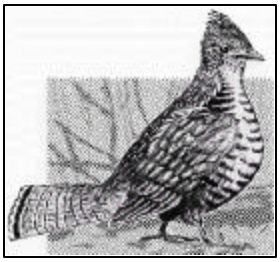
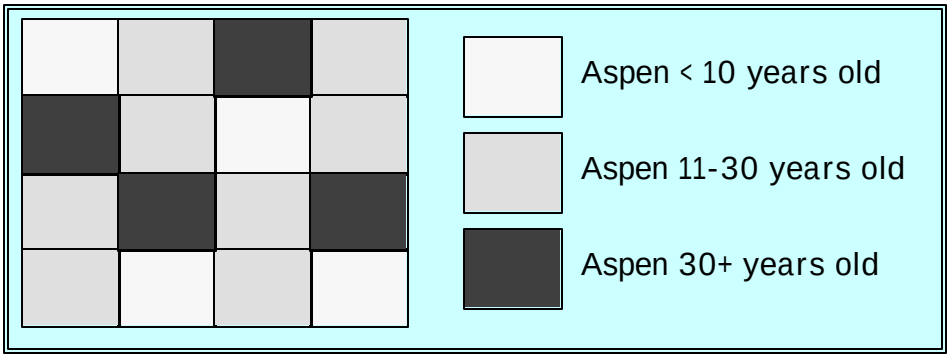


Improving Habitat for Ruffed Grouse on Private Woodlands

1) Ruffed grouse, sometimes called partridge, prefer woodlands that have small areas of approximately 2.5 acres of extremely dense young, woody growth immediately adjacent to approximately 2.5 acres of trees 40 years old or older. The dense young stand provides habitat for young grouse (brood cover) and the older trees provide winter food. Aspen is best suited for ruffed grouse.

a) If you have aspen, clear cut the aspen in groups as close to 2.5 acres in size as possible to evenly create a pattern where groups of trees of different ages are well intermingled. See the diagram below for a classic example.

Cutting Pattern in a Sample 40-acre Aspen Stand



2) If your woodland contains only scattered aspen trees, increase the amount of aspen in your woodlot by the following procedure:

a) Locate all the aspen trees in your woodland.

b) During the summer time, if possible, cut down all the trees around the aspen you have located that are within 60-70 feet of the aspen tree. In addition clearcut an area to the south of this circle equal in width to ½ of height of the trees to the south of this circle. Then in the winter time cut the aspen in the center of this circle. In the spring thousands of aspen suckers will grow from the old root system to create a stand of aspen trees. (NOTE: start with the oldest aspen trees that are still healthy). Continue this process over the years so as to create stands of aspen of varying ages throughout your woodlot.

3) In woodlots that contain no aspen the only way to encourage grouse and woodcock is to create dense thickets of young trees and shrubs within the woodlot. These thickets can be created by making small clearcuts no larger than 2.5 acres in the interior of the woods,

especially where the following woody plants are already growing; apples, crabapples, hawthorne, wild plums, dogwoods, viburnum, buffaloberry, raspberry, blackberry, hazelnut, sumac, grape, willow, cherry, ironwood, blue-beech (musclewood), and serviceberry (Juneberry). Wet areas are often excellent sites to produce these dense thickets of vegetation. If you wish to add aspen to your stand, first be certain that aspen will do well on your site and then plant aspen seedlings or transplant aspen that have been dug up from another location. Remember that aspen must have full open sunlight to grow and small numbers of planted aspen must often be protected from mice, rabbits and deer by encircling them with tree guards. As the aspen grows, increasingly longer tree guards must be used until the aspen reaches a height of 6 feet. This tree guard should then be left in place until the aspen is at least 3 inches in diameter. Whenever a clearcut is made for grouse, if at all possible, leave 1 log per acre lying on the ground. If at all possible, choose a tree that is at least 10 inches in diameter and cut it off at least 3 feet from the ground so as to leave a stump at least 3 foot high. As the young trees grow up over this log, a drumming site for male grouse will develop.

4) If your woodland contains aspen and you have managed that aspen according to the previous guidelines, then there is no need to do any additional management. The following recommendations, however, may help, but may also be ineffective or perhaps even detrimental to grouse populations. If your woodlot contains no aspen then the following recommendation will at best be beneficial to grouse and at worst be ineffective. However, they will be beneficial to woodcock and a variety of other wildlife.

5) Plant or encourage fruit producing shrubs growing on woodland edges or in woodland openings.

a) Plant a variety of species so that fruit is available from late spring to late winter: crabapples, hawthornes, dogwoods, sumac, viburnums, buffaloberry, wild grape, bittersweet, bush honeysuckles, autumn olive, etc.

b) Shrubs will probably need mouse, rabbit and deer guards in order to quickly grow beyond vulnerable size (more than 5 ft. tall and 3 inches in diameter).

-mouse guard ¼ inch mesh welded wire, sheet metal, or synthetic material 12 inches high encircling trees

-deer and rabbit guards – 1 inch mesh woven wire, or synthetic material 3-4 high encircling trees

c) To encourage plants already growing, cut away competing woody plants, thin and prune if necessary, and fertilize.

6) Manage Open Areas: Mow and fertilize open grassy areas to produce nutritious and palatable grasses, clovers and other forbs in spring and summer (check with County MSU Extension Office for most appropriate mowing schedules and fertilizer application rates). In general, mow at least once a year, preferably 3 times (late spring, summer, early fall) and fertilize with 200-300 lbs./acre of 6-24-24 or 0-20-20 fertilizer in late spring and late fall. If possible, mow 1/3 of the area at a time. Sewer sludge or manure may also be applied.

7) Plant Nutritious Perennial Grasses and Legumes

a) Frost seed wild white or Dutch white clover and red clover to bare sunny spots (broadcast inoculated seed when the last few frosts leave surface of soil). Check with the County MSU Extension Office to determine if lime is required.

b) Consider planting Imperial Whitetail Clover. Unfortunately, it is more expensive than wild or Dutch white clover, will not grow on dry, wet, or poor soils, and requires extensive seedbed preparation. However, the high protein content is very beneficial and attractive to grouse. If you chose to plant this variety, remember that you must herbicide, plow, disc, lime and fertilize, and seed drill or culti-pac. The expense is probably not justified for deer given the alternatives, but may be justified for grouse.

c) Whenever possible, consider establishing native plants. However, seed is often unavailable and attractiveness to grouse and woodcock should be explored.

d) Plant openings, dirt roads, and trails with a nutritious grass or grass-legume mixture.

-Use shade tolerant grasses (e.g. creeping red fescue) in shady areas (narrow trails, east-west dirt roads)
-White clover- perennial rye grass mixtures are best in larger openings because deer are less likely to destroy them before they become established. Other mixtures (alfalfa, buckwheat, red clover, brome grass, orchard grasses, fescue) are desirable but may not survive heavy grazing by deer during the first year unless planted on large areas (20 acres or greater). Check with County MSU Extension Office for instructions on planting white clover-rye grass mixtures in your area.
-Again, consider using native plant seed, where it is available.

d) Maintain planting with liming, mowing, and fertilizing as necessary (see #6).

MICHIGAN STATE UNIVERSITY EXTENSION Prepared by glenn dudderar, michigan state university wildlife extension