Habits in Nature: The Impact of the Beaver

This foundational lesson in the Responsibility Unit focuses on self-discipline and how responsible actions affect ourselves first and foremost. There will be a running theme throughout this unit that focuses on responsible decision-making and self-discipline in a way that shows responsibility to self, others, and the environment. Life science and music standards will be addressed through the study of habitats and environmental impact of noise. Each lesson will draw parallels with responsibility, self-discipline, and, ultimately, kindness. The focus of this third lesson is making responsible decisions to care for the environment and animals and plants in it; these are habitats in nature!

Kindness Concept(s)
Integrity, Kindness

Lesson Timeframe
35-45 minutes

Required Materials
“Beavers” from PBS Learning Media: https://wdse.pbslearningmedia.org/resource/tdc02.sci.life.colt.beaver/beavers/#.Wjh7XFwnGM8

Standards Map
This lesson aligns with CASEL Competencies, National Health Education Standards, and Common Core State Standards. Please refer to the Standards Map for more information.

Lesson Objective
Students will:
- Explain the difference between responsible and irresponsible decisions with regard to natural habitats.
- Identify natural habitats (lakes, rivers, forests, etc.) and evaluate ways to keep them safe and healthy.
- Explore how we can make responsible decisions regarding our natural habitats.

Teacher Connection/Self-Care
Every person on earth has a personal carbon footprint that they leave as they experience the world. You are responsible for your effect on the environment. The best way to truly accept this is to evaluate this effect. How much water do you use each day? Are you conscious about the electricity usage in your home? Are you part of a recycling or composting program? Most of us are aware of these simple ways to lighten our impact. However, this week’s challenge is to identify unique ways to decrease your carbon footprint at school. Are there ways to reduce your waste? How does your school handle recycling? Your kind actions set a terrific example for the students in your class!

Tips for Diverse Learners
- The video is available in both English and Spanish and has Closed Captioning.
7-10 minutes

In our last lesson, we talked about shared habitats for people. What are some of the habitats that you share with others? Invite student responses.

Now, let’s take our classroom as a shared habitat. What are some responsible decisions we need to make in order to keep our classroom a safe and healthy and fun place to be with others? Invite student responses.

Good! Our success in our shared habitats depends on the health of our habitats, and we need to do everything we just talked about in order to keep our classroom healthy.

Adapt this part of the lesson depending on whether or not you’ve already studied habitats with your class. If you have, you can use this as a short period of review. If you have not, follow the basic introduction below. This lesson provides a very high level overview of just one habitat and focuses on a single animal. You should adjust it to suit your particular geographic area or an animal of particular interest or study.

For this lesson, we are going to talk about habitats in nature! There are six major habitats for plants and animals. They are the arctic, forests, deserts, freshwater habitats (like lakes and streams), ocean habitats, and rainforests. Each of these natural habitats create special places for very specific animals to live. What habitats do we have near or within our community? Invite student responses.

What types of plants and animals live in these habitats? Invite student responses.

Have you ever thought about how animals create their own shared habitats, or homes, with one another? Did you know that often one type of animal depends on another type of animal for its survival? In many ways, humans are dependent on these natural habitats. For example, plants and trees create oxygen for us to breathe, so having healthy forest habitats is very important!

Today we are going to explore the forest and freshwater habitats and specifically examine how beavers use these habitats to create their dams and homes (called lodges), and how their dams and lodges impact the habitats around them.

12-15 minutes

Watch “Beavers” from PBS Learning Media (5 min):

https://wdse.pbslearningmedia.org/resource/tdc02.sci.life.colt.beaver/beavers/#.Wjh7XFwNgM8

As a class, discuss the following:
● In what type of habitat(s) do beavers live?
● What is a beaver’s home called?
● How does a beaver make its dam and its lodge?
● Beavers are pretty small animals and yet they can cut down huge trees! What do you think this says about the beaver?
● What effect does a beaver dam have on the habitat surrounding the dam?
● What are some of a beaver’s responsibilities?

Empower

10-12 minutes

Now let’s talk about some of our responsibility to animals like beavers and other elements of nature.

If we litter, which means we throw our cans or wrappers or other trash outside in the school yard and we don’t put them in a trash bin, how might that impact the animals or even people who live and play in the spaces outside of our school?
Invite student responses.

If we cut down a lot of trees without replanting, what might happen to animals like beavers or birds?
Invite student responses.

If we don’t take care of our local water sources, if we allow them to be polluted with garbage or with gas or oil or other toxic chemicals, what could happen?
Invite student responses.

Reflect

3-5 minutes

As we have been learning, the success of a human, plant, or animal living in a habitat depends on the health of the habitat.

Think about the impact that humans have on habitats in nature. Just like every animal is responsible for its own survival, humans also have a responsibility to help take care of the world’s natural habitats to assist plants and animals in growing strong and remaining part of our world and life cycle. As you go outside today, observe the habitats you see and think about the plants and animals that live there. Think about what their responsibility is as part of life cycle and think about what your responsibility is as a human in that natural habitat. How do you ensure the success of those animals or plants by ensuring the health of their habitat? Bring your observations back to class tomorrow!
Extension Ideas

- You could ask students to write down their observations so there is a writing sample and a “homework” element of the lesson (depending on if this lesson becomes the science lesson for the day).
- You could turn the empower/wrap-up into a nature walk and observe natural habitats and human impact on those habitats. You could turn it into a clean-up walk, too (if done close to Earth Day or some other kind of clean-up observance/event in the community or school).
- You could invite students to do further research on beavers, beaver dams, and lodges.
- In advance, you could arrange a field trip to a beaver dam/lodge if there is a freshwater source and dam/lodge in your community.
- There are a number of YouTube videos about beavers that you could share with parents to explore at home. National Geographic Kids has a good video: [https://www.youtube.com/watch?v=Ic3x8OVYe80](https://www.youtube.com/watch?v=Ic3x8OVYe80).

The Collaborative for Academic, Social, and Emotional Learning (CASEL) has been reviewing evidence-based SEL programs since 2003. Kindness in the Classroom® meets CASEL’s SELect Program and is included in the CASEL Guide to Effective Social and Emotional Learning Programs.

Kindness in the Classroom® met or exceeded all of CASEL’s criteria for high-quality SEL programming. Kindness in the Classroom® received CASEL’s highest designation for high-quality SEL programming.