

Beavers' Important Role in New Mexico

Beavers, New Mexico's largest rodent, live for 10 to 15 years, mostly in the water. They are industrious engineers that prefer certain woody species of vegetation for food and construction of their dam lodges, which they use for shelter and food storage. This modifies streams and surrounding woodlands, often improving the health of crucial life-giving riparian (stream) areas, by creating lush pond, or wetland, habitat for a variety of aquatic and terrestrial wildlife.

Beavers are listed in New Mexico Department of Game and Fish's Comprehensive Wildlife Conservation Strategy for New Mexico (2006) as a Species of Greatest Conservation Need population in New Mexico because of their role in improving riparian habitats. The need for conservation of beavers is due to "water withdrawals, habitat loss/fragmentation, and depredation control."

Plusses in an Arid Climate or Slowing Down Water and Keeping It in One Area Longer

- Beavers create ponds by building dams. This can increase the amount of water that stays in an area, possibly raising the water table and increasing water storage.
- Beaver ponds have the ability to trap and store organic materials, nutrients, toxic materials, and sediment, thereby filtering the water and making it cleaner downstream.
- Beaver ponds often aid in the recovery of overgrazed and eroded riparian areas due to increases in surface and subsurface water, thereby increasing riparian vegetation and reducing erosion.
- The still pond water percolates into the ground, recharging aquifers.

Creating Lush Wildlife Habitat

Beaver dams create areas of still water and habitat for aquatic invertebrates, fish, amphibians and invertebrates, waterfowl, birds, and mammals such as elk and deer.

Beaver ponds also provide people with recreation and aesthetic enjoyment, where they can watch birds and other wildlife.



Skip Lisle instructs volunteers of the APNM Beaver Brigade on flow device installation.

Volunteer Opportunity

Animal Protection of New Mexico has a network of volunteers, the Beaver Brigade, trained to help with efforts to coexist with beavers. Please contact APNM's Wildlife Programs Manager at 265-2322 extension 25, or beaverinfo@apnm.org, if you would like to be a part of the Beaver Brigade.

You Can Contact Us

Providing landowners with more options to resolve conflicts with wildlife is a goal of the New Mexico Department of Game and Fish and Animal Protection of New Mexico. If you have questions about beavers or would like more information about coexisting with them, call one of the NMDGF offices or the APNM Wildlife Programs Manager.

Albuquerque..(505) 222-4700 Raton.....(575) 445-2311
Santa Fe.....(505) 476-8047 Roswell...(575) 624-6135
Las Cruces(575) 532-2100

Animal Protection of New Mexico
(505) 265-2322 • www.apnm.org

On the cover: Members of APNM's Beaver Brigade and attendees of APNM's Beavers Belong '06 Workshop install a flow device in a stream that was blocked by a beaver dam. The pond level dropped at least 1 foot within an hour of installing the flow device.



Animal Protection of New Mexico
is a nonprofit 501(c)(3) organization.
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Living with Beavers:

A Guide for Solving Beaver-Human Conflicts

Developed by
Animal Protection of New Mexico &
New Mexico Department of Game and Fish



Relocating Beavers

While it is preferable to allow beavers to remain where they have established a territory, in cases in which conflicts cannot be resolved using a flow device, there is help available to relocate beavers. The success rate for relocations varies, and a complete inventory and habitat evaluation of potential release sites must be conducted to ensure that relocation efforts would be successful. Simply placing beavers in a different riparian area does not guarantee success.

Relocation Challenges

- Live trapping is time- and skill-intensive.
- Consent should be obtained from surrounding landowners prior to potential releases on private land.
- Family units may be split up if all of the beavers are not caught.
- Animals should not be released in an area in which they cannot survive.
- Being trapped and relocated is very stressful for beavers; it greatly decreases their survival rate.
- Other beavers often reestablish areas that beavers are moved out of.



Relocation Sites

Are you a landowner interested in having beavers on your property, or are you conducting riparian restoration efforts that could incorporate beavers? If so, please contact the Wildlife Programs Manager at Animal Protection of New Mexico (APNM) or the New Mexico Department of Game and Fish (NMDGF). NMDGF will evaluate your site to determine if the location is suitable for successful beaver relocation.



Resolving Conflicts with Beavers: Learning to Coexist

Dam building can cause damage, including bank burrowing, tree cutting, and flooding, to nearby private lands, crops, and roadways. Because beaver activities can greatly improve water quality, increase the amount of water in an area, and enhance habitat for so many other species, efforts should be made, where appropriate, to find nonlethal solutions to beaver conflicts with landowners.

Nonlethal Solutions

Felled Trees: Large, aesthetically valuable trees and fruit trees can be protected, allowing beavers to use the younger trees for their habitat. Paint the base of trees to be protected with a paint-sand solution, or a cayenne pepper-vegetable oil solution or wrap trees using 4-inch wire mesh, 4-foot high, and at least 6 inches away from trunks.

Ponding/Flooding: If flooding from a beaver dam is preventing flow downstream or threatening roads, bridges, and/or culverts, simple flow devices can be built and installed to allow water to flow from ponded areas and to lower water levels. Long drainpipes are placed through beaver dams, with a semicircular strainer of welded wire fencing upstream, which prevents beavers from plugging the pipe.

For culverts that get blocked by beaver dams, fencing can be strategically placed around the culverts; beavers can dam against the fence, while water continues to flow freely. Some maintenance may be needed, but this takes less time and expense than was spent previously in unclogging culverts.

Diverting water from beavers is a major challenge, and the structures have to survive in dynamic, sometimes harsh environments. Quality materials must be used, and the device must be designed, built, and placed correctly. Success with flow devices depends upon a good understanding of beaver behavior and beaver habitat.

► When beavers are cutting down trees that you want to keep, you can easily keep them away by wrapping the trees.



◀ Before beavers built a dam downstream, what is now a large pond had been a small stream. Within a few years, this will likely become a wetland.

► A flow device installed by Skip Lisle (Beaver Deceivers Int'l; www.BeaverDeceivers.com) in an acequia at the Cleveland Mill Creek near Mora, New Mexico.



◀ A flow device with fencing installed at a culvert. Water flow had been blocked completely by a beaver dam, but now beavers cannot dam the area even if they build at the fence. (Skip Lisle, Beaver Deceivers Int'l.)

► Fencing around a culvert. These structures are so strong that they will last indefinitely, with only a small amount of maintenance—mainly clearing out silt and debris a couple of times a year, which takes about 15 minutes—much less than was required before the deceiver was installed. (Skip Lisle, Beaver Deceivers Int'l.)



Beavers are a keystone species - that is, their presence and activities are so important to an ecosystem that their removal "leads to a loss of habitat for other species and a breakdown of ecological integrity."

—Dave Foreman, Rewilding North America, 2004