

Before You Go

Laying the Groundwork

Create the Ground Rules for Outdoor Behavior (Adapted from *My City's an Ecosystem: a Handbook for After-School Program Leaders*, Baltimore Ecosystem Study, Draft 1, March 2007)

In order to create rules for outdoor learning, students and teachers need to think about guidelines to keep everyone safe while observing and exploring the natural environment.

How-To:

On poster paper: Write heading only: *Our Rules for Outside*

Before doing the first outdoor lesson, show the students the poster *Our Rules for Outside*. Have the students brainstorm appropriate rules. Feel free to add your own suggestions for rules that will keep everyone safe and able to focus on the outdoor activity.

Two very important rules that should be included are:

1. Avoid disturbing wildlife. Observe quietly and respect the rights of all living creatures. This includes insects. If the first impulse is to swat or stomp on insects, ask students to use their hand lens and carefully examine the insect instead.
2. Avoid picking flowers or leaves from the plants.

Instead of collecting plants or parts of plants, have students:

- Write a description of the plant and where it is found
- Count whole plants or plant parts (leaves, petals, stamens, etc.) and record data in their journals.
- Observe and draw a picture of a plant

Other sample rules include staying where the leader can see you and move quietly and slowly so that your chances increase to see and hear wildlife. When you feel the list is complete, move on.

Establish all-gather signal and transition signal (whistle, animal call, hand motion, sphishing)

- Decide as a group
- Practice responding to the sound

Teach Students How to Be Safe and Comfortable Outdoors

(from www.evergreen.ca 2008-2009)

Dress for the Weather

In order for any lesson to succeed, students must be physically comfortable outdoors. Students must be forewarned to dress appropriately for the weather in advance of the outdoor lesson. Teachers may even want to have an "extra clothes" box for students to borrow cold weather clothes. For younger students, a helpful indoor exercise can involve reviewing what clothing is needed by "dressing" a student and with changing weather conditions, i.e., on a cool fall day what do we need to wear to be comfortable outdoors for an hour? People should wear a hat, warm footwear, and warm coat and mitts on cold days. Dressing in layers will keep students warm, too.

Ultra Violet Radiation

Did you know that children are at the greatest risk from the damaging effects of the sun's ultra violet radiation (UVR) since most of their lifetime exposure to UVR happens before their eighteenth birthday? The peak sun hours of 10 a.m. to 3 p.m. fall within the normal school day, putting children at even greater risk while they are outdoors during school. The most important safety standards that schools can implement may actually be in reducing students' exposure to solar UV radiation. A school with an outdoor classroom with shade trees is critical to reducing students' exposure to UVR. However, if there are no shade trees on your school ground here are some additional suggestions:

- Schedule outdoor classes in non-peak sun hours, first thing in the morning or after school;
- Encourage students to wear protective clothing (long sleeves, hats, sunglasses) and sunscreen
- Provide education programs to inform students and teachers about sun exposure.

Show students how to avoid hazards

Prevent bites and stings by applying non-toxic insect repellent, and walking away from (and not swatting at) buzzing insects.

Practice the 7 Leave No Trace principles:

1. Know before you go
2. Choose the right path
3. Pack your trash
4. Leave what you find
5. Be careful with fire
6. Respect wildlife
7. Be kind to other visitors

Find out more at <http://www.lnt.org/programs/peak.php>

Orient students to the four compass directions

Background

(A map) brings the landscape to life as the diversity of natural signposts emerges through the connections” -- between birds and berry bushes, between squirrel droppings and oak trees, between the changes in weather and the behavior of people walking in the city.”

How to:

As they map, let students “orient to the compass directions, and perceive the landscape from a bird’s eye view. Draw maps to locate features of the landscape or tell stories that map your explorations. The maps don’t need to be perfect. Mapmaking helps children develop their sense of their perspective on the world as they compare their view with others and as they tune their ability to make relationships between physical objects or abstract ideas. Making mind maps that tell stories about experiences or to puzzle over nature observations they don’t quite understand is a valuable and stimulating activity.

Practice journaling with the students

(from "Journaling" in the *Coyote's Guide to Connecting with Nature*, 2008)

Background: A nature journal with open and assigned entries will encourage a deeper understanding of the natural environment. Many of the activities during the GFT field trips will ask students to record their observations, predictions, drawings, maps, and questions in their journals.

