



A beaver cuts an average of 216 trees per year.

COEXISTING WITH BEAVERS

Beavers have many important ecological, economic, aesthetic, and intrinsic values. However, conflicts with beavers can happen when they construct dams that cause flooding to people's property and infrastructure, harvest valued trees and plants for food or dam construction, or when they transmit disease to people.

There are things you can do to reduce the risk of conflicts with beavers. This fact sheet offers some helpful advice to protect yourself, your family, your property, and beavers.

THINGS YOU NEED TO KNOW ABOUT BEAVERS

- A beaver cuts an average of 216 trees per year and prefers aspen, poplar, willow and birch. Harvested trees are used as a food source as well as in the construction of dams and lodges.
- The inner tree bark is a beaver's primary food for the winter; in the summer beavers mostly eat herbaceous plant materials such as grasses, leaves, fruits and aquatic plants.
- Trees and plants most vulnerable to beaver damage are usually within 50 metres of a waterway used by beavers. Trees and plants are most at risk when food is plentiful and predators are more scarce.
- Beavers construct dams to create ponds of water deep enough that they won't freeze to the bottom in winter. A depth of about 0.6 to 0.9 metres of unfrozen water is required for beavers to access their lodge and stored food year-round, underwater, where they are safer from predators.
- Beavers are stimulated to construct dams by the sound of running water.
- Road culverts are frequently targeted for beaver dam construction, particularly when they are located on gently sloping (1 to 10 per cent) relatively wet land close to hardwood or mixedwood forest. The construction of a beaver dam in a culvert or adjacent to a road can result in back-flooding and a road washout.
- Beavers can construct their den by building a lodge of branches and mud, or by digging holes in the bank of a lake, pond, river, creek or even a ditch. Dens in a ditch may extend under the road, and cause the road to cave in.
- Beavers may carry diseases and parasites such as tularemia and giardia (commonly known as beaver fever) that can be transmitted to people.
- Beavers tend to be most active at night, and will try to avoid interacting with people. However, like any wild animal, if a beaver encounters a person and feels cornered or threatened it may choose to attack.

