nil (optional: small personal blackboard and chalk or pencil and paper)

**Instructions:** Ask students what they already know about the natural world or what they expect to find during their exploration. If you have a small blackboard write the name of the student who suggests each brainstormed item beside that item. Ask two students to take the chalkboard and keep an eye out for the items listed. As they see an item on the list stop the group and point out the item that you see. Invite the student who brainstormed the item to comment. Continue this throughout the hike.

### 2. ALPHABET TRAIL

**Materials:** A piece of paper on which each letter of the alphabet has been written; pencils (per student or group)

**Instructions:** In groups or as individuals, challenge children to find something in nature that starts with each letter of the alphabet. Based on the capabilities of the group, the facilitator can decide whether or not items must be written in order (i.e. the item for “g” must be found before they can move on to looking for an item for “h”). The facilitator should also decide how specific the item names should be (i.e. will you allow “tree” or does it need to be “maple tree?”). Children should be instructed to leave natural objects in their place and record the name only.

### 3. DESCRIBE IT

**Materials:** Nil

**Instructions:** Have children go and find an object that exhibits a characteristic that you name (e.g., “please find something that is bumpy”). Be sure to indicate whether the object must be a natural one (if you don’t, children may bring litter - a teaching opportunity if you wish it). Caution children to not damage natural (usually living) items - (i.e. don’t pick leaves or other living parts of a plant etc.). Based on the capabilities of the group, the facilitator can suggest that children work with a partner (great discussions possible!). When children come back with their items, celebrate and share their finds. Repeat the procedure with other single descriptors.

Work up to the challenge of finding one item matching two descriptors (e.g., “please find something that is thin AND dull”).

If this is a favorite activity you can add more descriptors as the year progresses and children advance their skills (e.g., “please find something that is round AND sharp AND bumpy”).

### 4. COUNT ME IN

**Materials:** A piece of paper on which numbers (beginning with 1) can be written; pencils (per student or group)

**Instructions:** As individuals or in partners or groups, have children find something in nature that regularly occurs in similar numbers (or patterns). For example grass blades occur singly (in 1s); tree branches fork (in 2s); clover leaves (in 3s) etc. Remind children that they do not need to collect the items — just record them. Celebrate their findings!

## 5. DUPLICATION

*Materials:* Nil

*Instructions:* Divide children into groups of 4 to 10, depending on their age/ability. Ask each child to go and find some natural object that is special and bring it back (remind them not to pick live objects if they will be damaged - e.g., leaves from plants; you may also have to give size limitations!). When they return to their group have children sit in a circle and share all objects in the middle. Designate one person as captain. Have all children close their eyes except the captains. Captains should then remove one object (not necessarily their own) from the circle and hide it from view. Children should then be instructed to open their eyes. The captain should ask individual children in their circle to tell what the missing item is until it has been guessed. The child with the correct answer then becomes the captain. The item is returned to the middle of the circle and the game can begin again. You may wish to play this in teams within each group; you may wish to increase the number of objects hidden in each round until they all can be hidden and then identified!

*Variation:* Have each child find a partner; then send each child to find a special natural item. When they return, have partners exchange items which they then must go and duplicate.

*Variation:* As above, have groups of children go and gather special items and share them in the center of their circle. Blindfold all the children except the captain, who passes around half of the objects for the children to feel, then places them back with the other objects. When complete, the children remove their blindfolds and the captain has the children identify which objects they touched.

In all cases have the children return their natural objects to their original place when the game is over.

## 6. MISPLACED OBJECTS

*Materials:* A collection of objects (try 10!) that don't belong in the area where you will be walking (they could be natural objects from a different habitat but try it first with 10 human-made objects - e.g. a pencil, old key, shoe lace, bottle cap, eraser, old mitten...you get the idea!); a piece of paper and pencil for each individual or group

*Instructions:* Prior to the arrival of the children and without being observed, place the 10 objects along a walkway or trail so that they vary from easily spotted (!! ) to well camouflaged (not buried however!). Don't forget to vary the location from the right to left side of the walk, and vary the height at which you hide objects (consider safety first though!). Gather the children together at the beginning of the trail/walkway and indicate that there are 10 objects that don't belong along the path and that their task is to find them. Indicate that they should walk silently and not reveal objects they spot to other individuals/teams. Give a time limit for their walk on the trail. When completed discuss the objects spotted - which ones were easy to spot? Why? If some children have found objects that others have not, or if some objects were not found at all, walk the trail again and discuss again. A final walk should be held to gather the misplaced objects. Why were some objects hard to spot? This is a great opportunity to discuss camouflage, angle of view, how other senses can help.

