CENTRAL HARDWOOD NOTES

Logging Roads And Log Decks For Wildlife Habitat

Roads are essential to manage and use forest land. They can improve wildlife habitat and provide recreational opportunities. But roads are often controversial because they have so many different users-loggers, hikers, hunters, and off-road-vehicle drivers. Benefits to wildlife can be maximized and user conflicts minimized by careful planning and design. Decisions about gates, signs, and seasonal access should be made during the planning stage. Careful layout will ensure that sensitive habitats are protected and permanent improvements such as ponds and clearings are connected.

This Note covers the effects of log-truck and skidder roads on wildlife habitat. Note 11.03 Forest *Access* Roads, gives details about road design and construction. Note 9.11 Wildlife Openings, explains how to include roads in a system of wildlife clearings.

Logging Roads and Wildlife Habitat

Two rules should be followed when using roads to improve wildlife habitat. First, manage roads for herbaceous forage; and second, avoid sensitive habitats.

Most large tracts of central hardwoods can be improved for wildlife by developing permanent openings to provide forage. Truck roads and log landings are ideal for this purpose, and should be treated as wildlife openings. Manage truck roads and log decks for grass and legume crops as described in Note 9.11 *Wildlife Openings.*

In addition to providing forage, roads can add diversity in forest "structure" and plant species. Light entering the forest from the road stimulates the development of shrubs and understory plants along the forest edge. This effect can be enhanced by "daylighting" or felling trees for about a tree length on one or both sides of the road. Daylighted roads provide herbaceous cover, dense brush, and forest in close proximity. The rich mixture of plant species is attractive to many wildlife species.

Planting forage crops on skidder roads prevents erosion and enhances habitat. Skidder roads are not usually maintained between timber harvests but the effects of seeding will last for several years. Seeded skidder roads in regenerating or recently logged stands provide valuable travel routes for man and animals.

Sensitive habitats need to be protected during road building. Sensitive habitats are generally unusual habitats. They might include wetlands, stream banks, heron rookeries, bat caves, rare plant communities, or an exceptional stand of mast-producing trees. Careful field work during the design of road systems is the best insurance that sensitive habitats are identified and provided with adequate buffer zones.

Finally, you need to consider when and how to permit access. Even when roads improve wildlife habitat, they can have a negative effect on some wildlife populations by making them accessible to people. For example, in parts of the southeast, wild turkey populations are inversely related to the length of road per unit area. Roads actually provide brood rearing habitat, but they lead to increased poaching and harvest.

Access policy depends on wildlife management objectives and local conditions. Roads managed as wildlife openings are often best left for foot travel only. That policy protects the forage crops from damage by vehicles, and minimizes disturbance to wildlife. It also permits reasonable access if roads are no more than one mile apart. Even where deer harvest needs to be encouraged roads may be closed during spring and summer to protect cover crops and reduce disturbance during nesting and brood rearing seasons.

Roads and Pedestrians

Log-truck and skidder roads can be used to distribute foot travelers through the forest. In West Virginia, parking areas and forest roads had more impact on hunter distribution than habitat or game abundance. Roads can also be used to educate the public, highlight management activities, and provide a variety of recreational experiences.

Log-truck and skidder roads generally make good foot trails because they are infrequently used by vehicles. In fact, we usually want to keep vehicles off these roads except during management activities. Roads that are managed for wildlife forage provide opportunities to see wildlife and the landscape. Many “control points” used to establish roads-log landings, rock ledges, knolls, ponds, and streams-are attractive places to see wildlife, unusual plants, and land forms.

Consider the road system as a way of distributing hunters and hikers. Encourage use by providing parking, erecting signs, and maintaining forage crops. Appropriate signs can highlight natural features and effective management practices.

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