



Maintain Forest Roads to Prevent Erosion and Protect Water

The dirt and gravel roads that run through your forest play an important role in the management of your woodlands.

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Landowners should inspect their forest road system at regular intervals to detect problems and schedule repairs. Photo: George Hurd, Penn State University

A well-maintained road provides safe access for fire control, recreation, timber harvesting, and other forest management activities. However, poorly constructed and maintained access roads often cause severe soil erosion and sedimentation into streams. A well-maintained road provides safe access for fire control, recreation, timber

harvesting, and other forest management activities. However, poorly constructed and maintained access roads often cause severe soil erosion and sedimentation into streams. As a woodland owner, you are responsible for ensuring that your roads are properly constructed and maintained. Woodland owners who inspect and correct minor road maintenance problems early

can save money, protect water quality and ensure the continued use of their valuable forest road system.

According to the North Carolina Forest Service publication, *A Guide For Forest Access Road Construction and Maintenance in the Southern Appalachian Mountains*, you should inspect your forest road system at regular intervals, especially after heavy rainfall, to detect problems and schedule repairs. You should examine the roadbed, the road surface, cut banks, fill slopes, stream crossings, and surface drainage structures. You should get out and walk the road and not just rely upon a "drive by" inspection in a vehicle, All Terrain Vehicle, or golf cart.

You should check stream crossings to be sure that water draining from road surfaces and ditches does not directly enter the stream. Water should be diverted into stable, vegetated buffer areas that can filter sediments. Debris should be cleared from culverts, ditches, dips, and other drainage structures to prevent clogging that can lead to washouts. The debris should be placed where it cannot be washed back into these structures or into open water.

Road surfaces should be shaped periodically to maintain proper surface drainage. Ruts and holes should be filled in with gravel or compacted fill as soon as possible to reduce erosion potential. Berms along the edge of the road should be removed if they will trap water on the road. You should try and keep traffic to a minimum during wet periods and spring thaw to reduce maintenance needs.

The North Carolina Forest Service publication, *A Guide For Forest Access Road Construction and Maintenance in the Southern Appalachian Mountains*, is available free on-line at: www.ncforestsERVICE.gov/publications/WQ0214.pdf. On the rear cover of this publication there is a "Forest Road Maintenance Inspection Checklist" that you can copy and take with you when you do your own road inspections. By taking prompt actions to resolve any problems you observe during an inspection, you may be able to correct these issues early and save money. Regular road maintenance activities help to ensure minimal disturbance to forest productivity and water quality, along with fish and wildlife habitats.