

# Creating Earth Adventures: Self-Guided Programs to Connect Children with Nature



Janet Barlow/Sense of Wonder

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by Alan Warner

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**P**ROVIDING CHILDREN WITH opportunities to develop connections with nature is a task that grows in importance with each passing year. However, as governments, school boards and non-governmental organizations struggle with tight budgets, the resources to lead these programs can be jeopardized. After 15 years of programming at the Halifax Regional Adventure Earth Centre, we had reached our limit. Our staff could offer only so much and we were nowhere near satisfying the demand for our services. We tried new strategies for providing environmental education resources to teachers and parents: we recommended resource books describing engaging nature activities for children; we pointed to trail guides giving ideas on where to do these activities. Teachers and parents would nod at our recommendations, yet rarely did they pursue them. They simply did not have the expertise or the time to read the

activity books, figure out what would work best with their groups, and then find the place to do the activities.

While many educators and parents see the value of spending time with children in the outdoors, there is a gap between having good activity ideas and putting them together in a programmatic way. Our solution was to create trail-specific, self-guided nature experiences, called Earth Adventures, that describe exactly what to do and how. These were published in a guide called *Earth Adventures — 24 Nature Trails for Fun and Discovery in the Halifax Region*,<sup>1</sup> and subsequent Earth Adventures have been created for trails in Moncton, New Brunswick, and in various national parks. An Earth Adventure is a self-guided program with potential for application in any natural setting. The following describes the concept of Earth Adventures and the steps to creating them, based on our experiences and feedback from families and leaders who have used them.

## What is an Earth Adventure?

Earth Adventures are fun, self-guided learning experiences that help participants to appreciate a specific natural area and to understand the connections between that area, their lifestyles and larger environmental issues. These adventures include:

- hands-on activities
- an engaging storyline with a final discovery
- time to reflect in nature
- links to local natural history and environmental information
- opportunities to work together
- suggestions to reduce our environmental impact

Each Earth Adventure is a site-specific, sequential program with a storyline and detailed set of activities. The write-up for leaders (see sidebar) includes suggested preparations, directions to the site, instructions for what to do where along the trail, an attractive trail map, illustrations, and background information and tips for follow-up and further adventures. Depending on the ambition and scope of the project, the write-up may take the form of a short handout, brochure, booklet or complete book. In Halifax, we created an extensive series of Earth Adventures for 24 trails, but a pamphlet focusing on one or two trails can reach a great many people if it is distributed through a website and made available at the trailhead. Our Earth Adventures, which are used by youth groups, families and classes, take place on trails ranging from one-half to four kilometers in length and require from one to three hours to complete, depending on the adventure, group and weather conditions.

## The integrating storyline

An Earth Adventure begins with a storyline that is appealing to the kids and suited to a particular natural setting. The storyline is not a general theme, but a narrative akin to an improvisational play in which the participants take on roles and must accomplish a series of steps (activities) in order to achieve a goal or solve a mystery or problem.<sup>2</sup> For example, the storyline of the Earth Adventure “Oh Deer!” was written for a trail through prime deer habitat, a reforested area with clearings and remnants of old farmhouses and stone walls. In this adventure, each child takes on the role of a deer and practices deer survival skills in order to figure out the animal’s needs. In the adventure called “Monster Mania,” kids attend a Monster Training Camp in a local park that has large (“monster”) hemlock trees. They learn skills through various activities and ultimately they earn the right to meet the Master Monster (the largest hemlock tree).

Although specific activities are designated along the trail,

inevitably there is ample room for improvisation. Once the children begin to look at things through the eyes of a deer or a tree monster, they discover and explore in ways that extend far beyond the best laid plans.

