

Mixed pine-hardwood types generally provide good deer habitat and are important for mast, fruit and browse production. These stands should be thinned frequently to renew understory forage and hasten early mast yields. Where possible, retain valuable hardwood trees for mast production. A minimum stocking equivalent of 20 square feet basal area per acre of mast species is suggested. A good balance between the white and red oak groups is desired to provide consistent mast production.

Bottomland hardwood forests containing a mixture of oaks and other fruit-producing trees and shrubs provides good deer habitat. These areas normally have fertile soils and provide high quality browse; however, they are often subject to flooding which may reduce available food supplies. Mast production in this habitat is generally good but as in the mixed pine-hardwood type, both white and red oak groups should be retained.

Stand sizes of 40 to 100 acres in pine, and between 10 and 40 acres in mixed pine-hardwood and bottomland hardwoods are recommended. Intermingle forest types and age classes where possible to provide maximum diversity and edge. Regeneration areas should be well distributed and spaced at ¼ to 1½ mile intervals. Methods of tree harvest cutting (seed tree, clearcut or shelterwood) is not an important factor in deer management. Where clearcutting is practiced, cuts should be as small as economically feasible. Distributing small 5 to 10 acre clearcuts throughout an area improves habitat for deer. Regenerating stands in linear, irregular shapes benefits deer by maximizing edge.

Short rotations for pulpwood provide browse for deer more frequently than do long rotations. Hard mast, however, is practically eliminated under short rotations since mast production does not begin until about age 25. Yields increase annually until peak production occurs at about age 50-60 years. The decision to regenerate or leave individual stands should be based on the greatest need for forage or mast.

A regeneration or intermediate cut is needed at least every 6 to 10 years. On better sites, forage production peaks about 2 to 3 years after regeneration and then declines steadily for the next 5 or 6 years. At about 8 to 10 years the canopy closes and forage production declines even further. Until thinning at 15-25 years, forage production is at its lowest. Any subsequent intermediate cutting temporarily boosts forage production.

Conversion of extensive mixed-hardwood or pine-hardwood stands to pine is detrimental to deer. Discourage conversion of bottomland oak types to non-mast producing species. Encourage intermingling of mast-rich forest types of bottomland hardwoods along creeks and rivers. Prior to regeneration, areas providing critical habitat, such as grape or honeysuckle thickets, soft or hard mast, live oak clumps or stringers of bottomland hardwoods should be identified and protected during timber harvest. Also, natural openings, savannahs, fields and old house sites should be excluded from planting to provide natural foods and cover.

Favor site preparation methods which concentrate or limit the amount of debris on the ground. If possible, protect root crowns of valuable wildlife understory plants such as dogwood, viburnum, crabapple, plums, grape and chinkapin. Wide seedling spacing delays canopy closure. Spacing of 300 to 450 pine seedlings per acre allows a greater variety and quantity of understory food supplies to exist over a long period of time. Where practical, planting of desirable mast-producing hardwood seedlings on suitable sites is certainly a valuable practice.

Prescribed Burning

Prescribed fire is a practical and economical tool in deer management. Prescribed burning in pine stands benefits deer by increasing browse yields and improving the palatability and nutrition of understory plants. Care should be used with fire in hardwoods because trees will eventually be killed or their fruit production severely damaged. Exclude stream bottoms, transition and critical areas supporting mast-producing hardwoods and associated species.

Initial burns in pine stands should be made as early in the rotation as possible. Burning rotations of 2 to 3 years, depending on the site, provide maximum benefit to deer. During the first few years the entire area should be burned annually; thereafter, burning of small blocks in alternate years provides a continuous supply of lush, succulent growth. Burning should be conducted during late winter in February or early March.

Wildlife Plantings

Deer readily utilize plants growing in natural or developed forest openings. These openings can compensate for yearly and seasonal fluctuations in food supplies, especially mast. They are less important, however, if the habitat is enhanced through coordinated and sustained timber cutting for deer. Openings are also an aid to hunting and can be beneficial in obtaining adequate deer harvests.

Retain natural openings in timber stands. Forest openings of 1 to 3 acres should be developed in pine or mixed pine-hardwood types. These openings should be irregularly shaped, preferably linear, and strategically located throughout an area to provide maximum diversity and edge. Openings should not be developed adjacent to major roads or other access routes that are easily viewed to discourage poaching. Unused logging roads, skid roads and trails can be "opened up" and seeded to provide additional supplemental food.

A diversity in the management of wildlife openings is desirable. Rotation of the following alternatives should be considered.

1. Allow some openings to grow up in native vegetation and maintain these in an early stage of plant succession by annual mowing.
2. Plant some openings in annual crops such as corn, soybeans, cowpeas or one of the grain sorghums.
3. Plant some openings in wheat, oats or rye for winter grazing.
4. Plant some openings in perennials such as white clover and maintain these by annual late summer mowing and periodic fertilization.

Deer Herd Management

Harvest regulation is an essential part of sound management for white-tailed deer. Regulating the harvest is necessary to keep deer populations in relative balance with their food supply. Where food is abundant and deer are healthy, a sustained but regulated harvest maintains healthy conditions and prevents overpopulation. In areas where deer are approaching overpopulation and food supplies are becoming critical, herd reduction is necessary. Heavy deer harvests become important to prevent further damage to the habitat and a decline in deer quality.

Regulated either-sex harvests are necessary for proper herd management. Hunting bucks alone cannot control a growing population. Hunting deer of both sexes will not exterminate them any more than it will quail, squirrels or other game species, provided the harvest is regulated. When few deer are lost to causes other than legal hunting, a reasonable harvest of both bucks and does assures a healthy population for the future.

Many people believe that deer populations contain a high proportion of old barren does and that this fact can be used as a justification for harvesting antlerless deer. Antlerless deer harvests can be justified for a number of reasons, but this is not one of them. Does that have never produced fawns or