THINGS YOU CAN DO TO REDUCE THE RISK OF CONFLICT

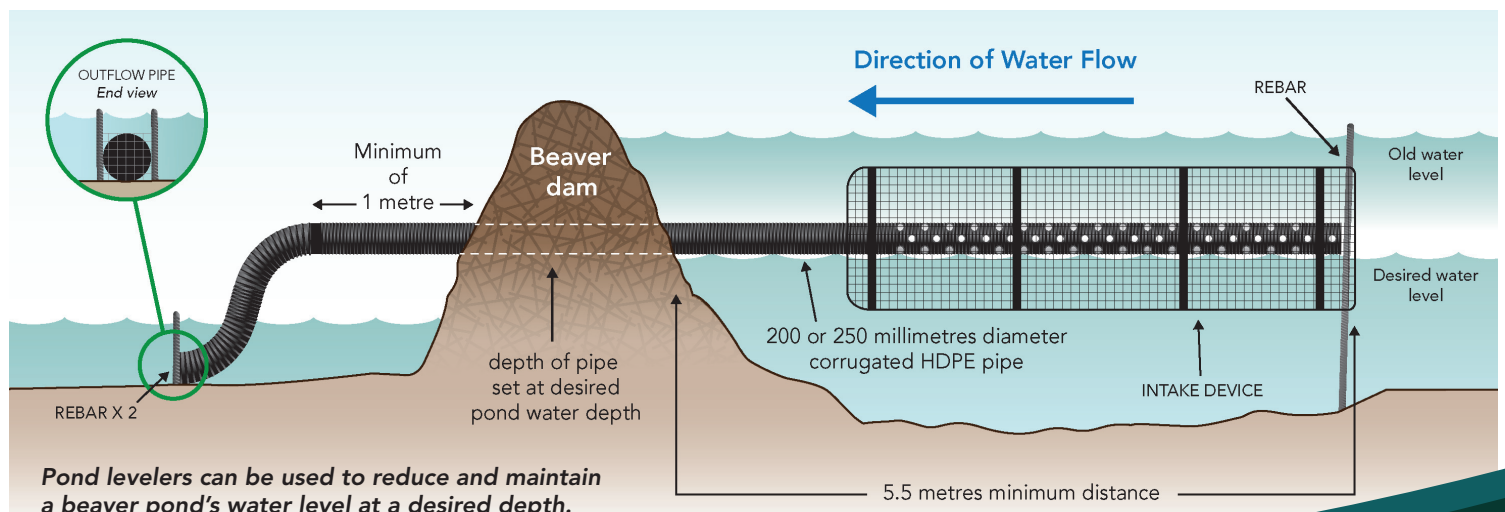
Reduce risks to people

- Do not approach a beaver or its lodge/den. Avoid physical contact with beavers and their feces.
- If you encounter a beaver that appears sick or injured, make note of its location and report it to a conservation officer.
- Prior to drinking any water in which beavers may be found, boil it for a minimum of one minute or ensure it has been adequately filtered or chemically treated.
- When handling harvested beavers, use good quality rubber gloves and thoroughly wash your hands with soap and water after handling beavers or coming into contact with water where they may be present.

Reduce risks to valued trees and plants

- Wire mesh fencing can be installed around the base of an individual tree, or a group of trees or plants for protection from beaver damage. Mesh is recommended to be four, six, or eight gauge, with openings not larger than 10 centimetres by 10 centimetres, and a minimum height of 1.5 metres. Fencing should be installed in contact with the ground and secured with landscaping staples. When fencing individual trees, be sure to allow space between the trunk and the fencing for the tree's growth.
- Electric fencing can be installed at a height of 10 centimetres above the ground to protect a group of trees or plants.

POND LEVELER



Reduce the risk of beaver dams causing flood damage to adjacent land and infrastructure

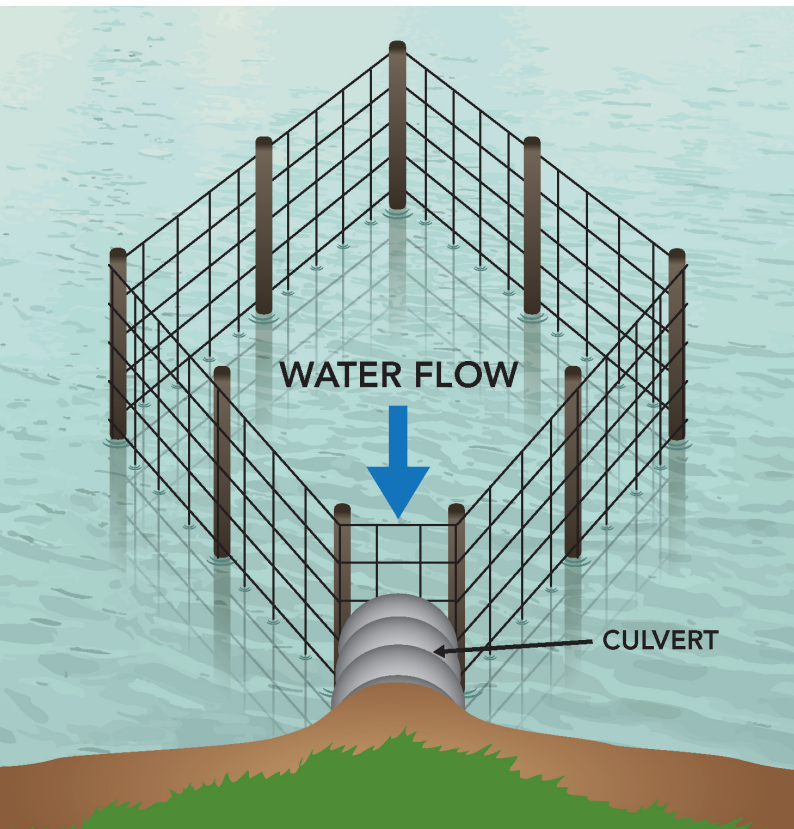
Install pond levelers

- A pond leveler reduces and maintains pond water to a desired level. The pond leveler should be installed at a level that (1) allows the resident beavers to thrive (typically a minimum depth of about one metre at the beaver lodge entrance), and (2) prevents the pond waters from negatively impacting adjacent land or infrastructure.
- Written authorization for the use of a pond leveler may be required before installation. Contact a conservation officer to request authorization. You will need to provide a legal land description of the desired location.
- A pond leveler can be installed through a beaver dam or into a culvert.
- The multiple holes on the pond leveler intake end allow for the slow, quiet movement of water, and discourage damming behaviour by a beaver. Studies have shown that beaver damming behaviour is stimulated by the sound of running water, and when that sound is removed, a beaver is not motivated to build or repair a dam.
- The screened intake area of the leveler keeps debris out and discourages plugging. Pond levelers typically need some maintenance to ensure the screened intake area stays sufficiently clear of debris to allow adequate water-flow. Pond levelers are considered to be a longer-term solution for dam management, and with maintenance, can be effective for several years.
- Instructions for the construction and installation of pond levelers are available from provincial wildlife staff (wildlife@gov.mb.ca).

