



TIPS FOR LEADING FIELD TRIPS & NATURE WALKS IN BEAVER HABITAT: A RESOURCE FOR EDUCATORS

Exploring beaver habitat with a knowledgeable guide is the best opportunity for beaver education there is! Nothing beats being able to understand the changes beavers make to the landscape better than seeing them for yourself- not to mention the anticipation of a potential beaver sighting! Even if you are unsure that beavers are currently active at your site, the evidence they leave behind and the impact they have on other species, remains for years after beavers have left.

Program planning and preparation:

- Schedule field trips to beaver habitat as early or as late in the day as possible to maximize the potential for a beaver sighting.
- Walk the trail(s) beforehand to familiarize yourself places of interest, talking points, safety hazards, etc.
- Familiarize yourself with the surrounding areas and the history of beaver activity at the site:
 - Are beavers currently present?
 - How long have beavers been present?
 - What is the human reaction to beaver presence at this site?
 - Use iBeaver or iNaturalist to investigate observations of beaver activity nearby. This gives you a better idea of how beavers move around the landscape in your area.
 - Study maps to understand the characteristics of your local watershed. Know the names of nearby bodies of water and how water moves through them.

Optional materials:

- Measuring tape
- Binoculars
- Pocketknife
- Beaver biofacts- skull, track cast, teeth, pelt, tail, claw replica

Things to observe:

- Beaver chewed stumps
 - Point out teeth marks and general pointed shape. Compare to a human-cut stump if possible.
 - Note how far from the ground beavers usually chew.
- Beaver dams
 - Observe materials used to construct the dam.

- Consider or measure height and length of dam.
- Point out upstream/downstream side of dam and compare water depth above and below.
- Ask: How might beaver dams might affect the movement of other wildlife? (Obstacles for fish, bridges for other mammals, etc.)
- Beaver lodges or bank dens
 - Smell the air around a beaver lodge.
 - Listen for sounds of beavers moving and vocalizing inside.
 - Look for little underwater highways in the sediment (if the water is shallow enough) that indicate where the lodge entrance is located.
 - Consider the height and width of the lodge.
 - Ask: How many beavers do you think can live inside?
- Beaver trails leading from the water onto land
- Scent mounds: little piles of mud throughout beaver habitat, that they create with their hands and add castoreum to define territory and deter dispersing or unrelated individuals
- Food caches: sticks placed intentionally in the water near entrances to lodges or dens
 - More likely observed in the fall as they are established, throughout the winter, and in early spring before the sticks are used and/or dislodged from the mud.
- Beavers!
 - Listen for tail slaps and chewing sounds
 - Watch the water for ripples, especially near lodges/dens
 - Scan the banks for movement
- Other wildlife benefiting from beaver
 - Turtles sunning on food caches
 - Fish in shallow water
 - Herons and other birds perched on lodges
 - Muskrats, otters, and other mammals who may temporarily use lodges and dens
 - Tracks near dams to indicate wildlife crossings
 - Dragonflies with still water to lay eggs
 - Woodpeckers foraging in drowned tree trunks
 - ...and so many more possibilities!

Possible Trail Activities:

- Use a pocketknife to reveal the cambium layer of the bark to demonstrate what beavers eat.
- Sit spot at the lodge. Sit quietly as a group and have people close their eyes to experience the beaver pond through sound.
- Build beaver dam analogs (BDAs) where appropriate.
- Identify tree species used by beavers.
- Measure preferred stump height and diameter.
 - Follow-up: Graph results and compare to existing data from other sources.

- Build mini beaver dams using natural materials in paint trays and test them by pouring water and observing how much water leaks through the dam.
- Plant willow or other preferred beaver food species.
- Wrap selected trees to prevent beaver chewing and discuss human-wildlife conflict.
 - Follow-up: Have students design educational signs to explain why the trees are wrapped to future visitors.

Visit www.coexistwithbeavers.org to learn more about the Human-Beaver Coexistence Fund and to schedule 'Beaver School' programs in the Mid-Atlantic.