## Hands-on activities

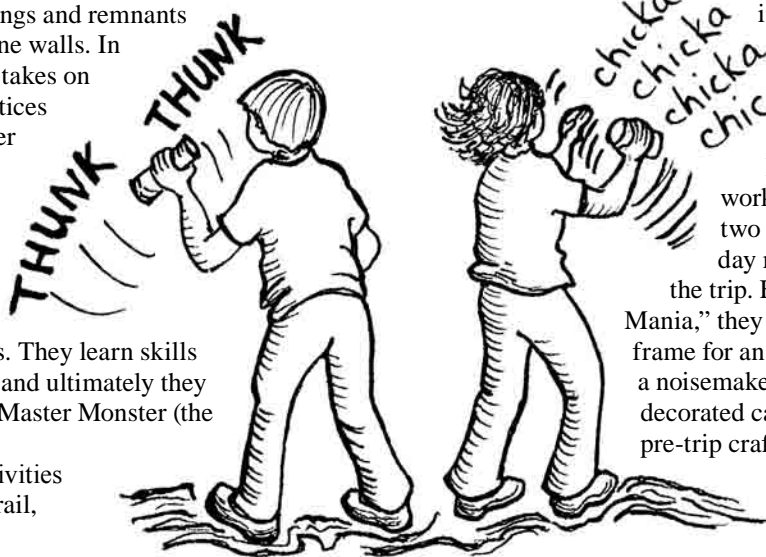
Each Earth Adventure features activities that focus on active exploration in nature using all of the senses. We frequently include activities from books and resources published by the Institute for Earth Education, such as *Earthwalks* and *Sunship Earth*,<sup>3</sup> as these are well-structured, experiential and focused on immersion in nature. We also frequently draw from Joseph Cornell’s book *Sharing Nature with Children*.<sup>4</sup> Whatever the source, we adapt the activity to the storyline theme and roles.

In “Oh Deer!” the children are turned into deer at the start of the trail with the help of a choreographed ritual and magic words. They use their hands and fingers as antlers and wiggle their noses to catch scents. They then sneak up the trail to the first activity spot, hiding behind trees and snorting to warn others if their sharp ears or sensitive noses sense any hint of trouble (the leader does a snort first if need be). They proceed to a small overgrown clearing of a former homesite, where their task is to scavenge about to see how many types of deer food they can find from a list in the activity write-up. They explore the homestead and discover many other things in the process. Ultimately they are asked to guess one of the prime senses a deer uses to find food (sight).

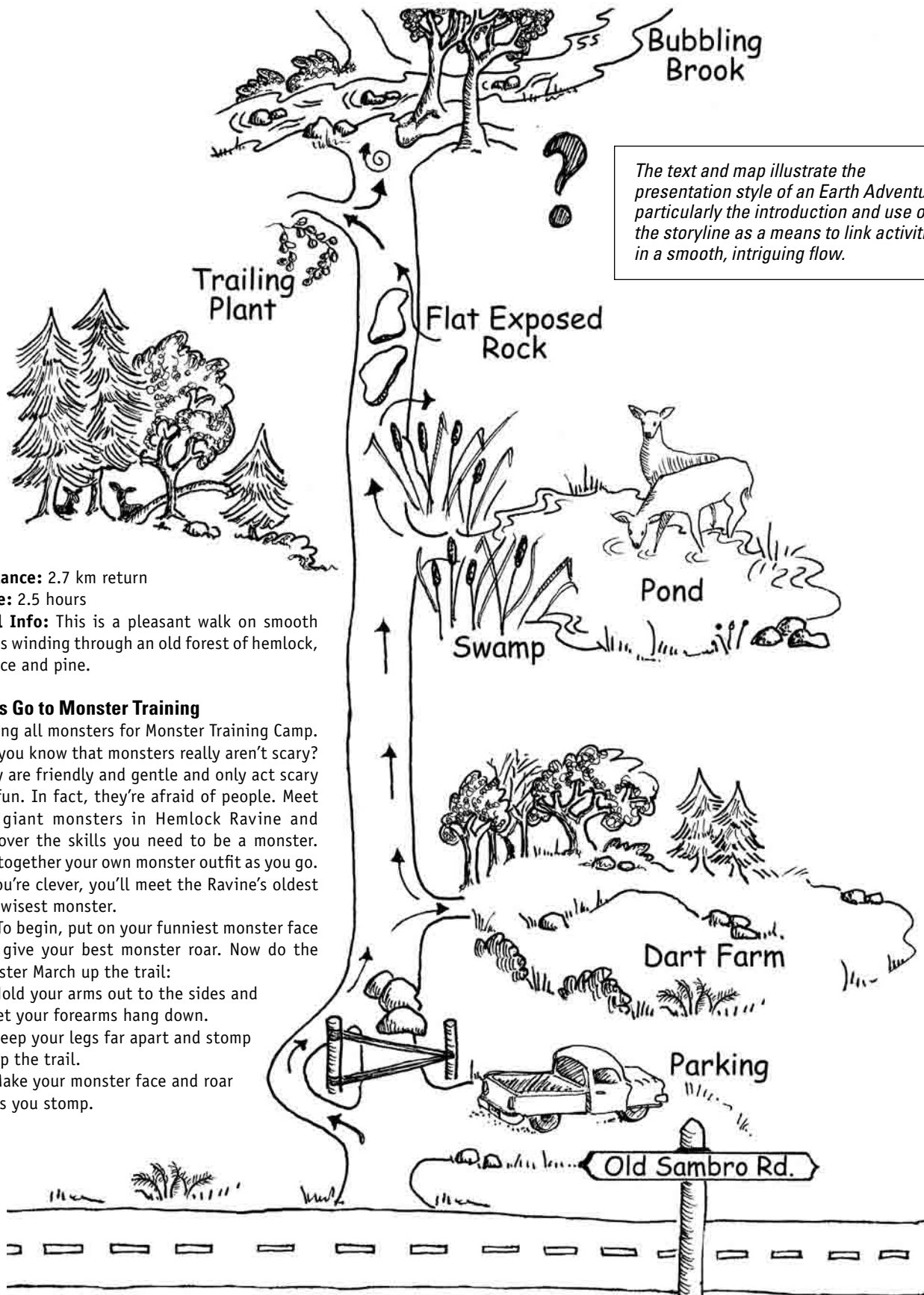
The adventure continues through a series of stops in which the children search for and select sleeping sites for deer, identify nature smells, and play a game of camouflage in which the coyotes try to sneak up on the deer. At the end of the trail, once they have figured out all of the needs and senses, they make a final discovery: they must find a small plaque chained around a tree off the trail. This is used to create a rubbing of the outline of a deer that participants collect as a reward. This small plaque is the only physical piece of infrastructure required for an Earth Adventure.