## 7. COLOUR ME

**Materials:** Paint chips in a variety of hues, one or two per student

**Instructions:** Distribute the paint chips to each child and ask children to find something in nature that matches the colour of the paint chip they have been given. Instruct the children that nothing live should be removed from its place. Re-assemble the group and share and celebrate the matches they have found.

## 8. BIG, BIGGER, BIGGEST

**Materials:** Nil

**Instructions:** Instruct children to find the smallest object they can. Indicate to the children that nothing live should be removed from its place. When the children return, celebrate their findings. Now give a second challenge - find the biggest object they can find - but it must be the same type of object they found before (i.e., if they brought a small fallen leaf, now they find the largest fallen leaf). A third challenge can be to find three of the same objects that fit in size between the smallest and largest object. Have the children put them in order from smallest to largest.

## 9. SOLO SPOTS

**Materials:** Journal (optional)

**Instructions:** Create a circle with students and discuss the peacefulness of the natural world and the value of solitude. Instruct students to find their very own spot in the forest to explore the peaceful solitude of nature. If students have journals suggest that students write if they wish while at their solo spot. Encourage them to explore the spot by sitting still and exploring what is at their feet. Allow students

to sit quietly for 5 minutes (lengthen the time as students become familiar with the outside world). When students leave their solo spots ask them to share things they heard, thought and felt. The key to this activity is to model experiencing your own solo spot.

## 10. QUESTIONS

**Materials:** Nil

**Instructions:** Only ask questions on the hike. The only “answer” allowed to any question is another question. Questions must also only be about things on the hike. Continue this until it gets out of control or students start to become frustrated.

## 11. COIN-FLIP HIKE

**Materials:** Any coin

**Instructions:** To start the hike, flip a coin: heads go right, tails go left. Hike on and look for an unusual or interesting object. At each stopping point, flip the coin to determine a new direction.

## 12. CHANGES

**Materials:** Nil

**Instructions:** Ask students to find evidence of changes taking place. You may not see the actual changes, but feel free to infer from observable evidence.

## 13. FRISBEE TOUR

**Materials:** Frisbee

**Instructions:** Take a Frisbee out on a walk. Throw the Frisbee and explore and discuss what is found under the Frisbee after it lands. Allow students to take turns throwing the Frisbee.

## B. Learning To Look; Looking To See

- ▶ activities that encourage children to look at the environment from a different perspective

### 1. TAKE A PICTURE

**Materials:** Empty slide frames, one per child (can be purchased at a camera store or ask a photography club to save you its throw-aways and re-use the frames)

**Instructions:** Give every child a slide frame and have each of them go and take a close up view of something natural. Have them return and share what they saw (no collecting is necessary!). Send them off again to take their favorite scenic shot of their surroundings; an upside down shot; vertical shot vs. horizontal shot.

### 2. BINOCULARS

**Materials:** 2 empty toilet paper tubes and one elastic band per child

**Instructions:** Instruct the children to make a pair of binoculars with their toilet paper tubes. Have them spot interesting natural phenomena and report back to the group. (Did you know that if you look through one end of actual binoculars you can see far away and if you look through the lenses at the other, you can see close up?)

### 3. “ANT” TRAIL

**Materials:** One length of string or yarn per child (about 50 cm each should do)

**Instructions:** Indicate to the children that they have been hired as park naturalists and must build a new nature trail. However, the park is for ants! Give each child a string and indicate that

they should choose a “habitat” and lay the string out so that it includes several scenic features for ants. When they have completed their trail they should be instructed to take one of their classmates along it. Follow up with a language arts/journal writing activity in the classroom!

### 4. CAMOUFLAGE

**Materials:** A large number of toothpicks (at least 200) of different colours. You can purchase coloured toothpicks but the only ones I could find were plastic. **DON'T USE THESE IF YOU ARE PLAYING OUTDOORS** (they don't decompose).

