



CENTRAL HARDWOOD NOTES

Site Preparation For Wildlife

Site preparation—whether for timber and/or wildlife objectives—can influence the quality of wildlife habitat on the site and surrounding forest for the entire rotation period of the regenerated stand. The site preparation you select will help determine the species and numbers of wildlife that use the stand as the stand progresses from regeneration through maturity.

A wide spectrum of wildlife will benefit from site preparation methods that increase production of soft mast and browse immediately following stand harvest. Wildlife adapted to a mature forest will be favored by a stand dominated by species producing hard mast, particularly oaks.

Soft Mast

Wild grape, flowering dogwood, blackgum, blackberries, blueberries, and huckleberries, provide food for ruffed grouse, many song birds, squirrels, and small mammals.

Wild grape.—Retain clusters of wild grape at a ratio of 1/4-acre of grapevines per 10 acres of forest. On dry sites grapevines rarely interfere with reforestation, and need no treatment during site preparation. On high quality sites, the excess grapevines should be treated before regeneration, leaving no more than five vines per acre, plus the 1/4-acre clusters. For more information see Note 6.13 *Wild Grapevine Management*.

Dogwood, blackgum.—Preserve individual and clumps of seed-producing dogwoods and blackgum, particularly along edges of the regenerated stand. Dogwood should survive and produce seed throughout the early part of the rotation; blackgum may persist for the entire rotation.

Berry-producing shrubs.—These species become more productive in full sunlight following harvests until they are shaded heavily by the new forest. Avoid general application of herbicides harmful to these species.

Browse

Many hardwoods provide browse for white-tailed deer, the principal large herbivore in the central hardwood forest. No specific management is recommended for producing browse, but site treatments that encourage sprouting, such as burning and root shearing, will coincidentally improve the quality and increase the quantity of browse.



White-tailed deer browsing (Jay Hutchinson).

Japanese honeysuckle is an important food for white-tailed deer and ruffed grouse in southern portions of the central hardwood region. Avoid herbiciding honeysuckle if consistent with timber objectives. Honeysuckle rarely interferes with stand regeneration on poorer sites, particularly where it remains partially shaded on the edges of harvest sites. On good sites it may be a major problem. Burning will retard vine growth 1 or 2 growing seasons.

Hard Mast

Providing hard mast is a highly desirable long term objective, achieved by regenerating a forest dominated by oaks. White-tailed deer, black bears, wild turkey, eastern gray and eastern fox squirrel, and many species of small mammals rely heavily upon acorns for their winter food supply. Hickories are also important species that should be encouraged in new stands.

On drier sites, oaks can usually be regenerated after harvest by a variety of methods ranging from clearcutting to group selection if adequate advanced oak regeneration exists before harvest (see Note 2.05 *Silvicultural Systems for Oak-Hickory and Oak-Pine*).

On better sites (SI 80), however, competition from species less desirable for wildlife such as red maple, yellow-poplar, sweet gum, and striped maples may require specific site treatments before and/or after harvest to encourage oak. If there is adequate oak in the understory on good sites it must be encouraged to reach sapling size before the final harvest. Treatments should start 7 to 10 years before harvest. Herbicide undesirable understory and mid-story trees, opening the stand moderately to stimulate growth of existing oak seedlings. Oak saplings 8 to 10 feet tall compete favorably with pioneer species when released by harvest. Getting oak into the new stand without adequate advance reproduction requires special silvicultural treatment (see Note 2.05 *Silvicultural Systems for Oak-Hickory and Oak-Pine*, and Note 3.06 *Seeding and Planting Oak*).

Miscellaneous

Snags provide homes, perches, and feeding bases for cavity dwellers, raptors, woodpeckers, and songbirds. Preserve at least two snags per acre when possible, selecting the largest snags available.

Seed log landings, skid trails, and logging roads with herbaceous plants palatable to wildlife. Red, ladino, and white clovers provide green, leafy food during winter and early spring for ruffed grouse and wild turkey. Orchard grass is favored for grazing, and also provides habitat for insects eaten by turkey poults and ruffed grouse chicks in summer (see Note 9.08 Logging Roads and Log *Decks for Wildlife Habitat*, and Note 9.11 Wildlife Openings).

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