

Wild Turkey Management

Alabama Guide Sheet No. AL 645B



Management Practices for Retaining and Creating Habitat

Habitat management for turkeys is mostly a matter of retaining, creating and managing suitable food, cover and water. Ideal cover is a well protected area of several hundred acres. Ninety percent of the area may be forestland, with a variety of timber types, one half of which should be mature hardwoods—predominantly oaks. The forest understory should be open. At least 10 percent of the area should be in well distributed grassy openings. As much as 50 percent of the area may be open if the area isn't heavily used by people. Create woodland openings of one acre or more in size, at least 200 feet wide and well distributed. Such openings allow maximum sunshine to reach the floor, thereby ensuring high production of low-growing vegetation from which turkeys can obtain insects. Adults use openings for resting and feeding. If there are trails or roads through the woodlands, these should be seeded with grass or clover and grass mixtures. Turkeys usually select areas with dense brush, tall grass and fallen tree tops for nesting. Important brood habitat includes forested areas with moderate herbaceous understories, forest clearings, forest savannas, power line rights-of-way and a water source. Excellent habitat for poults would be fallow fields and woodlands with an open canopy that allows plants to grow at ground level. These areas usually have an abundance of insects and moderate vegetation which allows young poults to move freely. Prescribed burning can help maintain relatively open understory.

Water

Adult wild turkeys require water every day, and should travel no more than one half mile to get it. Construct water holes if drinking water is scarce or absent. Locate water holes about one-half mile from creeks, ponds or other dependable year-round water supplies. Wildlife ponds should have a surface area of at least 0.2 acre.

Riparian Areas

Riparian areas are valuable to the wild turkey, especially in heavily farmed areas. These are the forested areas along a stream, creek, or river. Maintain or establish forested riparian areas 75 to 300 feet in width. Woody vegetation along streambanks tie together fence rows, brushy drainage ways and scattered woodlands. In doing so, the vegetation forms a network of trees, shrubs and vines which ensures variety in areas often dominated by row crops and pastures. This diversity provides suitable cover near food plots and provides food in the form of acorns, browse, and fruits. Riparian areas are helpful in controlling streambank erosion and protecting streams from sediment and other pollutants such as pesticides and fertilizers.

Establishing Food Plots

Food plots should be at least one acre in size. Larger plantings are recommended for chufa and on areas with heavy deer populations. They should be well distributed and located in or near woodlands. One

food plot for every 25 acres of woodland is usually sufficient for high turkey populations. Break and harrow plots several weeks before planting and apply fertilizer according to a soil test.

Choice foods for late fall, winter, and spring are acorns, beechnuts, chufa, corn, flowering dogwood, berries, wild grapes, pine seed, and agricultural crops that provide green winter forage such as small grains and winter clovers. Choice foods for summer and early fall are blackberries, bahiagrass, mulberries, browntop millet, cowpeas, corn, peanuts, grain sorghum, soybeans, wheat, insects, and seeds. Young turkeys depend almost entirely on insects and grass seeds for food during their first few months.

Suitable Perennial and Annual Plants for Management of Wild Turkeys

Plant	Planting Dates	Seeding Rate/ Acre
Bahiagrass	March 1-July 15	20 lbs
Browntop Millet	April 1-Aug. 1	25 lbs broadcast
Chufa	May 15-June 30	40 lbs
Clovers	Feb. 15-Sept. 15	1-12 lbs
Corn	March 20-April 20	7-10 lbs (rows)
Oats	Sept. 1-Oct. 15	60-90 lbs
Soybeans	May 1-June 15	40 lbs (rows)
Sorghum	April 15-Aug. 1	4-8 lbs (wide rows)
Ryegrass	Sept. 1-Oct. 15	25 lbs
Vetch	Sept. 1-Nov. 1	20 lbs
Wheat	Aug. 15- Oct. 15	30-60 lbs

Legumes are another important crop that is readily used by wildlife. Turkeys utilize legumes by feeding on the leaves and flower heads, and insects that live on the plants. Clovers are the most common legumes planted for wildlife purposes. Cool season perennial legumes are usually planted during the fall (Sept-Nov). Those that are adapted to wet soils include: Alsike clover, Ladino clover, and white clover. Red clover, Birdsfoot Trefoil, and Alfalfa are more suited to well drained soils. Proper land management is essential for the establishment of clovers. This includes plowing, application of lime and fertilizer, seedbed preparation, inoculant, planting date, and planting method.

Chufa is a warm season sedge. It produces underground nutlets that are relished by turkeys and

other wildlife. Plots should be at least 1 acre or more in size and they should be located away from streams and other wetlands. Larger plots are recommended because they are more likely to produce enough nutlets to feed turkey and other wildlife. Raccoons are especially inclined to eat chufa, which is the reason for locating the plots away from streams or wetlands. Turkeys do not eat the leaves of chufa, but they do obtain insects and other small animals from the low growing plants. Chufa is especially recommended on sandy and loamy soils throughout the state. If planted before June 15, the nutlets will mature about the same time that acorns begin to fall. If both are available at the same time, turkey will invariably feed on the acorns, while other wildlife go after the chufa. If chufa is planted after June 15, chances are good that most of the nutlets will be available to turkey after the acorns are gone.

