

Canopy Connections Pre-Trip

Artist Activists

Total Time: 50 minutes

OVERVIEW:

This pre-trip lesson introduces middle school students to the Canopy Connections Team, our community partners, and old growth forests. The lesson will provide foundational knowledge for students prior to arriving at H.J. Andrews Experimental Forest. We will draw from previous knowledge of the students and build off of that to introduce core concepts and systems thinking.

EDUCATION STANDARDS:

- **MS-LS1-4:** Use argument based on empirical evidence & scientific reasoning to support an explanation for how characteristic animal behaviors and specialized plant structures affect the probability of successful reproduction in animals.
- **MS-LS1-5:** Construct a scientific explanation based on evidence for how enviro and genetic factors influence the growth of organisms.

LEARNING OUTCOMES:

1. By the end of the pre-trip lessons students should be able to list 3 ways to prepare for the upcoming field trip.
 - a. *Make sure to bring rain gear*
 - b. *Make sure to wear close toed shoes*
 - c. *Layers to stay warm*
2. By the end of the pre-trip lesson students should be able to explain one way art is used as a medium for making observations of the natural world.
3. By the end of the field trip lesson, students will be able to describe how making art that incorporates their life perspectives has value and can be shared to contribute to their human and ecological community.

RATIONALE:

The Canopy Connections 2019 team seeks to excite the students about the upcoming trip to H.J. Andrews and foster the awareness of the natural cycles of old growth forests through OWLS and the use of art as a medium for observations. This understanding will engage activist attitudes aimed at increasing awareness and action on environmental issues.

PREPARATION AND MATERIALS:

- Prepare Oregon map on the board before starting introductions.
 - Stick on each geographic feature to the map
- What to Print
 - Leave No Trace/Packing Lists (one per student)
 - https://docs.google.com/document/d/1GVW0qOI_3R5kgqFRr1Q56uCoyTofZAt8Tzno9CpvOgM/edit?usp=sharing
 - Haiku worksheets (one per student)
 - Map of Oregon (one per student)
- Collect forest materials such as lichen, woody debris, cones, needles and leaves, etc.

ITINERARY:

- Introduction: 3 minutes
- Seed: 15 minutes
- Sprout: 13 minutes
- Bloom: 13 minutes
- Conclusion: 6 minutes

INTRODUCTION: 3 minutes

- We are Canopy Connections from the University of Oregon's Environmental Leadership Program
- As a group we have been collaborating with HJ Andrews Experimental Forest and Pacific Tree Climbing Institute to put together a field trip for you.
 - "You will all have the incredible opportunity to climb Ed, a 300 plus year old Douglas fir tree in a beautiful old growth forest."
- Introduce Ourselves
 - Name
 - Hometown
 - What we are most excited about

- “All of us here on the Canopy Connections team are very excited to help foster a relationship between you and the forest.”
- Play video
 - https://www.youtube.com/watch?time_continue=7&v=cdHHFS72y9A

SEED: 15 minutes

By the end of this activity, students will be able to:

- Describe the location they are going to visit for their field trip

Activity One: Mapping

- Separate children into 3-4 groups (depending on class size)
- Disperse maps to the students. Have them work together as a small group to locate key geographical features. Emphasize Eugene, the Cascade Mountain Range, the Willamette Forest, Blue River, and HJ Andrews.
 - <https://docs.google.com/document/d/170NJ2FMewtDnXz9WPR5gE9HNdJCummQvqap-B4Ho0Y4/edit?usp=sharing>
- Talking points:
 - “Let’s take a look at this map to get a little more familiar with Oregon’s geographical features and where we will be going for our field trip to HJ Andrews.”
- If there is time, talk about each feature and explain how each connects with one another.