Materials: Composition book or spiral notebook preferably with a string and pencil attached. (For composition book, loop string through center of book and knot it, leaving a long piece for tying on a pencil).

Preparation: None

How to:

- Distribute journals to all the students. Explain that this will be their nature journal. They need to write their name on the cover of their book because they will be completing assignments and handing in their journal periodically.
- Introduce the nature journal by describing how it will be used. There will be assigned entries but they should feel free to add ideas of their own – thoughts, poems and drawings.
- VERY IMPORTANT--At the top of every page write the date, the season, the time of day, a marker pointing North, and a note on the weather. The journal is about each student and his or her experience. "A journal tells a story...of change...The patient and disciplined journaler instills a mental habit of paying attention to all the nuances the five senses can perceive. Consistent journaling leads straight to a career as a naturalist!" (From the *Coyote's Guide to Connecting With Nature*)

How to Make Your Own Light-weight Clipboard

An inexpensive, lightweight, versatile and durable clipboard can be made from rigid Styrofoam poster backing board (foam core). This rigid foam board is easy to cut with a sharp utility knife. Cut to 8 1/2" x 11" size. It is relatively water-resistant and will not go soft when wet. It weighs very little, but has a hard surface that is excellent to write on. Use butterfly clips to hold down paper work. Fit the clipboard inside an extra large zip-lock bag when working outside in damp and wet weather.



Assemble or Create Materials for the Trip

Each student will need to bring:

- **Journal** with attached pencils (Journaling throughout the trip)
- Create **Sit-upon** (optional for Sit Spot Activity)

How to Make Your Own "Sit-upon"

A 'sit-upon' is a waterproof cushion used for sitting on grass, logs, or anywhere outside. Having a sit-upon keeps children's bottoms dry and comfortable while writing in journals, drawing, listening quietly, and resting. There are many designs of sit-upons boards, but the cheapest and simplest is made of one section of the daily newspaper, folded in half, tightly wrapped with a large plastic bag and taped shut. Another option is to use a piece of soft cushion foam instead of newspaper.

Materials for trips to both Winans Meadow and Middle Branch Park:

- Magnifiers on neck string (one per student - 25)
- Small pencil sharpener (one per group - 4)
- Journals with attached string (one per student - 25)
- White trays for stream study (one per pair in stream study group)
- Dip nets for stream study 1 per student in stream study group
- White cloth/towel for sorting seeds (1 for seed sorting group)

Materials for Winans Meadow only:

- Stopwatch (one for each pair of students in stick race group- 4)
- Round (not ridged or angled) pencils or 8 inch dowels (one per student – 25)
- Bandanas/blindfolds (one for each pair in Meet a Tree – 4)
- Butterfly/sweep nets (one for each student in stream study – 8)
- Bug jars (transparent jars with screw lids – one for each student in pollinator group – 8)
- 10 meter measuring tape (1)
- Pair of scissors (to cut cattails for fluttermill activity – 1)
- Golden Guide to insects

Materials for Middle Branch Park only:

- Directional compasses (one per pair in map activity – 4)
- Index cards (at least one per student – 25)
- 2 balls of string (1 each for food web and rafts activities)
- Colored disks (one per pair in map activity – 4)
- Hole puncher (for food web activity - 1)

Teacher’s bag should have all of the above, plus:

- First Aid kit
- Stopwatch
- Plant press—can be made with sheet of cardboard and thin pieces of wood
- 30 sit-upons (folded newspaper in a plastic bag for sitting on outdoors)

Additional items that could be collected/donated for field trips:

- t-shirts for 30 students
- hats
- rubber boots for stream exploration
- butterfly nets
- stream nets for stream study

Core Routines – These activities will occur during every trip and at every site.

All of the following except the Opening is taken directly or adapted with permission from the *Coyote’s Guide to Connecting with Nature* by Jon Young, Ellen Haas and Evan McGown, published by OWLink Media in 2008.

