



The newsletter for owners of land protected by a Conservation Restriction (CR) held by the Department of Conservation and Recreation (DCR)



Department of Conservation  
and Recreation

Winter 2025-26

# Conservation Connections

## DCR Land Protection Program News

Dear Friends,

We hope you are enjoying a beautiful winter! For some winter reading, we have articles about road maintenance (pg. 2), snags (below and pg. 4), and grapevines (pg. 3).

Since the last newsletter, we have acquired 8 more Conservation Restrictions, totaling around 640 acres. We worked in cooperation with a variety of private landowners as well as the Native Land Conservancy, the Massachusetts Audubon Society, and the Trustees of Reservations. These new CRs protect land in Ashburnham, Freetown, Harwich, Lynn, Northborough, Orange, Tolland, and Warwick. They protect diverse natural areas and provide recreation opportunities for the public.

Nic and Elise, our seasonal monitors, completed almost a year of work with the CR Stewardship Program and enjoyed getting to meet many of you on your properties. Unfortunately, the winter seasonal positions were not funded this year but we are happy to report that Elise will be returning to monitor CRs in eastern MA for the summer season.

We hope to see you out on your land soon!

~ CR Stewardship Program Staff

### INSIDE THIS ISSUE

|                            |       |
|----------------------------|-------|
| LPP news.....              | Pg. 1 |
| Value of snags.....        | Pg. 1 |
| Woods road management..... | Pg. 2 |
| Wild grape.....            | Pg. 3 |

### CONTACT

Caroline Raisler  
CR Stewardship Coordinator  
Cell: 857-274-7448  
caroline.e.raisler@mass.gov

## The Ecological Value of Snags

When you see a dead or dying tree you may be tempted to remove the “unsightly offender,” but they are actually an important component of a healthy forest ecosystem. Upright dead trees are called snags, and at no stage during decomposition does a snag go unused. Fungi are the first organisms to take advantage of the dead wood and start the process of decomposition. The fungi on a snag softens the rigid structure of the wood, which makes it easier for insects to enter the softened wood. Different types of insects use the dead wood in different ways. For example, some use the wood as a food source, while others lay their eggs in it.

Many birds rely on insects as a food source and are attracted to the abundance of insects a snag can host. Strong bills, like that of a pileated woodpecker, can bore into a snag to search for food.

Cont. on page 4

Bluebirds in snag cavity



# Woods Road Best Management Practices

A woods road is a familiar sight in many MA forests. These crisscrossing unpaved ways are one piece of a larger puzzle that helps tell the story of a forest. The origin of a woods road often depends on the historical use of the land. Many of these woods roads were created as legal roads for local or distance travel, while others were created for use on the property. Existing woods roads are often used for property management, including forestry and farming. The continued useability of these roads is dependent on the frequency and quality of the maintenance of the road.

The main factors that deteriorate woods roads are water and vehicle use. Because woods roads are unpaved, and depending on their slope and location, fast moving rainwater can quickly create potholes, ruts, and erosion. These issues can be compounded by overuse from vehicles, which can deteriorate the road even without additional water runoff. An unmaintained woods road can negatively impact the water quality of nearby streams and the health of the surrounding forest. Properly maintaining woods roads is the key to preserving their functionality and the health of the surrounding environment.



## Road Surface

The shape, design and quality of the road surface are key considerations for maintaining a woods road and preventing erosion and deterioration. The three main road surface maintenance techniques include crowning, broad-based dips, and grade breaks.

- **Crown**

The crown, or the slight up-slope to the center of the road from the shoulders of the road, can help move water off the road and prevent standing water. A road crown with a  $\frac{1}{2}$  to  $\frac{3}{4}$  inch slope for every foot of road away from the center will direct water off the road surface and prevent it from pooling or flowing down the roadway.

- **Broad-based Dips**

Another effective tool is to introduce broad-based dips into the roadway. Broad-based dips are minor dips in the road created by grading down a small section of road and raising the sections before and after it. The dip should take the surface flow and disperse runoff away from the road surface by acting like a channel for water to flow across the road. It is important to note that broad-based dips are not steep or designed like ditches, just a slight grade angled down and back up with a 20-40% angle across the road to direct water off the surface.

- **Raising the Road Profile**

Without proper maintenance, a road will start to entrench (sink due to erosion) and become lower than the surrounding terrain on either side. Entrenched roads can collect drainage and sediment from the surrounding area which can lead to increased erosion of the road and ditches. In these cases, the road profile can be raised to restore a more natural drainage pattern. Adding new road material to the existing roadway and stabilizing the shoulders of the road is a long-term solution, restoring natural flow over and off the roadway and into ditches.