- ▶ Paper cups or re-usable plastic bags
- ▶ Chart paper; marker

**Instructions:** In a defined grassy playing area, randomly scatter the toothpicks when the children are not in view (all except one toothpick, to use as an example). Gather the children outside the playing area and give each a container (cup, bag). Indicate that their challenge is to find and collect as many toothpicks as they can within the playing time. Show children what they are looking for (they may not know what a toothpick is!). Show the children the game boundaries and release them into the playing area. When the designated time is up (gauge this by the age of the children – 3 minutes is an average) call the children together and have them sit in a circle and sort their toothpicks into colour groups. Discuss which colours of toothpick were most found and least found by the children. Collectively graph the results of the colours of toothpicks found by the children. Discuss the results. Discuss how animals use camouflage to protect themselves or to prey on others. Discuss how seasons might affect camouflage. Have children think of “habitats” where the red or yellow toothpicks might have been the hardest to spot.

## 5. COLOURS

*Materials:* Nil.

*Instructions:* Form a circle with students and ask them to face outwards. Going around the circle, list as many colours as they can spot from that one location. Also try picking a colour and trying to find as many objects of the colour as possible.

## C. Sensory Awareness

- ▶ activities that highlight a sense other than sight!

### 1. MAGIC (FEELY) BAGS

*Materials:* 5 (or more!) bags with draw strings - cloth bags work the best since they are “quiet,” but plastic bags will work. Make sure you don’t use plastic bags that an unsupervised child could fit over his/her head. If you don’t sew or have a friend who does, watch out at the holiday season - cloth gift bags are becoming popular - and it doesn’t matter what is on the outside of the bag; it will be the inside that counts!

- ▶ A number of natural objects (same number as the bags) - relate the objects to the theme you are working on or wish to introduce. If you are in a natural area you may wish the objects to relate to the habitat you are in (e.g., a pinecone when you are in a white pine grove - then you’ll have an opportunity to talk about coniferous trees, seeds etc.).
- ▶ Vary the objects - some might be prickly (but not hurtful); some might be soft; some might need the sense of smell, not touch

*Instructions:* In a predetermined location (on a nature trail; around the schoolyard) put the bags in the most opportune place. They should not be completely hidden but could require

children to move slowly and carefully so as to not miss them. Do this without the observation of the children (and warn the custodians, park naturalists etc. ahead of time so that they are not removed by others!). At the time of your adventure with the students indicate that you are going to go on a walk to see what you can discover about your chosen theme. If you have an extra, show children a magic bag and indicate that they should be on the look-out for them along the trail because they contain clues for the day. Instruct that the bags should not be grabbed or removed. Start off on your walk, strolling slowly and quietly. As the children spot a bag gather them around and take the bag from its place. Indicate that there is an object inside - can anyone identify it without using their eyes? All children will want to do this - ask children not to speak out or give clues as to the identity of the object until all have had a chance to reach their hand inside the bag without looking. Ask for the object to be identified; discuss the relevance of the object to the surrounding habitat or to your theme. Continue on your walk choosing new groups of children to be at the head of the group. When at the end of the trail, and therefore when all bags have been collected, discuss the relevance of the objects to your theme, but also bring attention to the use of ALL our senses when observing nature.

### 2. FIND YOUR TERRITORY

*Materials:* Black film canisters (they are often given away at photo shops!) - one per child plus half that number again (i.e., if you have 30 children, get 45 canisters). Each canister needs to have a small hole punctured in the bottom.

- ▶ Lengths of yarn (about 50 cm each) - one for every three canisters (in the example above you’d need 15 strings)

- ▶ Cotton or toilet paper and common items which can be used as a source of scent - a different smell for every two children (i.e., in the example above you'd need 15 smells, fill 3 canisters with each scent, 1 to hang in the forest, 2 for students to use)

Make sure that children playing do not have allergies - stay away from peanut butter, and in warm weather don't choose scents that can attract wasps. Number the canisters and create a reference key to indicate which scent is in each canister. (I used the following items when we played: shampoo, lemon extract, almond extract, vanilla extract, lavender extract, toothpaste, cinnamon, cloves, coffee, tea, air (nil), almond extract, vinegar, motor oil.)