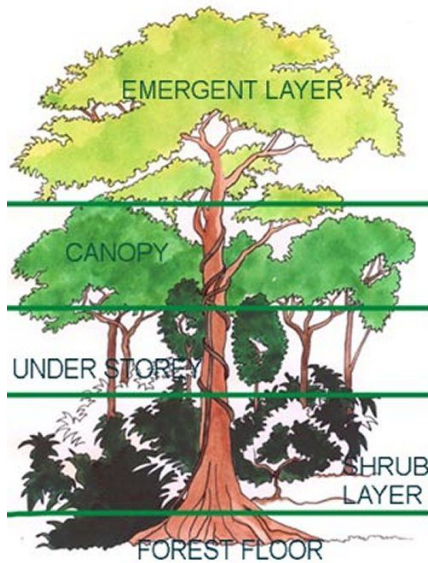
For example:

 - “The Willamette River and the McKenzie flow into the Columbia River.”
 - “Along the Willamette River are several cities and towns. Portland is the most Northward city, followed by Salem, Eugene, and Roseburg. Directly West of Eugene is Florence, right on the coast of the Pacific Ocean.”
 - “If you head East towards Bend, you’d be in the Willamette National Forest. HJ Andrews, where we will be for our field trip, is right on the edge of the Willamette National Forest. Nearby is the Deschutes National Forest, and both of these forests are within the Cascade Mountains.”

Activity Two: OWLS

- As a whole class, break down the acronym, OWLS. Prompt the students with questions rather than lecturing them. Guide them to find the correct answers.

- O: Old trees
 - There are many types of old-growth forests in Oregon, but generally speaking, old growth means a forest that has not undergone any major unnatural changes (such as logging) for more than 100 to 150 years.
- W: Woody debris
 - Large woody debris are the logs, sticks, branches, and other wood that falls onto the forest floor or into rivers.
- L: Layers
 - Forest floor, shrub layer, understory, canopy (where the students will be climbing)



- S: Snags
 - Standing upright dead trees

SPROUT: 13 minutes

By the end of this activity, students will be able to:

- Make quick observations about forest materials.
- Begin to make predictions about the forest materials.

Activity One: Getting to know forest materials

- Frame this activity by saying “scientists and artists don’t always get all the time they need to make observations so they need make observations, mental notes/pictures quickly...i.e. An artist painting a sunrise/sunset
- Have each small group turn around so they cannot see you.

- Place one or two forest items on each students desk and tell them before they turn around that they will have 30 seconds to look at their item so they need to take ‘mental pictures’ and make as many observations as they can.
- If someone says “why not take a picture?” really good artists can actually tell if something has been painted from a picture or something in real life because the dimensions are slightly off and the picture can look flat if painted just from a reference picture
- You can have the students write down what they observe if you want, these notes can be used for the haiku as well, which the students will work on immediately following this activity.
- If there is time run the activity again and give each student different materials so they can see a variety of forest items.
- Ask questions such as: “What do you notice about these leaves that are different from other leaves you’ve seen?” - i.e. leaves are waxy, needle-like - follow through trying to draw out why they might think this, what are the advantages of waxy leaves?
- If we bring in woody debris - “Where do you think this comes from?” “How does it relate to OWLS acronym?”
- Ask questions that guide students in the direction of identifying conifers as the dominant tree type in the HJ Andrews.
- Follow up example question: “Based on the characteristics of these objects, what sort of animals do you think live here?” “What do you think the climate is like? Dry? Wet? Cold?”

BLOOM: 13 minutes

By the end of this activity, students will be able to:

- Describe how making art that incorporates their life perspectives has value and can be shared to contribute to their human and ecological community

Activity One: H.J. Andrews, Science, and Art (Poet-tree)

- Frame this activity by saying: “Art and science are key aspects of H.J. Andrews forest. Writers, artists, scientists from diverse backgrounds and fields come together to reflect on the significance of ancient forests and how humans interact with it. H.J. Andrews hosts two people every year who stay in the forest and write. A lot of important artwork and writings have come out of people staying at H.J. Andrews.”

Writing a Haiku:

- “Do you know what a haiku is?” “Has anybody written a haiku before?” “If you do know what a haiku is, can you explain the format?” - if no one knows, explain that a haiku is a type of poem that has a certain number of syllables per line. 5/7/5 is the order of syllables for each line.

