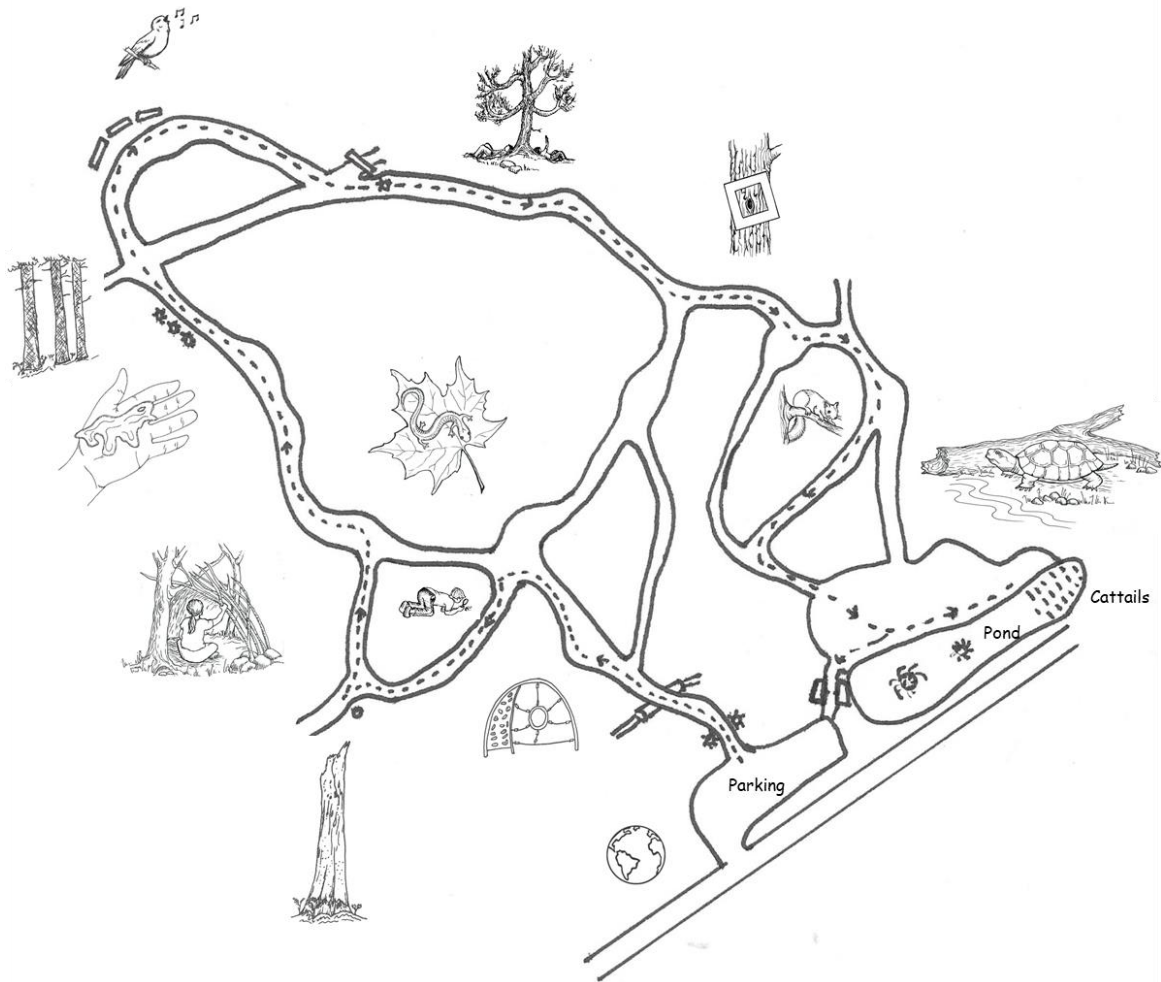


Mission Planet Earth:

A Stronach Park Adventure



Distance: 0.6 km return

Approx. Time: 1 hr

Trail Info: This is a stroller and wheelchair accessible, flat trail including a picnic park on a small grassy hill beside a pond. The walking trail is situated in a small yet diverse forest that is surrounded by wetlands that drain into the Annapolis River just 200 m away. There is also exercise equipment along the trail that families may want to try.