**Instructions:** Prior to the arrival of the children hang one of each of the canisters containing different smells along a designated pathway or trail (inform the custodian, or park naturalists of what you are doing so that the canisters are not removed). The canisters should be in sight and not immediately next to each other. Use the yarn, one end tucked in the snap-on lid to hang the canisters. Assemble the children and give each a canister. Indicate that their task is to find the matching territorial marker for their "species" along the trail - essentially they must use their sense of smell to match the scent in their canister with one hanging along the trail. Show children the boundaries of the playing area (i.e., all markers can be found within this section of trail) and send them off. When ALL children think they have found their marker, have them return to you with it (but not when they first discover it since other children may still be investigating). Open the containers to discover success. Discuss how other animals depend on their sense of smell much more than

we do. Would animals be interested in other animals' scents as well as their own? Could some animals' territories be in the same area? Lots to investigate back in class!

### 3. FIND YOUR KIND

**Materials:** Slips of paper with the noise of an animal written upon it - you will need two of each, times half your class (i.e., if you have 30 students, you will need 15 animal calls, each written out twice).

- ▶ I used the following birdcalls:

White Breasted Nuthatch

"*Neep, Neeep, Neeep*"

Yellow-Throated Warbler

"*tew, tew, tew, tew, tew, tew*"

White-Throated Sparrow

"*Sam Peabody, Peabody, Peabody*"

Barred Owl "*Whoo cooks, whooo cooks, who cooks for you all*"

Canada Goose "*honk, honk, honk*"

Bobolink "*bobolink, bobolink, bobolink*"

Mallard Duck "*quack, quack, quack*"

Killdeer "*killdeer, killdeer, killdeer*"

Chickadee "*chickadee dee dee*"

Crow "*caw, caw, caw, caw*"

Bluejay "*JAY, JAY, JAY, JAY*"

Mourning Dove "*Coo, coo, coo,*"

Yellow Warbler "*Sweet, sweet, sweet, so sweet*"

Eastern Wood Pewee "*Peewee, Peewee*"

Red-winged Blackbird "*Okrakree, okrakree*"

Ovenbird "*Teacher, teacher, teacher*"

**Instructions:** After gathering the children together in an open playing area (no hurtful obstacles), give each a secret identity. Have them silently memorize the call and put the paper in their pocket. Have children get on their hands and knees and tell them that their

task is to find another of their species. As an added challenge you may wish to blindfold the children. When all have found their kind, or the time available is exhausted, have children share their call. Discuss how the animal may have got its name; discuss how animals use their calls (and how other species listen to them too!).

#### 4. INSECT COLLECTORS

*Materials:* Send a note home to parents and start collecting used margarine tubs or other small plastic containers with lids. You will also need nylon screening (available at a hardware store) and some craft/florists' wire (narrow gauge).

Lids will need a circle drawn on them and cut out so a template is needed (the bottom of a mug) and a pair of sharp scissors. Small holes need to be poked around the hole in the remaining part of the lid - a big darning needle or compass point works. Ask a parent volunteer to cut the big holes and poke the small holes on all the lids - not safe tasks for young children.

*Instructions:* Give each child a tub, lid, piece of screen (just larger than the hole) and a length of wire. Showing a pre-made example, have children thread the wire onto the underside of the lid, twisting together the two wire ends when they meet.

Enjoy carefully collecting terrestrial insects on your next outdoor excursion - no need to handle them - you can see them through the lid. Don't forget to release them back into their habitat!

#### 5. SILENT HIKE

*Materials:* Nil

*Instructions:* Tell students about some of the amazing sounds you have heard while hiking. Walk quietly, without speaking and making as little noise as possible to discover as many sounds as you can.

#### 6. BLIND DATE

*Materials:* Blindfolds

*Instructions:* Put students in pairs and blindfold one partner. Ask the sighted partner to carefully lead the blindfolded individual to a tree and ask her/him to use her/his sense to explore the tree. Then ask the pair to return to the spot the blindfold was attached. Remove blindfold and have the student identify the tree she/he explored. Switch roles.