

The Beaver (*Castor canadensis*) is the largest rodent in North America. Their habitat is in small lakes, rivers, wetlands and other waterways. Beavers build dams using woody material to modify their habitat, and they feed on the bark of fast growing hardwood trees. For these purposes they cut down trees adjacent to ponds and waterways, and may travel considerable distances overland in order to find suitable trees for their use.



*Beaver lodge in Toronto*

### **Hosts and Damage**

In Ontario, beavers have been known to eat almost every tree and shrub species available. In the Toronto area, preferred foods and building materials are poplars and willows.

Beaver activity may cause damage to public and private property in the form of flooding or tree damage. Girdled, cut or felled trees may topple over, fall onto other trees, utility lines, or precariously hang over public pathways or roadways. In addition, they often gnaw on living trees just to grind down and sharpen their continuously growing incisor teeth. Dams built by beavers may cause flooding, which in the most severe cases may weaken structures, washout roads, and alter watercourses.

However it is important to note that beaver dams, in addition to creating new wetlands, also reduce erosion, help regulate the flow rates in many rivers and streams, and enhance fish habitat. In this respect, some nuisance and damage should be tolerated.



*Beaver damage*



*Tree protected with wire mesh*

## Specific Management Practices for Control of Beavers:

- Wrap wire mesh loosely around the lower trunks of trees, to prevent beavers from cutting or damaging the tree. Loosen the mesh every other year to prevent girdling.
- Spray host tree trunks with registered products that are offensive to the beavers' sense of taste or smell. Such products are available at most home and garden centres.
- When landscaping and renaturalizing, use tree species that are less desirable for beavers. Evergreens and hardwood species, such as white oak and elm, are less preferable as food sources.
- The beaver's instinct to build dams is triggered by the sound of running water. Construct culverts to avoid creating excessive water flow. Consult professionals when using this method.
- Trapping is a temporary solution. If there is an appropriate habitat for beavers, others will return to the site.

## General Management Practices to Improve Plant Health:

- Water your trees during dry spells. Infrequent, but deep soaking preferably during the early morning hours is recommended. Water absorbing roots are located in the upper 25 cm of the soil and extend outward well beyond the canopy dripline.
- Place organic mulch, (e.g. wood chips), or living mulch, (e.g. ground cover plants) around tree bases to keep the soil moist for longer periods and encourage healthier roots.
- Avoid unnecessary excavating, grade changes, soil compaction, root cutting or hard surfacing around trees. These activities destroy vital roots, which may lead to the decline or death of trees.
- Refrain from using salt or herbicides around trees.

**Forest Health Care** is a holistic approach to tree care that focuses on improving the health of trees in an urban environment. Our objective is a healthy, sustainable urban forest. Trees in urban forests are often stressed by compacted soil, drought, poor planting and pruning techniques, air pollution, road salt, damage from construction and much more. Trees planted in the right sites and properly maintained are less likely to suffer and are more resistant to pest problems.

Pest problems are managed using a decision making process that considers the following:

- Identification of the host and the pest.
- Monitoring of the host and the pest.
- Selection of the appropriate management strategy.
- Evaluation of the management plan.

Our focus is on pest management programs that are environmentally, socially and economically sound.