Solitude and reflection in nature are important elements of each Earth Adventure. In “Oh Deer!,” these are integrated into the experience when the children select their deer resting place. They spend a few minutes alone in the resting place,

enjoying their spot and writing or drawing in adventure journals that they make at home and bring along for use in each Earth Adventure. For many Earth Adventures, kids work in groups to make one or two simple props out of everyday materials to prepare for the trip. For example, for “Monster Mania,” they make a cardboard picture frame for an observation activity and a noisemaker for a monster dance (a decorated can with pebbles in it). These pre-trip crafts build interest and set the tone for a fun adventure together in nature.



## Monster Mania: A Hemlock Ravine Adventure



*The text and map illustrate the presentation style of an Earth Adventure, particularly the introduction and use of the storyline as a means to link activities in a smooth, intriguing flow.*

**Distance:** 2.7 km return

**Time:** 2.5 hours

**Trail Info:** This is a pleasant walk on smooth trails winding through an old forest of hemlock, spruce and pine.

### Let's Go to Monster Training

Calling all monsters for Monster Training Camp. Did you know that monsters really aren't scary? They are friendly and gentle and only act scary for fun. In fact, they're afraid of people. Meet the giant monsters in Hemlock Ravine and discover the skills you need to be a monster. Put together your own monster outfit as you go. If you're clever, you'll meet the Ravine's oldest and wisest monster.

To begin, put on your funniest monster face and give your best monster roar. Now do the Monster March up the trail:

1. Hold your arms out to the sides and let your forearms hang down.
2. Keep your legs far apart and stomp up the trail.
3. Make your monster face and roar as you stomp.



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## The adventure write-up

The storyline, activities and instructions for an Earth Adventure are written up in a simple format. Each write-up has an “Earthworks” box that describes a key ecological concept in the context of the trail storyline and then asks the children to guess the concept. For example, the experience of surviving as a deer, along with the clues in the Earthworks box, help the kids to realize that each creature’s survival in nature depends on its interrelationships with other species. An “Earth Step” box includes tips that encourage environmentally responsible behavior either on the trail or at home. A “Beyond the Adventure” box gives ideas for further exploring the area and includes suggested readings on local history and an eco-pack of activities provided by a community historical society. Background information for leaders includes natural history tidbits, such as a description of how deer behave when startled and a note about identifying the local mayflowers that deer sometimes eat. Leaders use these extra bits of information in varying ways. Some read the boxes out loud; some introduce the information at teachable moments; others don’t use them at all.

