

Managing Your Forest Acreage For Both Timber and Wildlife

Forests constantly change-slowly when left to nature, faster when disturbed by man. People, storms, wildfire or just the passage of time can cause changes in the kinds, numbers, sizes, age and conditions of trees.

Forest animals have specific requirements for food, cover, water, space and other needs. (Table 1 gives examples.) No single forest condition favors all kinds of wildlife. As forest changes, its suitability for each kinds of animal also changes. Wise forest management takes this into account.

Common forestry practices have relatively predictable effects on wildlife. Some of these are summarized in Table 3.

Local conditions must be carefully considered in managing forest wildlife. The size and proportion of every forest to be managed will often determine the eventual distribution of animal residents. For example, a small clear-cut in large forest will merely displace squirrels and birds to similar habitat nearby. Timing can be important, too, because nesting and feeding activities vary with the season.

Change is always a factor. Many animals actually benefit from harvest cuts because lush under story vegetation results. Later, as a new over story develops and ground plants re gradually shaded out, many songbirds, turkey, quail, deer, hawks, butterflies and other wildlife that moved in after cutting are slowly replaced buy different species. To maintain these animals in a particular forest, there must be continual management. Usually it is best to have several forest sands in different stages of growth to provide diverse food and cover. This is quite often the case when adjoining landowners have agreed to put their land together under one umbrella plan for management.

Cooperative agreements among group of landowners to collectively manage timber and wildlife resources is becoming a reality in a number of Southern states, including our own. This cooperative approach enables better management and marketability of timber as well as better game management due to having larger units to work with.

Sometime the income from hunting leases can be enough to provide a substantial portion of the landowners share for having timberland and/or wildlife management practices installed on their property.

TABLE 1. FOREST WILDLIFE NEED

SPECIES	FOOD	WATER*	COVER	REPRODUCTIVE SITE	REMARKS
Bluebird	Insects, berries	bound	open grassland; old fields, clearcuts	cavity, 3'-7' above ground	artificial nest boxes important
Dove	crop gleaning, weed & grass seed, few insects	free	hedge rows; edges; fields, clearcuts and young plantation	nest in tree or hedge occasionally on ground	adapt well to suburban condition; some migratory
Ducks	aquatic plant, fruits, nuts, crop gleanings	free	open water; island with brush & grass; sheltered beaver ponds; flooded hardwood	tall shorelines plants or emergent water plants; tree cavities or nest boxes	protect beaver ponds or create impoundment s; many migratory
Quail	insects, weed seeds, crop gleaning	bound or free	grass, weeds, brush, vines	on ground near opening or edge	best if level open enough for easy travel and feeding
Wild turkey	insects, fruits, mast, grass, clover, seeds, snails	bound or free	mixed mature hardwoods, pines stands edges, small openings & cut overs	on ground, in dense cover, open forest or cut overs	can range over several square miles of forest;
Warblers	insects	bound	ranges from tree top to ground litter	nest in tree, shrub or cut overs	some migratory
Wood cocks	mostly earthworms	bound	alder, hazel, fairly open underneath	low cover near wetlands	need source of earthworms and abundant soil moisture

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SPECIES	FOOD	WATER*	COVER	REPRODUCTIVE SITE	REMARKS
Rabbit	grass; buds; young stems & bark	bound	brush, briars, shrubs, edges; cutovers	depression in ground lined & covered with grass	grassy areas important. Swamp rabbits (canecutters found in bottom land areas)
Fox	rodents, fruits, insects	free	old fields, edges, grasslands, open woods	den, usually below ground	gray fox frequents woods, red fox more common in open fields
Gray Squirrel	bud, mast insects	bound	mature to over mature hardwoods or pine hardwood mix	tree cavity or leaf nest	adapt well to human development
Whitetail Deer	bud, mast, leaves, new shoots, farm crops	free	thickets, brush, mature forest, pine stands, cutovers	bed on ground	adapt well to broken forest & farmland
Butterflies	mostly nectar	bound	clearing, edges, roadways	usually host plant of larvae	some migratory

*Free- dew, paddle, stream, etc. Bound- contained in food, do not need to drink

TABLE 2. FORESTRY PRACTICES AND WILDLIFE

PRACTICE	CONSEQUENCE	EFFECT ON WILDLIFE
Regeneration Cut	Full sunlight to ground stimulates weeds, grass, shrubs, seedling, sprouts; creates edges, mast and den trees lost	Favors, deer, quail, turkey, doves, rabbits, some songbirds, butterflies, hawks, etc; displaces squirrel, raccoon and some birds; small or irregularly shaped clear-cut best
Thinning	increases light reaching ground; removes low quality, low vigor trees; improves mast production	improvement for deer, turkey, quail woodcock, some birds and insects; small loss of nesting and feeding sites
Log Road Stabilization	prevents soil erosion and stream sedimentation; sunlit, seeded corridor provide food, edges	protects fish and other stream animals; encourages deer, quail turkey, rabbit, some songbirds
Streamside Management Zones (SMZ's)	protect mast, den trees and perches; maintain stream temperature and quality; filter light, sound, dust wind	affords sanctuary for animals displaced by harvesting; serve as corridor between undisturbed habitats; protects fish and other stream wildlife; provide edges
Mechanical site preparation, burning	reduces litter; stimulates sprouting, seed germination	favors quail, dove, turkey, deer, some songbirds and insects; effect usually last 3-5 years
Natural regeneration or pine planting	gradually reverse the effect of harvesting	displaces some deer, turkey, quail, songbird, etc., over period of 5-10 years

TABLE 3. WILDLIFE ENHANCEMENT PROJECTS

PROJECT	DESCRIPTION AND COMMENT
Food Plots	Establishment of food plots can attract wildlife selectively according to the species cultivated; also benefit predators; annuals plants must be re-established yearly
Brush Piles	Placement of slash to provide cover for rabbits, quail and other animals can increase the local population densities of these species and their predators
Water Holes	Excavation or blasting of water holes will improve habitats that lack free water for deer, songbirds and other; several holes per square mile is best

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Den Site	Location and protection of hollow trees, rocks, retreats, and other refuges will help maintain adequate reproductive sites and cover for cavity nesting birds and mammals
Nesting Structures	Wood ducks-place 15' to 20' above ground on poles or tree within one miles of pond or river. Must include an adequate predator guard. Bluebird- space nest at 100-yard intervals along field edges
Perches	Leaves, dead or dying trees near clearcuts or along field edges, about one every two acres; leaves, clump of trees and undergrowth in 4 to 5 openings
Prescribed Fire	Burning is an economical way to set back plant succession, which encourages many kinds of wildlife; it should only be practiced by professional
Special Features	Location and protection of old house site, spring seeps, uncommon food plants, roosts, and unusual cover will maintain important feeding, escape and nesting habitat for songbirds, turkey, deer and other species

Resources: Mississippi Department Of Wildlife, Fisheries and Parks, Virginia Division of Forestry (Pub. # 100), and Mississippi Forestry Commission.



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