



## Pictou County Forest School Climate Change Post-Visit Lesson Plans

**Activity:** Animal Tracks Carbon Footprints

**Curriculum Outcomes:** Elementary/Middle School

**Materials:** Paper, markers/pencil crayons, chart paper, stencils of animal tracks

**Resources:** [NS animal tracks](#)

**Intro/Minds On:** Students should have a pre-existing knowledge of carbon footprint from the PCFS visit. Remind them of what it means to have a carbon footprint and how we get one (heating the house, driving cars, ordering stuff online, buying our food from far-away countries, etc.)

- Show students [NS animal tracks](#)
- Have students trace their feet onto chart paper and label their footprint “human”
- Have them trace/copy/draw several of the animal tracks. Label each animal track.
  - You could create a stencil if the kids know how to use stencils/aren’t confident in their drawing ability/are too young to replicate.
- Ask the students if they have any pets - add their paw prints to the sheet and label them “cat”, “dog”, etc.

### **Action:**

- Ask students what they think the carbon footprint or eco-footprint of each animal is
  - Have students choose 3 very different colours that indicate “small”, “medium” and “large”, and show them how to create a little legend indicating those colours off to the side, with “carbon footprint” as a legend title
- Ask students if there is any animal who has a big carbon footprint on this page (humans 😊). Let them colour the human footprint with the “large” colour
- Have a discussion on what resources each forest animal uses, and how those resources are local and didn’t have to be ordered on Amazon or produced in a factory
- Start to go through each **forest animal** colouring their tracks in the “small” colour because they consume resources that are close to where they live/they don’t drive cars, etc. **making sure they don’t colour in deer, cat, dog, or human yet**
- Ask students if they think their **pet** has a carbon footprint
  - Discuss how a pet can have a carbon footprint - we buy them toys, we order their food from Amazon or Superstore, it was made in factories, we don’t know where the factory bought the meat or grain from
  - Colour the cat and dog foot print the “medium” colour
  - Decide as a class that you should probably draw an arrow connecting the cat and dog footprints to the human footprints, discuss why (because we buy the toys and food for them)



- Ask students what deer eat - explain that deer can be responsible for browsing baby trees that can prevent the forest from regenerating
  - Have a discussion about how trees are good for reducing carbon “Why do we want to plant more trees?” etc. Can introduce the concept of “sequestering” to older grades.
  - Ask/explain how/why deer affect forest regeneration (because humans cut the trees down). Does the deer have a carbon footprint? Is it the deer’s fault or human’s fault that the deer might have a carbon footprint?
    - Decide as a class if you will colour the deer in small or medium, or half-and-half/overlapping colours.
    - Decide as a class if you should draw an arrow connecting the deer footprint to the human footprint
  
- If you want to incorporate farming, you could add cow prints and draw arrows back to humans as well. Cow pasture requires cutting down trees, cows toot methane (another greenhouse gas)
  - Discuss factory farms vs. local farms, which has a higher carbon footprint

**Consolidation/Next Steps:**

- Find out online what the average Canadian carbon footprint is and write that on or around your footprint
- Have a discussion about what that means
- Come up with ways to reduce your carbon footprint and your pet’s carbon footprint (don’t buy as much unnecessary stuff, don’t eat fast food very often, try to buy local food, make a garden, use less electricity, don’t buy bottled water or single-use plastics, let your dog play with bones and sticks and don’t buy as many plastic toys, walk or bike to school/work/grocery store if you live close, look up homemade toys you can make online...toilet paper rolls with treats in them etc.)

[NASA Climate kids](#) has lots of content