## What happens in practice?

We have received valuable feedback on our Earth Adventures from several hundred users through our website and from a research project based on in-depth personal interviews and observations of families on the trails.<sup>5</sup> Some of our key findings are as follows.

- Successful leaders do not need specific expertise in the environment and nature, nor do they need outdoor leadership skills. The key ingredients are enthusiasm for the activities and willingness to play along and join in with

the children. When an Earth Adventure is introduced with enthusiasm, the children buy into the storyline, sometimes engaging in each activity and sometimes exploring on their own, depending on their ages and inclinations.

- The write-up is the start, not the recipe. Leaders cite the diversity of elements, activities and information as strengths of the write-ups. Children often latch onto one part of the adventure, but the aspect of it that they most relate to will change from group to group, and from day to day. One element of an Earth Adventure that is very important to most participants is the conclusion — discovering the plaque.
- An Earth Adventure can appeal to a diverse range of children. The prime age range is 5 to 11 years, but children as young as 3 years old can participate in activities. And while the onset of “cool” in early adolescence (12 to 13 years) presents an upper age limit, adolescents can participate by leading trails for younger children.
- With school classes, it is important to do an Earth Adventure in small groups of no more than seven or eight students, assigning a volunteer parent or leader to each group. Most activity locations on trails are not suitable for a full class. To manage class groups smoothly, one leader can facilitate a large-group activity or game at the trail-head while the sub-groups start the trail in a staggered sequence. At the end, a second activity may be provided for the earlier groups who are waiting for the later groups to finish. Volunteer leaders can be given the detailed write-up ahead of time to help them prepare.

## Steps in designing an Earth Adventure

Designing a successful Earth Adventure takes expertise in program design and environmental education, as well as creativity, writing skills and attention to detail. If it is done well, the result will be a resource that can be used by many people over time. It is relatively easy to acquire grants for designing such a program because active environmental learning and healthy physical activity are priorities in most communities. Additionally, funding agencies are often eager to support projects that require one-time investments and have few ongoing costs.

### Trail selection

Children are typically not fond of long hikes, yet they do like to move forward and explore what is around the next corner. An Earth Adventure helps children to explore and connect with a small portion of a natural area, rather than covering a lot of ground. Our trails average between two and three kilometers. Loops are preferable to linear routes, although sometimes the trail layout requires backtracking, which can be programmed effectively. Note that one does not need a real trail: some of our Earth Adventures involve moving through a combination of paths and open areas in urban parks. The “Wharf Rat Tale” uses the boardwalks of the Halifax waterfront as its context.

Although our initial concept was to provide trails in beautiful natural areas that tend to be somewhat removed from large population centers, the Earth Adventures we designed for local parks are the ones that are used most frequently. Once leaders become familiar with the concept in these nearby areas, they often venture to the more distant sites. In many cases, an Earth Adventure helps participants to see a familiar area in new ways.

When designing an Earth Adventure, we spend a great deal of time at the outset walking a wide range of trails and park areas to find the spots that are appealing, suitable for activities, and have an appropriate distance from stop to stop. In parks, we try to avoid the most popular thoroughfares because adults and some children can become self-conscious while “playing” if they feel they are being watched by others. Additionally, children like to get off the large pathways and discover the small routes, nooks and crannies of a natural area. However, this preference to get off the beaten track needs to be tempered by an assessment of the environmental fragility of the area. Dense undergrowth off the path can be challenging as it prevents groups from moving around and exploring off trail. At the other extreme, areas with little ecological diversity, such as grass fields, offer fewer interesting exploration opportunities.

### Storyline and activity selection

Once the area is selected, creating the storyline is the next challenge. Consider the assets of the natural area. What makes it special and worthy of attention? Our storylines frequently have children transform into creatures that are noteworthy in the area (raccoons, herons, ants, rats, etc.) and send them on a quest to solve the creatures’ life problems. We also adapt kids’ interest in fantasy stories and quests to suit the natural setting. Trail titles include Treasure Island, Nature Pirates, Wizards and Potions, and the Magician’s



Marc Langlois

Apprentice; and the problem or quest often ends with the discovery that the magic is in nature. The children discover that the treasure on the island *is* the island, the potion *is* the river water, and the magician *is* the ocean. Other storylines are based on having participants explore the specific attractions of the locale, such as by becoming a rock hound or a young naturalist. It is important to be aware of cultural and gender issues, avoiding stereotyped roles and storylines that may appeal only to either boys or girls.