Directions: Coming from the East on Highway 101, take Exit 16 and turn left off the ramp towards Kingston. After 800 m you will come to a stop sign and turn right onto the number 1 highway. Drive through Kingston 1 km and turn left at the lights onto Bridge Street. Drive 600 m and turn into the Stronach Park on the right.

Trail Tools: Bring a daypack with water, snacks, first aid kit and anything else you need. Prepare and gather these tools for each person before heading out on the trail.

- Third Eye - magnifying lens (if you have one)
- Alien face finding tool – cut a rectangular frame out of a cardboard box (like a cereal box)
- Sample container – plastic yogurt container
- Spy Scope - decorated cardboard toilet-paper roll
- Snack and water
- Adventure Journal and pencil
- Binoculars (optional)



Destination Planet Earth



⇒ Start just past the fence between the 2 big pine trees on the path just beyond the parking lot.

As an alien explorer from the planet Hanwavel which orbits a star 20 light years away, you are on a mission to find life forms on other planets in the Milky Way Galaxy. This particular solar system happens to have a very lively planet called Earth that you are lucky enough to land on. Use this guide to help you discover new life forms. The scientists on Hanwavel will be so excited to see the cool stuff you discover. Some folks say that Earth has creatures that carry their homes around on their backs and creatures that breathe through their skin! Maybe you will see some of these cool creatures! Use your Adventure Journal to document all the creatures you see so you can be the best planet explorers ever!

First, give yourself an alien name and write it in your Adventure Journal. Now raise and turn on your alien antennae so you can detect life forms by wiggling your index fingers above your head. Practice the Hanwavel greeting in case you meet strange life forms:

- 1) Stand with your legs apart and bend your knees.
- 2) Stick your arms out to the sides and wave them up and down.
- 3) In your best alien voice, say "Ooga Booga Shmuk".
- 4) Do the Hanwavel greeting to any life form you see along your journey.

Report to your ship's galactic transporter to beam down to Earth:

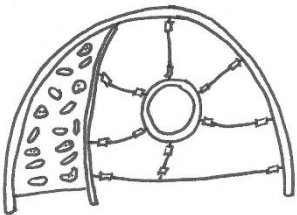
- 1) One at a time, stand between the 2 big trees .
- 2) Arms straight above your head.
- 3) Turn around three times and jump forward.

Our Home – The Milky Way Galaxy

Our solar system, with the Sun at its centre, is home to 8 planets. Earth is the 3rd planet away from our sun, and the only one to sustain life that we know of.

1. Earthling Welcome

⇒ Walk 25 m until you see the strange climbing structure to the left of the trail.

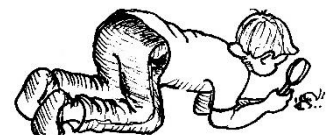


The Earthlings want to welcome you with this Alien Monument. Earthlings love strange things because they know that it takes all kinds of life forms to keep the planet working properly. Since Hanwavelians use all their senses to explore, climb on this monument to understand what it means to you.

- Come up with 5 words to describe this monument.
- Draw the monument and write your description words in your Adventure Journal.

2. Greet the Wee Ones

⇒ Walk 15 m to where the trail widens and there is an exercise climber to the right.



Start Small. Look at the forest floor in front of you with all the green things sticking out.

- 1) Get low to the ground on your hands and knees and use your third eye (magnifying lens), or good eyes, to search for small life forms.
- 2) Be sure to gently look around leaves and rocks. You may find some delicate creatures that you don't want to squish. Some of the creatures you might see are red-backed-sliders, 8-legged-jumpers, multi-leg-crawlers, slow-oozy-blobs and armoured-scramblers.
- 3) Use your Adventure Journal to keep track of all you find!
- 4) Place any creatures gently back where you found them.
- 5) Do the Hanwavel greeting to these creatures.



When red-backed-sliders, which are called "salamanders" by some Earthlings, are threatened, they wiggle rapidly which startles a predator, causing them to be dropped so they can make a quick escape! When you walk along trail, **do the Salamander Wiggle** by moving your hips and arms side-to-side in opposite directions. When you hear a bird, freeze!

Look for Salamanders under old logs all along the trail. Be sure to gently put them back and don't handle them if you have bug spray or sunscreens on your hands. The best way to pick up creatures is in a leaf so oils from your hands don't affect their delicate skin.

