# BEAVER WETLANDS CONSERVATION PROJECT



### **OVERVIEW**

In recognizing the ecological importance of beaver influenced wetlands for a wide array of plants and animals as well as for their role in maintaining water quality, recharging aquifers and attenuating flood potential, the Vermont Fish & Wildlife Department (VFWD) endeavors to protect these ecosystems to the greatest extent possible.

The Beaver Wetlands Conservation Project, often referred to as the Beaver Baffle Project, was initiated by VFWD to give citizens additional resources and options for resolving beaver conflicts, and to provide opportunities for broadening the public's understanding and appreciation of beaver and the wetlands they influence. Since its inception in 2000, project staff have employed an adaptive strategy for maintaining wetlands by helping citizens resolve beaver conflicts using various water control devices such as "baffles" and exclusion fences. In addition to providing on-site technical assistance to affected parties, project staff also conduct training sessions and workshops to provide opportunities to learn about techniques for resolving human-beaver conflicts, staff also defer to various citizen groups on beaver biology/management and methods for maintaining wetland habitat.

Project staff, on average, annually respond to 400 calls/emails related to beaver activity, conduct 50 site visits, and install 15 water control devices statewide each year. The beaver baffle project offers landowners a cost-effective solution to coexist with beavers. As of 2022, the Beaver Baffle Project has installed over 330 water control devices, influencing over 3,600 acres of wetland habitat throughout the state.

## **FAQS**

#### What is a 'beaver baffle' and 'exclusion fence'?

A **beaver baffle** is a device that is installed through a beaver dam to help control the water level in a wetland. The device functions by having water enter a pipe, which is placed inside of a cage that is set on the bottom of the pond at a minimum of 30 feet, preferably farther, from the dam. The pipe runs along the bottom and through a notch that is dug in the beaver dam. The outlet of the pipe extends downstream of the dam. The depth of the notch determines the new water level. The idea is the water escapes the pond through the baffle system without the beavers knowing how to stop it. The baffle system may not be able to maintain a constant water level throughout the year due to periods of heavy rain or drought. Citizens need to maintain some tolerance for water levels to fluctuate.





Above: beaver baffle Below: exclusion fence



An **exclusion fence** is built at the inlet of a culvert to discourage beavers from trying to dam the culvert. The size and shape of the fence is important to its success. Culverts can amplify and echo the sound of running water, which is often a trigger for beavers to build a dam. Culverts can restrict water flow and offer an easy location for beavers to build. Fences are typically built using metal feedlot panels, 2x4's and cedar fence posts.

#### Do these devices resolve all conflicts?

No, VFWD's devices do not resolve all conflicts. There are site specific variables including water volume, water depth, site layout, maintenance, and beaver activity that all influence the effectiveness of the devices. Project staff prefer sites where the devices are most likely to function as intended. The goal of the project is to maintain high quality beaver created wetland habitat. While a baffle or fence may resolve a specific conflict, if there is not a significant amount of wetland habitat associated with the site, staff may choose not to install a water control device. However, there are private contractors who offer similar service and may have additional options.

#### How is the project funded?

The Beaver Wetlands Conservation Project is funded, in part, by a US Fish and Wildlife Service grant, the Vermont Duck Stamp Fund and the Pittman-Robertson Act. Landowners who choose to have a water control device installed on their property are asked to contribute approximately 50% of the materials or cost for the materials to build the device. There is no fee for on-site technical assistance.

#### Is trapping necessary to resolve conflicts?

Regulated trapping can be an effective tool for reducing conflicts with beaver, however, landowners are always encouraged to first explore non-lethal options for resolving conflicts including tolerating beaver activity on their property. If regulated trapping is the only option, either because the landscape conditions prohibit the use of water control devices or non-lethal options have already been tried unsuccessfully, VFWD recommends landowners use a licensed trapper during the regulated trapping season to ensure the animal can be fully utilized for its fur and meat. The department does not provide trapping as a service but can refer people to a local, licensed trapper.



For more information visit: www.vtfishandwildlife.com/beavers