- Tell students to use the pictures and their observations in the previous activity to write the haiku. Write a haiku individually with the first line including what they noticed, the second line what they wondered or were curious about, and the third line what the pictures reminded them of. Read sample haiku we created in this format:

- Sample Haiku:

(Noticed): Fallen light shining,

(Wondered): Jagged branches, Unknown cause

(Reminds Me): Magic fairytale

Name:

Class:

I notice...	I wonder...	It reminds me of...

Sample Haiku:

(Noticed): Fallen light shining,
(Wondered): Jagged branches, Unknown cause
(Reminds Me): Magic fairytale

YOUR HAIKU:

I Notice...(5 syllables)	
I Wonder...(7 syllables)	
It reminds me of...(5 syllables)	

Activity Two: Poets and Creative Writers at HJ Andrews

- If students in a group finish early and time allows, read them the following quote by Robin Wall Kimmerer or the poem by Scott Slovic.

“It’s a hopeful thing when scientists look to the land for knowledge, when they try to translate into mathematics the stories that water can tell. But it is not only science that we need if we are to understand. Lewis Thomas identified a fourth and highest form of language. That language is poetry. The data may change our minds, but we need poetry to change our hearts.” —*Robin Wall Kimmerer*

A Writing Excerpt from an H.J. Andrews writer-in-residence Out of Time by Scott Slovic

*Eventually the physical process of straining uphill on
the narrow trail had its desired effect. I stopped thinking so much—stopped
Thinking about thinking—and started simply breathing. I tried to figure out what I heard as
I walked—the gurgles of rainwater, the occasional whooshing of steep streams,
Distant caws and cackles of birds, and my own breathing—in and out, in and out.
I recalled Richard Nelson’s notion that when you’re in a place, you bring the
place into you by drinking its water, eating what lives there, and breathing in its
air. I concentrated on breathing this forest into myself as I hiked.
As I walked through the old growth forest—ancient living trees, giant snags
Still standing, deadfall everywhere in the process of fertilizing decay—I found myself
More fascinated with my own meager breaths. Nothing momentous about a single tiny
Person walking and breathing in the woods. But the rhythm of my breathing had, for the
moment, joined the other rhythms of this forest—the rhythms of water and air, of
movement and stillness, of living and dying. This felt good to me.*

Conclusion and Sharing Section: 5 minutes

- Encourage students to share their haikus within small groups, if they don't want to read their haikus encourage them to share what they noticed/wondered about/etc.
- Ask several students to share their haikus with the whole class as we come back together

Here are some examples of haikus other 7th graders have written about forests, written by students from Richford, VT:

Listen very close

You might hear a faint whisper

A songbird's singing

-- Samantha Ryea, 12

Songbirds singing loud

Autumn trees tall as can be,

swaying in the breeze

--Ann Badger, 12

<https://youngwritersproject.org/node/2089>

- If time allows, ask the students what they are excited about for the field trip, which will create excitement in the process (both in their minds individually and in the class as a group). You can also use this time to remind them of some of the things they came up with about preparing for the trip, and to pass out the Leave No Trace/Packing List sheet for the students to take home.
- For the next 5 minutes, ask students how to be prepared for the trip. Their recently-gained understanding of place will help them to see why it will be colder/rainier/etc. and better prepare themselves for the trip.
- Have the packing list handy to support the students in discovering any components they missed.
 - ROSE (Respect for Others, Self, and Environment)
 - Be safe
 - Be kind
 - Stay on the trail

Example Packing List:

- Rain Jackets

- Rain pants
- Warm Mid-layer (Wool or fleece is preferable to cotton if available)
- Water bottles (Can refill at H. J. Andrews)
- Lunch and snacks (NO peanuts or tree nuts – no exceptions)
- Appropriate footwear (Waterproof, closed toe, hiking boots or rain boots are preferable)
- Gloves
- Hats
- Sunglasses and sunscreen depending on weather
- Warm long socks
- Extra socks if shoes are likely to become soaked
- Inhaler for any students with asthma
- EpiPen for each student with allergies
- Pacific Tree Climbing Institute waiver
- Be Safe, Be Respectful, Be Kind to yourselves, one another, and the forest

Make sure to cover:

- Closed toed shoes*
- Long socks*
- Long Pants*
- Warm Layers*
- Rain Jacket*