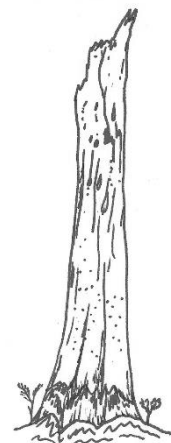
3. *Look for Life in Death*

⇒ Take the path to the left and walk 45 m to where there is a trail going off to the left.

Look at this old dead tree with the holes in it. It looks like some kind of communication tower for life forms.

Create the Hanwavel "all is well signal" to send to your ship.

- 1) Place small sticks in the holes in the tower to create a V-shape pattern.
- 2) Send the signal by tapping out a message on the sticks.



Look for these small animals living on the forest floor

Red-backed Salamanders, Spiders, Centipedes, Millipedes, Wood Bugs, Slugs, Beetles.

Do not handle creatures if you have bug spray or sunscreen on your hands

Eastern Red-backed Salamander

This trail is surrounded by wetland and is a great spot to find salamanders because they are born in water and then crawl out to live life on land as adults. Their skin is sensitive and although they have lungs, they also take oxygen in through their skin. This is why their skin needs to always be moist and chemicals can hurt them.

The 4 other salamanders living in Nova Scotia are the Yellow-spotted salamander, Red-spotted newt, Four-toed salamander and Blue-spotted salamander.

Salamanders use sight and smell to find insects, worms, snails, spiders and slugs to eat.

Standing dead trees are called “snags”. Does this snag still have life? Look closely at and around the old snag and maybe you can find signs of other life forms using this old tree as a place to live. Write them down in your Adventure Journal. Do the Hanwavel greeting to all the creatures you find.

Figure out the size of this old snag for your Adventure Journal report by using your hands to measure around the trunk. Line your hands and the hands of your companions around the tree and note how many hands it takes to go around. Then, estimate the height of the tree using yourself as a measuring tool. If you were to stand on your own head, how many of you would it take to reach the top?

4. *Quick Make Shelters!*

⇒ Back on the main trail, walk 45 m to where the trail widens and there is a chin up bar.

Wiggle your antennae around. You detect a storm coming and rain makes you hiccup uncomfortably. You and your companions need to work together to quickly make a shelter for yourselves! Use the dead materials you find on the ground to build a comfy place to rest for a few minutes and have a snack and drink. If you have time, make mini-shelters for small creatures to show you are an earthling friend.



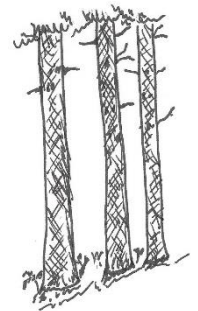
Leave-No-Trace – Once you are finished playing with the shelters, put the forest materials back where you found them for others to find and use later. Pick up any trash and leave the forest looking even more natural than you found it.

5. *Alien Bark Search*

⇒ Walk 60 m on the main trail to where there are 3 red pine trees lined up along the trail to the left just past the step exerciser.

These three, tall, two-needle-plants lined up beside the path remind you of the tall plants back on your own planet. You can see the old rust coloured needles on the ground that they shed every year. Notice the plant’s red coloured protective covering that flakes off as odd, rounded shapes.

- 1) Go to the base of one of these and pick up the flakes on the ground. Can you find one that looks like an animal or alien friend that you might know?
- 2) What other creatures do these shapes look like?
- 3) Keep your favourite creature shape for later.



EARTHWORKS



Energy for life needs to come from somewhere and stars like our Sun power everything on the planet including you and all other life forms. We also suspect that stars are the universal energy producers for life on other planets in the Universe

Radiation from the Sun is captured here by the forest plants and pond algae and they make it into food for herbivores to eat. Herbivorous animals eat the plants and then in turn are eaten by larger animals. This process transfers the Sun's energy along food webs to fuel all life on planet Earth, both in water and on land.

6. Find Feathered Friends

⇒ Walk straight along the path for 60 m until you see 3 balance beams in front of you.

Everyone spread out 2 meters and sit on the wooden beams facing the wet area. The flying creatures love this lush green wetland with its thick ferny understory and lots of bushy green plants of different heights. Use your alien spy scope to search for feathered friends in the trees and bushes (use binoculars if you have them). Try calling some feathered flyers to you:

- 1) Sit very still and quiet for 30 seconds.
- 2) Then make this sound: "psh, psh, psh."
- 3) Repeat it several times. This often attracts feathered flyers if they are nearby.