The next step is to identify what the participants need to figure out or discover during the adventure. In “The Stolen Seed Caper,” they are trying to find out how and why the seeds are mysteriously disappearing from the trees, and they get clues for completing each activity along the way. In “Wizards and Potions,” they must figure out how to stop the troll Dreeg (‘greed’ spelled backwards) from polluting the river.

As one scouts the area and comes up with a storyline, activity ideas inevitably surface. Although it is not a linear process, we have found it is easier to define the storyline before focusing on the activities, as the storyline tends to produce activity ideas, especially if it is suited to the natural context. Our priority is for activities to involve direct experience using the senses while developing appreciation for the natural area. Every trail requires participants to use at least three senses, and the only writing they do is in their adventure journals. We often use activities that involve children in empathizing with other creatures as well as discovering and appreciating the small things in nature. We watch children playing in a given setting and see what attracts them, and use these attractions as a focus for an activity. We include at least one small-group, nature-themed game on each trail. The kids enjoy the games, and they encourage positive interaction among the group members. We use few props, as they complicate the process for the leaders, but the occasional prop can bring a special element to the adventure. The trail is meant to be a flowing adventure, so we interweave stationary activities

with activities that occur while moving to the next spot.

The trails should be usable all year round, except when there is snow cover, since exploration on the ground is a key to many activities. Visit your trail in different seasons during the design phase and avoid activities that are dependent on seasonal phenomena. Wild roses in bloom may scream out as an attraction in June, but the flowers will not be there for groups at other times of the year. An exposed outcropping is a place to linger in July, but not in November.

### Researching and writing the adventure

Once the storyline and activities are sketched out, one must research the background information, discover the potential community links and resources, and find the material for the boxes and information tidbits. The write-ups need to be clear, simple, short and fun to read. Ideally they include six to ten activities and are no more than 2,500 words in length. Leaders typically read the steps as they go, and so need explicit directions and have no time for complicated phrasing. Some sections of the text, such as rhymes and magic words, are read aloud, but usually leaders paraphrase the text for the children. Fun illustrations and attractive graphic design add appeal. Finally, there needs to be some introductory information for leaders that briefly explains the purpose, philosophy, safety concerns and leadership approach.

The final key to success is pilot testing the Earth Adventure in multiple ways. Give the draft write-up to several people and invite them to follow the trail for the first time. We spent a great deal of time on the trails and worked

hard to describe clearly the directions to get from one place to the next. Yet leaders still struggled because once we had become familiar with the area, we sometimes no longer recognized how many wrong turns one can take. Once the trail is clearly delineated, take different groups of children through the adventure, watch novice leaders with their children, and ask leaders for feedback on the write-up based on their groups' experiences. The leaders and children can tell you what works.

Writing an Earth Adventure takes work, but the result is a set of nature experiences that children, families, youth groups and classes can enjoy and benefit from forever.

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#### Notes

1. Alan Warner, Janet Barlow and George Taylor, *Earth Adventures — 24 Nature Trails for Fun and Discovery in the Halifax Region*, 2nd edition, 2006, illustrated by Lois Bearden. The book models a wide range of storylines and a multitude of activities. Visit <[www.earthed.ns.ca/ea\\_halifax](http://www.earthed.ns.ca/ea_halifax)> for a more detailed description and ordering information.
2. For background on the storyline concept, see *Creating Worlds, Constructing Meaning: The Scottish Storyline Method* by Jeff Cresswell, 1997. Order from <[www.storyline.org](http://www.storyline.org)>.
3. Institute for Earth Education, *Earthwalks and Sunship Earth*, <[www.eartheducation.org](http://www.eartheducation.org)>.
4. Joseph Cornell, *Sharing Nature with Children*, <[www.sharingnature.com](http://www.sharingnature.com)>.
5. The research is described in detail in Jen Morse's master's thesis, "An Exploration of the 'Family Learning Together' Approach to Environmental Education," Dalhousie University, Halifax, Nova Scotia, 2004.



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