Install beaver deceivers

- Beaver deceivers are recommended for installation on culverts that are at greater risk for beaver blockage.
- Where site conditions allow, the most effective beaver deceiver is the trapezoidal (four-sided) fencing system, with a minimum total length of 14 metres, plus a top and bottom side. When built to these specifications, a beaver deceiver typically requires little maintenance and can be effective for many years.
- Beaver deceivers are usually built on-site and adjusted as needed to meet the site's requirements. If the ground is uneven where installation is required, leveling the ground will allow for easier installation.
- Instructions for the construction and installation of beaver deceivers are available from provincial wildlife staff (wildlife@gov.mb.ca).

BEAVER DECEIVER



Beaver deceiver fencing can be used to lower the risk of culvert blockage by beavers.

Remove beaver dams

- Removing a beaver dam is generally a temporary solution and should only be considered after other techniques have been tried or if they are unsuitable for the area. Although the lethal removal of the beavers associated with the dam will typically be required prior to the commencement of beaver dam removal activities, if the habitat remains suitable, more beavers are likely to move into the area and will construct new dams.
- Refer to *Manitoba's Guide to Beaver Dam and Lodge Removal* for legal requirements and beneficial management practices related to beaver dam removal. The guide is available on-line at manitoba.ca/human-wildlife under "Publications and Links".

LETHAL BEAVER REMOVAL

- Beavers can be harvested by a licensed trapper during the regulated season, where it is lawful to do so. All trapping regulations apply. It is recommended that landowners in areas prone to conflicts with beavers work proactively with local trappers for beaver population management. Beaver harvest is best conducted when their pelt is prime (January to March) to ensure the pelt is not wasted and its value is maximized. Make arrangements with a local trapper well in advance of the prime trapping season so that they can be prepared to harvest beavers on your land at that time.
- In certain circumstances, under *The Wildlife Act*, a person may kill a beaver in defence of their property and they must report the killing of the beaver to a conservation officer within 10 days. For additional information about this provision please contact Manitoba Government Inquiries at 204-945-3744, 1-866-MANITOBA or mgi@gov.mb.ca.
- Another option is to utilize the services of a pest management company that has been authorized to remove beavers.

Beaver dams help to increase biodiversity, improve water quality, and recharge ground water supplies in a watershed.

WHY NOT JUST RELOCATE BEAVERS?

Relocating beavers can create a new set of problems for the beavers, other wildlife, and people:

- The relocated beaver may be attacked and seriously injured by the resident beavers.
- Relocated wildlife may carry diseases to wildlife in the release area.
- Relocating beavers late in the season may not leave them enough time to build their lodges and store enough food to survive the winter, leaving them vulnerable to death by starvation or exposure.
- The relocated beavers may cause conflicts with new, surrounding landowners.



Road culverts are frequently targeted by beavers for dam construction.

BENEFITS OF BEAVER DAMS

Beavers provide many ecological, economic and aesthetic benefits. A few of these benefits include:

- Beaver ponds significantly increase local biodiversity by creating riparian and wetland habitats that can support a variety of wildlife including invertebrates, fish, amphibians, waterfowl, and small mammals.
- Standing dead trees (snags) that remain in beaver flooded areas provide food (insects), resting places, and nesting cavities for many bird species.
- The increased presence of fish and wildlife in larger beaver pond areas results in increased hunting, fishing, and wildlife viewing opportunities for people.
- Beaver dams improve downstream water quality by trapping and storing sediment, and reduce the loss of sediment from the forest ecosystem.
- The sediment left behind when the beavers abandon an area can result in a fertile moist meadow.
- Beaver ponds increase the surface area and volume of water in a watershed and assist with the recharge of ground water supplies. Increased surface and ground water supplies improves access to water for livestock and helps with drought resilience for farm production.
- Well-maintained beaver dams can help reduce water loss through runoff, and can moderate peak flows of flooding events.

For more information on reducing the risk of conflicts with beaver and other wildlife, visit [manitoba.ca/human-wildlife](https://www.manitoba.ca/human-wildlife).

To report wildlife showing aggressive behaviour, or that appears sick, injured, or orphaned, contact a conservation officer at the local district office or call the TIP line at 1-800-782-0076.