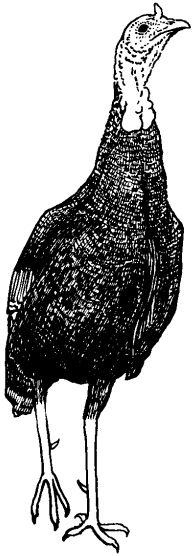


Wild Turkey



The wild turkey is prized for its recreational value and eye appeal. It was abundant in precolonial times but was nearly eliminated by humans during the settlement of America. Today the range of the wild turkey is fairly large, and there are populations (about 4 million turkeys) in every state except Alaska.

Mississippi has one of the largest turkey populations in the United States, with the statewide estimate between 250,000 and 350,000 birds, depending on annual recruitment.

Characteristics

The wild turkey has longer legs and neck, slimmer body, smaller head, and darker plumage than the domestic turkey. Tips of wild turkey tail feathers are light brown, while those of the domestic turkey are white.

Male wild turkeys (gobblers) differ from females (hens) by having longer legs and neck, larger feet, and larger bodies. Males have a bronzy, shiny body plumage, with black-tipped breast feathers. Hens have light-brown breast feather tips. The gobbler typically has a tuft of feathers, called a "beard," sticking out of its breast, along with spurs that curve up on the lower legs. Occasionally the beard or spurs do not develop on a gobbler. Some hens have beards. The head and neck of the adult gobbler are typically whiter than a hen's because of less head feathering.

In spring mating season, the head of the sexually aroused adult gobbler turns a combination of red, white, and blue. The wild turkey goes through several color phases. The red phase occurs mainly in southern Mississippi and is a rusty red on the tail, wings, or most body feathers. The smokey-gray phase occurs throughout Mississippi and is mistakenly thought to be a partial domestic turkey. Smokey-gray turkeys, usu-

ally hens, are whitish grayish on parts or most of the body. They are not part domestic, and they do successfully reproduce. Another color phase you sometimes see is the black (melanistic) phase. These turkeys have no other colors, just black. The true albino, with a total absence of any color, is rare.

You can tell a gobbler by its large track, with a middle toe at least 4 inches long. A hen's track has a middle toe less than 3 inches long. Hen droppings are spiral shaped, but gobblers typically leave a long, J-shaped dropping.

In the spring, you can tell young turkeys from adults by an uneven tail shape. A young turkey has an unbarred (white bars) tip on the tenth main wing feather, and short, greater upper-secondary coverts. Jakes, or yearling gobblers, normally weigh 9 to 13 pounds and have short, rounded spurs and a beard less than 5 inches long. Older toms generally weigh between 16 and 21 pounds and have spurs longer than half an inch and a beard more than 7 inches long. A first-year hen (jenny) typically weighs 5 to 7 pounds. Adult hens average 9 pounds.

Flocks

Wild turkeys separate into flocks on the basis of sex and some by age. In summer, the basic unit is the family flock (brood), consisting of the hen and her poults. One or more successful hens often form multiple hen-brood flocks in late summer and fall. (Hens that are unsuccessful in nesting form their own flocks.)

Adult males form flocks that rarely associate with hens outside of the breeding period. In late fall, young males separate from their brood and form jake flocks. Occasionally, young gobblers associate with adult gobblers.

Within a flock, there is a hierarchy, or pecking order, where the birds set a rank of dominance. Generally, older birds are more dominant than younger birds, and larger turkeys dominate smaller turkeys. Males usually dominate females.

Home ranges of wild turkeys vary greatly by season and bird. Generally, home ranges are greatest from fall through spring. At this time, gobblers use an average of 4-plus square miles but an average of just over 2 square miles in summer. But on an annual basis, individual gobbler home ranges may be from 3 to 11 square miles. Just after the poults hatch, a hen-brood flock's range may be only 100 acres but increases weekly. This is because of the small size and limited mobility of poults.

Reproduction

The increase of daylight in spring triggers hormonal changes in wild turkeys. When gobbling begins in late February to early March, this signals the mating period. Gobbling attracts females for mating.

Gobblers mate with several hens. Adult gobblers do most of the mating. Gobbling begins at daybreak, while the gobbler is on the roost. Then the gobbler flies down and begins his courtship display by strutting and gobbling for the hen(s). Strutting begins with raising body feathers, fanning the tail, and dropping the wings alongside to the ground. Blood rushes to the gobbler's head, his snood gets long, and his wattle turns a bright red. If the hen is receptive, she will crouch before the displaying gobbler, and they will mate. A single mating is enough to fertilize all eggs, but hens usually mate several times.

Once the mating season is fully underway, hens seek out nesting areas to lay eggs. In Mississippi, laying generally begins in late March to early April. Turkeys usually nest in areas with a well-developed understory that provides hiding places in some bushy/vines (old fields, cut-overs, pine forests).

The hen lays one egg per day until she has a clutch averaging 9 to 11 eggs. Incubation takes 28 days, and all poults hatch within 24 hours. Depending on weather, the brood hen and poults leave the nest within 24 hours of hatching. Peak hatching is from about May 20 to June 10. If the first nest is destroyed, some hens try a second nest. Hens that have to reneest lay fewer eggs. Generally, less than half of all nesting attempts are successful.

