# Beavers in Delaware

Beavers are social animals that stay with their parents for several years after they are born to help raise new litters and maintain the family pond.

At three years old beavers will start to look for a new area to build a lodge, separate from their family unit.

Good beaver habitat consists of streams, marshy area with trees close by and lakes with trees along the banks. Beavers prefer tree species such as willows, aspens, birch, cottonwood and ash.

Beavers are stimulated to dam by the sound of running water.

Beavers, just like other rodents, have teeth that never stop growing. They must continually chew on trees, sticks and logs to grind their teeth down. A beaver's teeth appear yellowish-orange due to the presence of iron in their teeth.

Beavers were completely removed from Delaware in the mid-1800s by unregulated hunting and trapping. In 1935, Delaware brought three pairs of beavers in from Maine and release a pair into each of the three counties, the initial reintroduction totaled 24 beavers.

## Why are Beavers Good?

Beavers are "Ecosystem engineers," they can modify ecosystems by flooding and changing hydrology with their dams. This creates beaver ponds that can cycle nutrients and filter water in them.

Beaver ponds attract other wildlife species such as herons, waterfowl, muskrats and turtles. Flooded areas from beaver can promote aquatic and wetland plant growth that isn't typically found in areas where seasonal flooding occurs.

Beavers can increase tree numbers and diversity. This may seem counterintuitive, but beaver activity has been scientifically proven to increase the number of trees in the area surrounding ponds and increase the different types of trees that are present.

## When are Beavers a Nuisance?

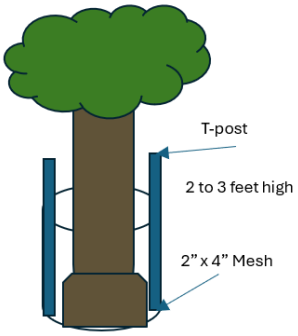
*When they are damaging ornamental or agricultural trees:*

Beavers chew most of the way through many trees at once and then wait for wind to knock them down. This method can lead to loss of many valuable trees that can be damaged very quickly.

*When they cause flooding:*

Beavers purposefully cause flooding as they dam a stream or creek. Dams can cause flooding of roadways, homes, agricultural fields and public spaces like parks. Late spring and winter are when flooding typically occurs.

# What Can be Done about Nuisance Beavers?

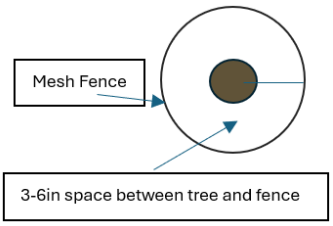



If a beaver is becoming a nuisance on your property, there are several non-lethal options available. These options can be used before a recreational trapper, Nuisance Wildlife Control Operator or DNREC Division of Fish and Wildlife need to be contacted.

## *Fencing for Trees/Shrubs*

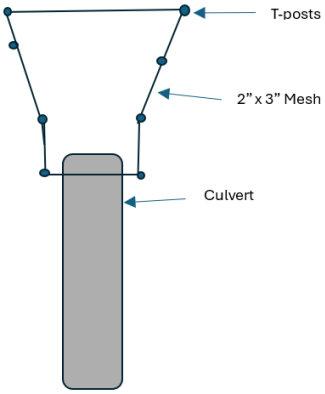
Chicken wire, hog panel or garden wire mesh can be used to protect individual trees, planted areas and culverts.

Trees/shrubs can either be wrapped or encircled with wire and staked down with either t-posts, sod staples or metal stakes.




- 2" x 4" wire mesh is preferred
- Wire should be at least 2 to 3 feet tall from the base of the tree/shr

## *Fencing for Culverts*




Culverts should be fenced on the upstream side of the culvert.

Diversion fencing should be placed at least 10ft upstream from the mouth of the culvert to encourage the beaver to dam away from the culvert.

Fencing around culverts should be at least 6 inches above the highest expected water level for the area where it will be placed.

### *Sand Paint*

A mixture of household paints that match the bark of the trees/shrubs you would apply them to with play or masonry sand. Ratio should be 20oz of sand to 1 gallon of paint.

Pros:

- Can last very long time (2-3 years) if using outdoor paints
- Relatively inexpensive

Cons:

- Toxicity of paints were found to have a lethal dose to beavers after chewing only 3 trees treated with mixture. (https://www.workingwithbeavers.ca/files/new_texture_report.pdf)
- Ineffective in areas where beavers have flooded trees.
- Ineffective on sapling trees and small shrubs.

### *Taste Aversion*

Application of mineral oil and cayenne pepper has been found effective for some tree application. Will need reapplication after rain events.

Thin barked tree and shrub species do not tolerate this application and can be stunted or killed by it (ex. birch, maple, sycamore, crape myrtle, beech).