Feathered flyers have excellent hearing

- 1) Spread out 5 meters along the trail and listen for a couple minutes.
- 2) How many different calls do you hear? Write the number of calls in your Adventure Journal. Compare your numbers.

Feathered flyers use special calls to find each other.

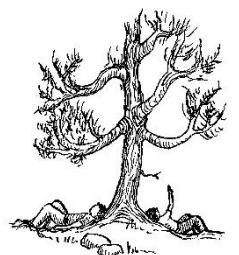
- 1) Partner up and each pair agrees on a feathered flyer song or call that you both can do. One person does not partner up and spots others for safety as below.
- 2) The partners split and go 5 meters away from each other on the flat trail.
- 3) Everyone close their eyes.
- 4) Make your agreed-upon call and with eyes closed try to find your partner. The spotter watches for safety.
- 5) Give a feathered flyer hug when you find each other.

Do the Hanwavel greeting to all the feathered friends when you leave.

7. Discover Tree Beings and Alien Faces

⇒ Walk 30 m to where there is a barrier in the path to the right and a tree in the middle of the trail. This section is done along the trail for about 60m and stops at the next trail going right.

Do you feel like you are being watched from above? Look up. Do you think these tall forms with wild branches are the elders of the forest? They are ever present and silently growing from their tips as their lower branches die due to low light.



- 1) Walk along the trail and stop at large tall being that you think could be a wise elder. Everyone find their own being, lie down underneath and look up.
- 2) Get to know the being by...
 - a. look at its fuzzy crown and branching arms
 - b. look at its foot digging into the earth and the wrinkles in its ankle.
- 3) Draw a picture of the being in your Adventure Journal. You can even give them a name and personality.

You have been gone a long time. Take out your Alien face finding tool to see if you can find the faces of your friends and family in the forest. Hold it at arm's length with both hands so you can see through it and find faces everywhere you turn. Look on tree bark, roots and in the branches to start.

- 1) Find the Grumpy face of Uncle Glug.
- 2) Find the Happy Face of Grandma Boop.
- 3) Find the Surprised face of Cousin Farfle.
- 4) Find the Silly face of your best friend Lalee .
- 5) What other faces can you find? Show your group who you have found.



8. *Catch a Critter*

⇒ From the spot where the last activity ended, where the trail turns right, walk 40m and turn down the second trail that goes to the right, across from the balance ropes.

Practice your spotting skills by catching critters on the move! Keep on the look out for quick and noisy bushy-tailed climbers and striped-ground-burrowers. Greet them the Hanwavel way! Bushy-tails prefer to spend time in the trees scolding intruders and ground-burrowers scurry and chirp warning calls from piles of brush on the forest floor.

- 1) Choose one Alien to be the Critter Catcher and everyone else are the critters.
- 2) The Catcher stands at least 3 meters away from the Critters.
- 3) The Catcher turns away while the Critters pretend they are squirrels or chipmunks.
- 4) The Critters start to move and the Catcher turns around unexpectedly and tries to catch the Critters moving.
- 5) The Critters must move to a different position each time the Catcher turns away.
- 6) The first Critter to get caught moving trades places with the Catcher.



BONUS CHALLENGE – If you see a striped-ground-burrower, see how close you can get to it before it runs away. How do you need to act to get really close?

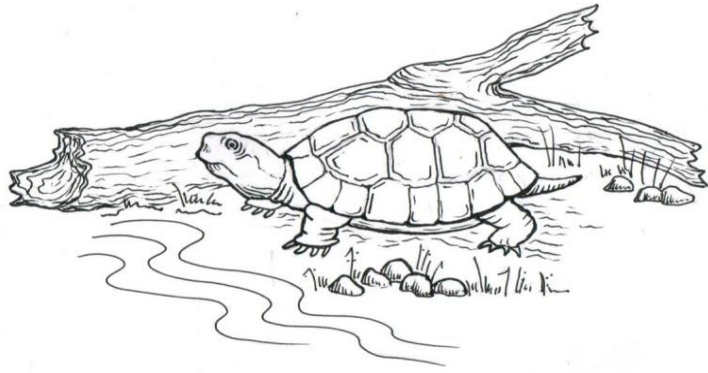
9. *Find Pond Life and Alien Invaders*

⇒ Continue along this trail for 70 m and walk to the edge of the pond and turn left.