Protect plots from grazing by livestock. If it is necessary to fence individual plots, install at least one gate per plot. That gate should be wide enough for farm tractors, disk harrows, fertilizer trucks, and other equipment to enter. When the nutlets are mature in the fall, either pull a few plants by hand at several places in the plot or make a few trips through the plot with a disk harrow. Either treatment exposes some of the nutlets and makes them easier to find by turkeys. Such exposure is especially recommended during the first one or two years that a plot is located on a particular site.

Plant outlying agricultural fields to the same crops as recommended for food plots. Winter forage crops in improved pastures are excellent for wild turkeys, also. These are good ways of providing food for wild turkeys without interfering with normal farming activities.

Habitat Maintenance

Maintain an open understory in woodland. Turkeys thrive where openings comprise as little as 5 percent of the total area and as much as 50 percent. To retain turkeys throughout the year on heavily forested land or to attract them during the spring, provide openings of 5-20 acres. Long narrow openings are provided by utility rights-of-way, or by widening logging roads. Prescribed burning, brush control, release cutting, and other practices may be used in maintaining turkey foods in woodland. Prescribed burning increases the stands of annual grasses, wild

legumes and other desirable foods of the wild turkey, especially in pine woodland.

Maintain in early stages of succession by periodic mowing, disking, burning or other means. Vegetation in openings should be no higher than one foot, especially during most of the growing season. Improved pastures provide excellent feeding areas for hens and older poult. Mow ungrazed or lightly grazed openings during mid-summer to stimulate new growth and to prevent such areas from becoming too thick.

Avoid mowing during nesting season. Restrict mowing in areas of turkey habitat between mid March and early June. Field edges should provide a subtle transition from woodland to opening, allowing poults to have access to cover when feeding in fields. This can be done by thinning trees along field edges or allowing edges to revert to brushy cover. If fields or pastures are heavily grazed, build fences several yards out from the woodlands to prevent cows from cleanly grazing field edges.

Young pine plantations are low quality turkey habitat when compared to mature pine, pine-hardwood and hardwood forests. Restrict pine management to sites best suited to pine production. Small pine plantings of less than 1/2 acre in size may increase habitat diversity for turkey because they provide thermal cover and roost sites. Leave hardwood dominated drains and stream bottoms uncut when harvesting or establishing pine stands. Retain soft and hard mast producers in uplands. Thin pine stands as liberally as needed. Prescribe burn as soon as the tree height in young stands allows safe burning. Restrict management activities such as prescribed burning during nesting season.

Prescribed Burning

Fire is among the most valuable and cost-effective tools available for managing habitat yet is probably the least understood. A prescribed burn removes vegetation from only part of the total area. Additionally, the recovery of burned areas is swift and the resulting new vegetation and conditions on the ground are much more "user friendly" for wildlife. Benefits include: reducing plant litter, the accumulation of which makes walking and food foraging difficult for poults; controls woody plants; releases dormant seeds; and increases the number

of small insects attracted to the new vegetation. Burning in late winter or early spring removes litter and grass thatch and encourages butterfly pea, lespedezas, milkpeas, partridge peas and beggarlice. Burn a tract once every 2-3 years. Areas left alone will advance into less desirable stages of succession and will produce unfavorable habitat for wildlife.

Land users should either undergo training or become certified in the use of prescribed fire, or retain a professional who has training and experience in prescribed burning. It is essential to have the proper equipment and permits to plan and conduct a controlled fire.

Home Range/Populations

The number of turkeys that an area can support is termed the carrying capacity. This level is determined by several factors which include: disease, parasitism, and predation. Many predator populations are at an all time high. Predation accounts for the main cause of nest failure, egg loss, hen mortality, and probably poult mortality. Populations vary a good bit from year to year, depending primarily on reproductive success. Predation of hens and eggs seems to be the main factor affecting reproductive success.

Disease and parasitism are density-dependent factors, and concentrations of wild turkeys on a small area increases the probability of occurrence and spread of diseases and parasites. Concentrations can also increase the probability of predation and poaching. This can be avoided by not using feeders or spreading corn as bait. Aflatoxin contamination is also possible from moldy corn.

Studies have indicated that the average range of most wild turkeys in the southeast is about 640 acres and is irregular in shape. Fall turkey population estimates have varied from 2-32 birds per square mile of range. There is both a fall and spring hunting season on gobblers in many parts of Alabama where populations are dense enough to warrant such hunting. In other parts of the state, there is only a spring season. The population is so low in some places that no hunting is permitted.

Keep disturbances to a minimum, especially from March to June, as this is nesting season.

- Restrict timber cutting to small areas. Extensive cutting causes turkeys to change their range.

- Restrict human activity, especially March through August
- Keep livestock and stray dogs out of turkey range
- Prevent wildfires; and any fires during nesting season
- Avoid mowing open fields during the nesting period.

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