The fact that wild turkeys nest on the ground and need 6 weeks to lay and incubate eggs makes hens and their nests open to predation and human disturbance (destroying nests by burning, mowing, and discing). Common predators of turkey eggs include raccoons, skunks, opossums, crows, and snakes. Death rates of poults generally range from 70 to 80 percent or higher, especially during their first 2 weeks of life, when they can't fly, and they roost under the hen on the ground.

Diets

Wild turkeys eat whatever plant and animal matter is available, whenever it is available. Poults eat lots of insects and other animal matter to get protein needed for rapid development. Poults double their weight each week for the first 4 weeks. As turkeys grow older, plant material becomes the main food source. About 90 percent of the mature turkey's diet comes from plants, including green foliage of grasses, vines, and forbs; acorns; buds; seeds; and different fruits.

Wild turkeys eat different cultivated crops, including soybeans, corn, wheat, oats, ryegrass, chufa, and clovers. Often these species are planted in food plots. We're not sure of the benefits of food plots to wild turkeys, but we do know they are better than supplemental feedings. Supplemental feeding can hurt turkey populations. It tends to concentrate flocks, making them open to poaching, and it helps carry parasites and diseases.

Management

Wild turkeys prefer large tracts of mature forests (bottomland and upland hardwoods, pine-hardwood, pine) mixed with open areas (pastures, hayfields) that provide variety for feeding and reproduction. Often you can improve turkey habitats through certain land management practices. These include thinning and control-burning pine stands, planting food plots, and creating and keeping permanent grass/forb openings in heavily forested areas. Before making improvements, determine your management objectives, inventory existing habitats, consult with a professional wildlife biologist, and develop a comprehensive management plan.

Forest management plans should consider wild turkeys and other wildlife species. Restrict final harvest (clear-cut) areas in upland pine forests to 50 acres or less, with maximum feasible age differences between cutover and adjacent stand(s). Pine stands should have a 40-year or longer rotation. Thinning and burning in many upland pine types help timber and wildlife. Turkeys are attracted to these areas because the open understory promotes growth of seed-producing grasses and legumes (important turkey foods) and increases insects.

Changing to hardwoods and large tracts of pine-hardwood forests to pine plantations could decrease turkey populations. Keep travel paths and streamside management zones of older timber at least 300 feet wide where you clear cut. You can use small group select or clear-cuts (up to 20 acres) in bottomland hardwood stands to regenerate hardwoods. Selective thinnings favoring oaks, beech, wild pecan, and other mast-producing species benefit turkeys and other wildlife. Turkeys do not like hickory nuts. Dogwoods, blueberries, huckleberries, and other fruits found in the understory are good turkey foods, and you should protect and increase these species.

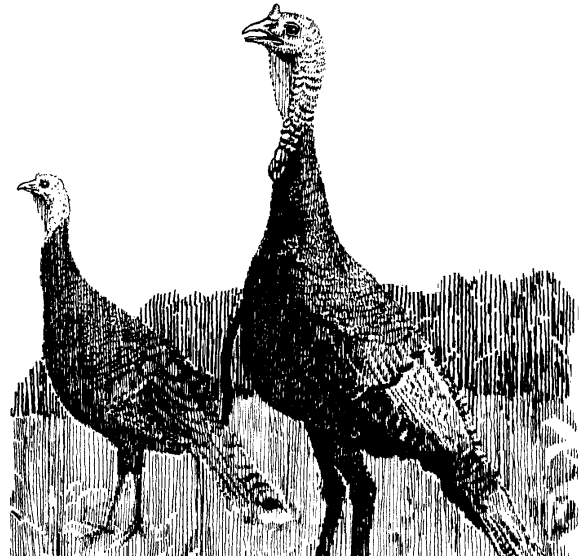
In Mississippi, suitable habitats that did not have viable populations of wild turkeys have been restocked with native wild birds in past years. Never release pen-reared turkeys into the wild, because diseases and poor genetic stock can hurt wild populations.

Illegal hunting (poaching) can be a problem. Laws regulate hunting to protect the wild turkey population. Annual gobbler survival rates may range from 35 to 55 percent on heavily hunted public areas. As much as 90 percent of all gobbler death occurs in the spring hunting season. The effectiveness of regulations is only as good as the enforcement, how much landowners protect turkeys, and hunters' ethics.

Gating roads and coordination among hunters and conservation officers can help establish and maintain wild turkey populations. Survival rates of gobblers and jakes are not significantly different. Harvest controls, such as not harvesting jakes, can increase the percentage of adult gobblers. Collecting information from gobblers harvested (weight, beard and spur length, and age class), hen-brood surveys, and gobbler counts help wildlife biologists manage the wild turkey.

Predator management is controversial in wild turkey management. Research has indicated viable turkey populations can generally withstand predation if you provide suitable habitat. In areas with suitable habitat, predation rarely is a limiting factor on turkey populations.

The wild turkey is again abundant in the Magnolia State. People must work together to ensure future generations can enjoy this magnificent bird. This includes properly managing habitat, practicing ethical harvest, and working closely with wildlife professionals and organizations such as the Extension Service and the National Wild Turkey Federation. For more information about the Mississippi chapter of the National Wild Turkey Federation, contact your county Extension office.



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