Walk along the edge of the pond towards the cattails. Look in the water for strange life forms. Some of these life forms have shells that they carry around on their backs and some can hop quite well and hold their breath for a long time. Do you know what they are? Write down all the life forms you see in and around the pond.

Wood Turtles

Wood Turtles are one of the four species of turtles in Nova Scotia and are listed as threatened in the area. They have a bumpy shell that is dark grey to brown, with orange markings when wet. The skin of the throat, tail, and limbs are orange-red.



Native species you might see...

Snapping Turtle, Wood Turtle, Green Frog, Dragonflies, Black Ducks.

Invasive species you might see...

Giant Water Snails, Goldfish, Red-Eared-Slider Turtles.

Try to take a picture of a hopping creature along the water's edge. You will need to sneak up very slowly and quietly to get close up.

If you have a sample container with you, scoop up water from the pond and find water creatures in the squelchy muck.

Not all of these creatures are from here. Some of them are also alien species, but they come from other places on Earth. Unlike you, they don't plan on leaving. Some of these alien species are not good for wild places and can out-compete the native species and take over their habitat. Some of the alien animal species you might see here are giant spiral-shells, golden-swimmers and shelled-red-ears.

In your Adventure Journal, draw and write your own descriptions about all the animals you see in and around the pond. Talk about these with your companions.

Earth Steps



Invasive Alien Species are species introduced outside their normal distribution, whose establishment and spread can affect ecosystems, habitats, or other species. Nova Scotia has a long history of species introductions. Up to a third of the plants in our province are comprised of exotic species introduced by humans, but only some are invasive and a problem for natural ecosystems. (Information from the NS Department of Fisheries and Aquaculture - DFA).

What can you do to help prevent the spread of Invasive Species?

- Learn what invasive species are in your area and keep a look out for them (www.ap.smu.ca/~lcampbel/NSInvasiveAlienSpeciesGuide.pdf)
- Report invasive species to the authorities (DFA or NS Dept. of Lands and Forestry)
- Tell others about invasive species in Nova Scotia

10. *Find Past Hanwavel Symbol*

⇒ Walk back along the pond to the gate between the edge of the pond and the parking lot.

There are old stories back on Hanwavel of a previous group of explorers coming to this place. They were called the "Earth Adventures Mission" and they are said to have left a symbol of one of their favourite creature discoveries here on earth where few could find it. It is said to be somewhere very near the stone structure and gate, but it is attached to wood.

If you find it, make a rubbing of it in your Adventure Journal to prove you were here.

11. *Beam Back to Your Ship*

⇒ Stay at the gate.

It is time to return to your ship. You can place your creature bark shape here as a gift to the Earthlings or you can keep it as a souvenir. Do the Hanwavel greeting once more, as it also means goodbye and thank you. Stand on the before the gate and jump through it as high as you can to beam back up.

Congratulations, you have successfully completed your exploratory planet Earth mission. Everyone compare their lists of Earth creatures when you return to your ship. How many did you find?

You may also want to upload a few of your favourite photos to the Photo Gallery.

BEYOND THE ADVENTURE



More information about Stronach Park can be found at the village of Kingston's website and Valley Family Fun www.valleyfamilyfun.ca/kingston-family-fitness-trail/

Clean Annapolis River Project Society (CARP) - www.annapolisriver.ca/

Since Stronach Park is just 200 meters away from the Annapolis river, it is home to some special animals and plants that are important parts of the river ecosystem. Some of these species include the Wood Turtle, Snapping Turtle and many wetland plants. The health of the park is important to the whole river system and the Clean Annapolis River Project Society make it their goal to promote the health of the river system, including all water ways that lead to the Annapolis River. To find out about the many conservation and education projects that CARP are working on in your area, visit their website (above) or their office in Annapolis Royal.

CREDITS:

This document was created by Marina Myra of Wild Roots Nature Education Centre. This work was inspired by material from Earth Adventures in the Halifax Region 3rd Edition, by Alan Warner, Janet Barlow, and George Taylor.



Editing was by Dr. Alan Warner, Professor Emeritus, Department of Community Development, Acadia University.

Illustrations by Marina Myra and Lois Bearden.



FINANCIAL SUPPORT:

This Trail Adventure Project was made possible with the generous funding from the Municipality of the County of Kings - Department of Communities, Culture and Heritage.

