



Hilltown
Families.org

COMMUNITY-BASED
EDUCATION NETWORK

Tips for Exploring

Beaver Habitat

Lodges, Dams, Caches, and Adaptations

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Above: A frozen beaver pond in winter gives visitors the opportunity to get a close look at the lodge, which closely resembles a brush pile. Actively used lodges will often emit steam in the wintertime, indicating cozy, warm beavers inside.

Lodges

Beavers are well-known for creating their living quarters. Their lodges look like piles of sticks made for a bonfire - except they're in the middle of a pond! Beavers create their lodges by felling small trees, pulling them into the water, and piling them until the pile extends above the water. Aquatic plants and mud are used to help keep the pile together. Then, they chew into the pile to create an entrance hole and a living chamber.

Though their lodges are quite cozy, beavers do not hibernate through the winter. They are very active, even once their ponds have frozen over. Beavers swim around underneath pond ice during the winter, and will come up on land to find food, too. Beavers have even been known to engineer the ice in their ponds, maintaining holes to come in and out of or working to keep it out of their way while they work on building projects.



Dams

Dams are beavers' way of creating perfect habitat, and they're incredibly effective. Beavers build dams in streams and small rivers, particularly in small woodland valleys. The surrounding woodland serves as a resource for food and building materials, and the shape of the small valley is perfect for creating a small pond. Dams, like lodges, are made of sticks and plastered with mud and aquatic plants.

Left: A beaver's winter work left this tree newly stumped! Trees such as this one are large enough for use in a dam.

Right: A very large oak tree, located next to a beaver dam, has become a winter project for the local beavers. A recently-chewed tree like this one has a fresh wood smell and will have wood chips surrounding its base (unless there's fresh snow).



Caches

While beavers are capable of leaving their lodges to find food in the winter, they prepare for the winter by caching food, or stockpiling it in accessible places. Their favorite foods are the buds and outer bark of deciduous trees, and they work hard during the fall to gather quantities of these delicious treats. One strategy for caching food is to fell a large tree so that its branch tips are submerged. In winter, ice will form on the top of the water, but the delicious branch tips will remain underwater, providing easy access for beavers. Another strategy is to gather an abundance of young branches and cache them in a pile underwater. Similar to felling a large tree, this strategy allows beavers easy access to food all winter long, but requires more gathering work to take place in the fall. Beavers are also willing and able to move around on dry land in winter, and can therefore seek out food sources if necessary.

Beavers raising kits rely heavily on cached food during winter because kits, who are still growing, maintain the same metabolism year-round and therefore require large amounts of food. Adult beavers, on the other hand, slow their metabolism during the more sedentary winter months and therefore need less nourishment.



Left: Beavers eat only the outer parts of twigs, not the inner wood. Twigs that they have eaten from have their outer bark stripped off.

Adaptations

In order to behave as they do in winter, beavers have some special qualities. Their fur is nearly waterproof, with a coarse outer layer and an under layer of very fine hairs. The fine hairs underneath have tiny hooks that allow them to act as a water-tight mesh. Beavers' bodies can also create an oily substance that they can rub through their fur, providing even further waterproofing.

Beavers' signature physical features - their teeth and tail - are essential in winter, too. Their paddle-like tails help to regulate their body temperature and store excess fat for metabolizing when the going gets tough. Their big, orange teeth (colored such due to their high-iron diet) serve as tough tools for chewing year-round, and without them, they'd have no lodges or food. Not all beavers feel the need to continue to chew with vigor during the winter months, but some do, and are happy to continue to work on felling trees year-round.



Left: A beaver's large, orange teeth are accompanied by a set of smaller molars (**below**). The front incisors do the hard work of gnawing through trees and biting through branches and twigs, while the flat teeth in the back of their mouths grind their food.



Right: A well-aged piece of wood with evidence of beaver teeth. The dark color of the inner wood indicates that this is not a freshly chewed log.



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