



## Wildlife Services

Protecting People  
Protecting Agriculture  
Protecting Wildlife

Wildlife Services provides national leadership and expertise to help ranchers, farmers, wildlife managers, and others resolve conflicts between people and wildlife. Our programs and research protect U.S. agriculture and natural resources, property and infrastructure, and public health and safety.

As part of this work, we assist local communities nationwide in reducing local damage caused by beaver. Beaver are North America's largest rodent, measuring up to 4 feet in length and weighing 30 to 80 pounds.

## Factsheet

# Beaver Damage Management



American beaver (*Castor canadensis*) are one of the few animals that can alter ecosystems to meet their own needs. They use sticks, mud, and rocks to build dams across streams, forming ponds that protect them from predators. While beaver create valuable habitat and other environmental benefits, their activity can also cause safety hazards and costly damage to surrounding property, infrastructure, and resources.

Beaver inhabit all of the continental United States, except for the Florida peninsula and desert Southwest. Conservation efforts to recover beaver, and the lack of predators, has resulted in a growing population throughout many watersheds. Wildlife Services works to reduce local damage while recognizing and respecting the beaver's environmental importance.

### Damage From Dam-Building, Flooding, and Tree-Cutting

Beavers are skilled dam builders and can save time and effort by building a small dam across a culvert under a highway. Because most roads aren't designed to withstand impounding water, these conditions can lead to total road collapse.

Flooding from beaver ponds can cover large areas, causing extensive damage to property (such as residential yards, athletic fields, croplands, timberlands, and roads) and public utilities. Beaver dams can also damage natural resources—for example, by blocking fish from reaching their spawning grounds in a stream's headwaters.

Beaver cut down trees for building materials. When they remove trees from a shoreline, it can cause stream banks to erode and increase sunlight that raises water temperatures, altering the stream's ecological dynamics. Beaver also eat the bark, leaves, and twigs of many tree species. They often feed by removing the bark within easy reach all the way around large trees. This stops the movement of moisture and nutrients from roots to leaves, causing the trees to die.

*Beaver can damage single trees or acres of agricultural land and transportation infrastructure.*

*Wildlife Services biologists are experts in beaver damage management, including safe and effective dam removal.*

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*Wrapping trees with wire mesh can deter beaver.*



*Consult wildlife professionals to gauge whether a water-leveling system may be effective.*

## Management Techniques

We recommend an integrated approach, using a variety of methods and tools, to reduce or eliminate beaver damage. Exclusion, habitat management, and other nonlethal techniques are the first steps. Landowners and managers can carry out many of these methods themselves.

- Wrap valuable landscape trees and shrubs with hardware mesh (1/2-inch) or wire mesh (2- by 4-inch), extending at least 30 inches above ground level.
- Protect a road culvert by installing heavy-gauge fence structures with floors and supports large enough to discourage dam-building against the entire structure.
- Build a diversion fence upstream from a culvert to encourage beavers to build their dam where it won't impact the road.
- Replace trees and woody plants that attract beaver (such as willow and aspen) with less desirable species (such as native pines).
- Use flow devices to control water levels in beaver ponds or blocked culverts. These devices collect and move water through the dam without the beaver detecting leaks (which triggers the beaver's repair response). Many options are available in a variety of materials and constructions, from simple to complex. Wildlife professionals can advise and help gauge the potential for success, allowing beaver to remain while protecting property.

## Dam and Beaver Removal

If nonlethal techniques fail or are impractical, it may be necessary to remove the dam and beaver. Know the laws in your State and consult wildlife experts before attempting any removal work. Many States prohibit wildlife transport and relocation, but our staff can relocate beaver where allowed. State wildlife agencies also regulate the harvest and control of beavers, including legal trap types, trapping methods, and seasons. Wildlife Services follows all State regulations in managing beaver damage.

Our experts can remove beaver dams with hand tools, heavy equipment, or explosives. Wildlife Services personnel are trained and certified in the safe and effective use of explosives for dam removal. However, beaver can be persistent once they select a location. Removing the dam alone doesn't usually deter beaver—they will rebuild quickly in the same location or one nearby.

## Contact Us

Wildlife Services provides technical advice and direct assistance at the request of landowners, communities, industries, local agencies, and others. For help with beaver damage, call us at 1-866-4USDA-WS (1-866-487-3297).

To learn more about this topic and find other helpful resources, see "Beavers" in our Wildlife Damage Management Technical Series ([www.usda.gov/wildlife\\_damage\\_techseries](http://www.usda.gov/wildlife_damage_techseries)) or visit [www.aphis.usda.gov/wildlife-damage](http://www.aphis.usda.gov/wildlife-damage).