

Conservation Officer Shawn Carrell assisting with capturing two beavers from a private pond. Department

For more information and additional resources on beaver coexistence, relocation, and restoration in New Mexico, please see the Department's Project Guidelines on Beaver Coexistence and Relocation:



https://wildlife.dgf.nm.gov/conservation/habitat-handbook/



A pipe-and-fence system. Beaver Solutions

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### Beaver Relocation and Removal

Department Conservation Officers responding to beaver-related complaints will provide up to three different interventions when needed to mitigate wildlife damage, including describing appropriate coexistence strategies.

When coexistence is not feasible, removal or relocation may occur as a final intervention. In this case, Department biologists first assess whether there are sites available for beaver relocation. If so, Conservation Officers will humanely capture the beavers and work with the landowners at the relocation site to coordinate a release. Viable relocation sites should have:

- Approval from neighboring landowners who could be affected by the beaver(s) being relocated to that area.
- A persistent water source and suitable riparian vegetation conditions (e.g., abundant woody and herbaceous plants for use in foraging and dam building).
- No beavers currently occupying the site or nearby areas.

Department biologists should also be consulted to determine whether a beaver relocation might impact any state- or federally listed species that may be present in the release area and if the proposed relocation poses any potential threat of pathogen (e.g., whirling disease, chytrid fungus, ranavirus, etc.) or aquatic invasive species transmission between removal and release sites.



Conservation
Officer Marcelino
Peralta assisting
in a beaver
relocation.
Department



# Beavers in New Mexico: Coexistence and Relocation



American beaver (Castor canadensis). Defenders of Wildlife

Beavers' natural instincts to build structures and dam running water have been shown to greatly benefit wildlife and landscape health, but those instincts can result in property damage, causing beavers to be seen as a nuisance. Thus, coexistence strategies, outlined here and in other New Mexico Department of Wildlife (Department) guidelines, are recommended by the Department to minimize damage to property while still allowing for the ecosystem and land-scape benefits that accompany beaver activity.

The Department encourages use of beaver coexistence strategies before exploring the possibility of relocating or removing beavers. However, beaver relocation and reintroductions may be possible as a beaver conservation strategy in watersheds where beavers do not currently occur but local resources could support them (e.g., proper food resources and water availability).

## The Benefits of Beavers:

# **Why Coexistence Matters**

- Ponds and wetlands created by beaver dams are beneficial to many species of fish, birds, mammals, reptiles, amphibians, and pollinators.
- Beaver dams can help increase the amount of surface and ground water in the landscape.



Beaver pond and lodge near Chimayo, New Mexico. J. Marchetti

- The slow release of water from beaver dams and the increased storage of water can extend the period of time when a stream holds water from seasonally to year round.
- As the soil moisture increases, so does plant growth adjacent to beaver wetlands, which can improve wildlife habitat.
- Beaver dams trap sediment, which can cause the channel bed behind the dam to rise in areas where the channel has become downcut or incised. The rise in the channel bed also raises the water table, supporting plant growth.
- Riparian corridors with beaver activity can act as a place of refuge for wildlife during wildfires and tend not to burn (or not burn as severely) compared to riparian areas not dammed by beavers.

Beaver dam in the Rio Chiquito, NM. R. Whittlesey



#### Tree Protection

To protect trees and other woody vegetation from beavers, fencing can be installed around the base of individual trees or tree trunks can be coated with a mix of latex paint and sand.



Trees coated with a mix of latex paint and sand. Colorado Department of Transportation (CDOT)

Fencing should be at least 4 feet tall with a 2x4 or 4x4 inch mesh size, leaving some space between the trunk and the fence so beavers cannot reach the tree. For coating, mix latex paint and fine sand (30-70 mil grit size) or other appropriate, non-lethal materials, and apply coating up to at least 4 feet from the tree base. While fencing can last for years, coating will need to be reapplied on a regular basis.

Protective fencing around a tree. CDO1



# **Infrastructure Protection**

Installing culvert fencing is effective in preventing beavers from blocking culvert openings. Use heavy gauge fencing (e.g., 4 to 6 gauge) with a large mesh size (6x6 or 6x8 inch) to allow for the passage of fish and aquatic wildlife.

Design culverts with a large opening. Beavers are less likely to dam culverts with a large inlet opening (e.g., bottomless arch culverts) compared to culverts with small inlet openings (e.g., pipe culverts).



Culvert protective fencing. The Beaver Institute (TBI)

Pipe-and-fence systems, where culvert fencing is used in combination with a pond-leveler (also called flexible pond-levelers or water-level control devices), may be required in situations where culvert fencing is blocked by beaver damming or flood debris, thus restricting water flow into the culvert and resulting in ponding upstream.

Installation of pond-levelers and pipe-and-fence systems at culverts or through beaver dams can be effective in preventing existing beaver dams from triggering flooding of adjacent property and roads or restricting water flow.

A pond-leveler being floated into place prior to submersion. TBI



The Department may be able to provide fencing and pond-leveler materials to private landowners with qualifying projects. Landowners interested in receiving materials should contact a member of the Department's Private Land Program staff to learn more about the program and the qualification criteria.