All but the ‘opening’ and ‘activity’ parts of this trip are core routines. Educators know that children do well with routines. You undoubtedly practice many routines in your classroom. What distinguishes the following routines is that they directly relate to the natural environment. These routines were developed over many years by educators who found them to be valuable foundations for building a relationship with nature. Core routines inspire curiosity, introspection, caring, sharing, and critical thinking. You can add stories, songs, and your own adaptations to fit your students.

If you decide that there is value in connecting your students to nature, then these routines will help you develop a practice of integrating nature into every subject you teach, which is absolutely possible! When nature becomes ingrained in your

thinking and language, you will easily find ways to relate every topic to the natural world. Ask any of our great thinkers and leaders and most, if not all, will say that they have a connection to nature.

Never let the Core Routines become boring chores or disciplines. They should not be thought of as assignments. Lead your students into the routines with a personal story or an interesting question that lets students feel as if they are going on a fresh learning adventure within the secure parameter of a consistent routine.

These routines transfer readily back to your schoolyard. You can establish the routines of Sit Spot, Journaling, Story of the Day, and Thanksgiving.

#1 Sit and Observe or “Sit Spot” – 15 minutes

Background: As explained in *Coyote’s Guide*, “The idea is simple: guide (your students) to find a special place in nature (in your schoolyard or nearby park) and then let them become comfortable with just being there...The essential attitude of this routine is to know one place really well—one ecosystem, one patch of earth, a grouping of plants, a special tree, the changes in the sky—over a period of time and in every season. The other part of this routine is about sitting, (by yourself), in stillness...(to) open the door of the world most humans never know--the private world of wildlife, the language of birds, and the beauty of being accepted into the expansive natural world where other life begins to feel comfortable having humans present. There is a magic that happens when this world opens up to us, and we begin to see things from a different perspective than the one we have in our other daily routines.” --Jon Young

The power of this activity is its simplicity. Its value should never be underestimated. Each time you allow yourself to spend time in one spot, *your* special place, you see and feel something different, something that can be expressed through journal writing, drawings, and shared stories. One note: Never make a Sit Spot feel like a punishment.

How To: Direct the students to take their journal (with attached pencil) and sit-upon (optional) and find a place to sit for 15 minutes. The place should be far enough from anyone else so there is not a temptation to communicate. Once situated in the sit spot, each child should be able to hear the all-gather signal.

If students need something to sit on outdoors, see page of this section (*Laying the Groundwork*) for a way to create a “Sit-Upon.”

#2 Story of the Day – 15 minutes

Background:

Group storytelling inspires students to wonder about ways they can discover new things. Stories can also be told individually through journaling and drawing.

“Sharing stories with others builds a collective knowledge much greater than the isolated experience of one person. We gain a storehouse of information from others’ stories: (one saw an insect on a shrub with orange stripes on its wings, one spied an empty bird’s nest in the tree near her ‘sit spot,’ one spotted a hawk sailing over the schoolyard). Storytelling layers knowledge slowly built over time, as a living oral library.”

Story of the Day encourages self-expression and self-confidence in the validity of each person’s (own) experience.”

Story of the Day and Sit Spot tend to feed each other and enhance the value of both. Enjoy the many ways that you can lead your students into these two activities!

How to:

While the students are still in a circle, ask students to share a sentence or two about something each will remember. Go first to model. Possible format: “I noticed...,” “I will always remember...,” “I’ll never forget...,” “This is what I did: ...”

(From *Coyote’s Guide*)

#3 Thanksgiving: Circle of Thanks – 5 minutes – (can happen at beginning or end of the visit)

Background:

Thanksgiving can create an opening or closing to activities and though it might feel awkward at first, it can become a treasured and awaited for part of the day.

How to: Simply gather a circle and invite everyone to say aloud something they feel thankful for. You might do this to start the day and then again at the end of the day. You can go around the circle or “popcorn” style, allowing students to speak when the spirit moves them. You can give thanks by saying just one word, or take a longer time to allow little stories to unfold. You can be grateful for elements of nature, or for whatever brings happiness. Be serious or funny, reverent or lighthearted, all while steering participants to lift their hearts with a true sense of gratefulness. A circle of thanks often results in a peaceful sense of community and connectedness.

Make sure to be good role-model yourself. Be sincere in what and how you express gratitude, and others will be inspired to follow. (from *Coyote's Guide*)

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The full handbook of activities can be found here*



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