

## **Managing Oak Forests for Ruffed Grouse**

Oak forests hold much of value for the ruffed grouse and many other species of wildlife. This is especially true in the eastern part of the ruffed grouse's range south of the Great Lakes region where aspen is uncommon or absent. Oak acorns represent an energy-rich source of food for many species of wildlife, including deer, turkeys and grouse. Young stands of oak can provide dense protective cover that also is necessary for the well-being of a variety of wildlife.

Young, dense oak stands provide critical habitat for ruffed grouse, yellow-breasted chats, blue-winged warblers, eastern towhees and many other songbirds. Unfortunately, a number of these songbirds, as well as the ruffed grouse, are experiencing population declines throughout eastern North America as maturing oak forests make dense, young forests uncommon.

Without management, these mature oak forests likely will develop into forests comprised primarily of species less valuable for grouse.

Because oak requires substantial sunlight to reproduce and grow, active forest management is required to maintain oak as a component of future forests. In the process, important habitat is created for wildlife. Because oak forests generally do not support as many grouse as aspen forests, even under the best of habitat conditions, it is vitally important to properly manage oak forests to maintain grouse populations.

Private land owners interested in managing oaks for ruffed grouse and other wildlife should carefully consider pre-harvest conditions before proceeding. Advanced regeneration, or the number of young oaks in the understory of a mature oak stand, is an important pre-harvest consideration when managing oak. Poor regeneration may lead to a relatively open, patchy stand that will have limited value for grouse and other wildlife, especially where other tree species have replaced the oak.

Young oaks need plenty of light to grow rapidly and out-compete other species. Clearcutting, therefore, can be an effective regeneration method.

Before deciding on the best method for managing your oaks, however, it may be wise to ask a professional forester to assess the degree of advanced regeneration in the stand. If there is good reproduction, clearcutting likely will provide the best results. If regeneration is poor or absent, it may be beneficial to use another management method, such as a shelterwood cut. This method involves the removal of a stand in a series of partial cuttings. By maintaining part of the overstory, oak seedlings may be allowed to build up in the understory before a final harvest is made.

Prescribed fire may be used in the meantime to reduce competition from shade-tolerant species in the understory and to increase survival of oak reproduction. This too requires careful consideration, and professional advice is essential.

Ruffed grouse benefit most from patches of young trees (5 to 15 years old) from 5 to 40 acres in size. High stem densities in these patches will protect grouse from avian predators while allowing good visibility and mobility at ground level.

A hardwood cut adjacent to an old field and/or riparian area will provide access to good brood cover and fruit-producing shrubs such as blackberry, dogwood, viburnum, elderberry and grape.

If your oak management includes cutting the majority of the mature oaks in a given area, it may be desirable to leave a group of mature oaks adjacent to a cut to provide a supply of acorns.

Oak forests support a wide variety of wildlife in the eastern and central United States. Regeneration of oaks is critical to the work of maintaining the oak component of hardwood forests and providing high-quality habitat for ruffed grouse and other wildlife species. Landowners interested in supporting a variety of wildlife should maintain the oak component of their hardwood forests through active management.

by Rick Horton