- **Other Techniques**

There are a variety of other road surface options that can be implemented depending on the characteristics of the road. Out-slopes are areas where the road is higher on one side than another. This drains water off the downhill side of a road and is best used in areas that are not too steep and that would benefit from draining excess runoff before it reaches an environmentally sensitive area. Alternatively, an inslope can be created where the highest point of the road is on the downhill side. This drains water to the uphill side of the road into a ditch or drainage system and can be used when a road has a steep drop on the downhill side. These and other techniques are specific to certain characteristics of a road and cannot always be implemented.

## Ditch Maintenance

Maintaining where the water flows from the roadway is also important. The quality and condition of a roadside drainage ditch is determined by the quality, condition and maintenance of the road surface, so the surface should be addressed first. The first thing to do is to observe the drainage ditches along a stretch of road and evaluate the potential issues. Is the ditch too deep and eroding the sides of road? Is it filling with sediments or materials? Is there a berm along the side of the road? Each of these issues requires different maintenance practices to be fixed.

- **Design**

A low maintenance drainage ditch should be a wide and shallow “U” shape with gentle slopes on either side and vegetated whenever possible. Often over time and with incorrect maintenance, ditches become deep “V”s that are ineffective at slowing water, erode the shoulders and sides of the road, and can pose safety issues for vehicles.

- **Cleaning and Grading**

Cleaning and grading ditches should be done as typical maintenance, taking care not to dig the ditch into a “V” shape. Maintenance can also be done with leaf blowers, vacuums or by hand to remove materials that have built up over time. Cleaning and regrading alternating sections will prevent the ditch from becoming a pathway for water and sediment to flow too quickly and into waterways.

- **Berms**

A berm, or mound of soil that forms parallel to the roadway on the downslope side, can form on roads over time and prevent water from draining off the roadway or into a ditch. Berms can be removed and the area regraded to allow water to continue to flow into drainage ditches.

These maintenance techniques are some of the foundations of woods road maintenance, but there are a variety of management practices that can be used to keep your woods road in good shape and prevent sediment from flowing into local streams and wetlands. Check out the links below for more information regarding the best management practices for woods road maintenance. As always, please review the terms of your Conservation Restriction regarding woods roads and check in with CR Stewardship staff if you have any questions.

### Helpful Links:

[Massachusetts Forestry BMP Manual](#)  
[USDA Forest Service Gravel and Dirt Road Field Guide](#)  
[Massachusetts Unpaved Roads Manual](#)  
[Massachusetts Stream Crossing Standards](#)  
[Massachusetts Wetlands Protection Act and Regulations](#)

## Wild Grape and Nesting Birds

Bark strips from wild grape are used by many bird species in the north-east to build their nests; some species of birds use the bark as their primary nest material. The peeling, flexible and strong bark strips are the perfect material for creating a sturdy nest, especially for a hanging nest like the Baltimore Oriole's. Even a tiny patch of wild grape on a property will likely provide a very valuable resource for birds.

Photo by desertdutchman



## Snags cont...

Woodpeckers nest in cavities that they create in snags and dying trees; these cavities are then used extensively by "secondary cavity users," who cannot create the cavities themselves, for shelter, breeding and food storage. Examples of secondary cavity nesters include wood ducks, bluebirds and chickadees. Cavities are well insulated and allow inhabitants to stay cool in the summer and warm in the winter. Thirty-five species of birds in the Northeast rely on snags to build their nests and roost. Snags also provide great perches, particularly for raptors such as the red-tailed hawk.

Birds are not the only ones to use the cavities. Mammals and reptiles also take advantage of snags for food, shelter and reproduction. The peeling bark of some snags is a feature used by bats that will roost behind it. You might even find bigger mammals like deer snacking on the lichen growing on the outside of snags.

Depending on the type of tree and environmental factors, it can take years or decades for snags to fully decompose, making them an important contributor to the overall carbon storage capacity of a forest. Eventually essential nutrients are put back into the soil through decomposition which fertilizes the area and helps new tree saplings grow. Then the cycle can begin anew!

If you have a dead or dying tree on your property, consider leaving it for the ecological value it provides. If you're unsure about the safety of a tree, consult with an arborist. If you do end up taking down a dead tree, consider leaving it as a log since downed wood also provides exceptional ecological value and habitat!

For more information on snags visit this [Snags for Wildlife website](#).



Photo by Bill Damon

### DEPARTMENT OF CONSERVATION AND RECREATION

Land Protection Program  
10 Park Plaza, Suite 6620  
Boston, MA 02116



Conservation Connections is produced semi-annually for owners of land protected by a DCR-held Conservation Restriction.

Governor: Maura T. Healey  
Lt. Governor: Kimberley Driscoll  
EOEEA Secretary: Rebecca L. Tepper  
DCR Commissioner: Nicole LaChapelle  
LPP Director: Jennifer Howard  
CR Stewardship Coordinator: Caroline Raisler  
CR Stewardship Planner and newsletter editor:  
Sasha Auer

