

Wetlands, Beavers and Flood Resilience!

Information Courtesy of Conservation Commission of the Town of Halifax

Importance of Wetlands

- Wetlands play a crucial role in achieving flood resiliency and maintaining biodiversity. The benefits of wetlands are to:
- Decrease damaging floods
- Recharge drinking water aquifers
- Remove pollutants from surface and ground water
- Protect against drought
- Decrease erosion

In addition, wetlands provide opportunities for wildlife observation, canoeing, fishing, bird watching and other activities.

Beavers, A Keystone Species

Beavers play an essential role in creating and maintaining wetlands. Innumerable species rely on beaver-created habitat, and some of these species are threatened or endangered. Animals supported by beaver wetlands include minks, otters, songbirds, ducks, great blue herons, grebes, frogs and toads, salamanders, and turtles. In addition to wildlife, beaver dams catch sediment that would otherwise be washed downstream;

this protects downstream fish spawning areas. Therefore, when we coexist with beavers, we are improving water management and supporting the habitat necessary for many other species.

Learning About a Complex System

By understanding and appreciating what beavers do, we learn how our physical environment works as a complex system. And we are dependent on this complex system for our health, well-being, and survival.

Conflicts Between Beavers and People

Beavers continue to seek their natural habitat, which is now dominated by humans. Like us, beavers are ecosystem engineers. Their efforts at establishing homes for themselves and their young may impact people living in the area. As they raise water levels to keep themselves safe from predators, they may flood back yards and roadways. To build their dams and lodges, and secure food, they may kill trees people value. However, eliminating beavers is

not the solution. Beavers create the physical environment that supports biodiversity, flood resiliency and fresh healthy water. Human-wildlife conflicts can be resolved without destroying beavers or other animals.

Resolving Conflicts - A Few Examples Among Many Options

Flooding yards and roadways

The Castor Master™ was invented by Skip Lisle of Beaver Deceivers International; it is a double-walled pipe and round fence (filter) used to prevent flooding by lowering the pond height. Near roadways, a Beaver Deceiver™ will move the dam back from a culvert. If the top of the structure is lower than the top of the culvert, then when there is a spill over it can drain into the culvert.

Trees

Individual trees can be wrapped in wire fencing to prevent beavers from chewing them down. The best choice is 2" x 4" galvanized welded wire utility fencing, 14-gauge or stronger. Alternatively, you can paint tree trunks with a mixture of latex exterior paint and fine sand in

a ratio of 5 ounces of sand per quart of paint; this will discourage beavers from chewing. Choose a color that matches the tree bark. When protecting trees, be selective. Beavers do need young trees to eat. The types of trees that beavers prefer are generally

fast growing, so growth each spring can increase due to beaver feeding activity. As an example, the stump left behind from a willow tree that a beaver has cut down can sprout multiple new stems. Other tree species, such as

poplars, will regrow from the same roots.



A Beaver Dam Near a Halifax Road Being Outfitted with a Beaver Deceiver © Skip Lisle (photo: David Erickson, Halifax VT)



Installation of a Beaver Deceiver © Skip Lisle (photo: David Erickson, Halifax VT)



Beaver Wetlands – A Birdseye View over Halifax (photo: David Erickson, Halifax VT)

For more information, visit the Green River Watershed Alliance at <https://www.greenriverwa.org> or the Halifax Conservation Commission webpage at <https://www.facebook.com/halifaxvtconserv> or HalifaxVTConserve@gmail.com

Beavers are a keystone species. They are builders, reshaping their environment. Their wetlands support hundreds of other species.



Beaver in the Spring (photo: Andrea Rand, Halifax VT)