28. WILD TURKEY

Meleagris gallopavo silvestris

SUMMARY

ild turkeys were reintroduced to Vermont starting in 1969 and are now abundant throughout the state. They are omnivorous birds, feeding on grasses, leaves, grains, insects, nuts, and berries. They thrive on a matrix of forest and fields, particularly with intact hardwood forests with mast-producing trees such as beech and oak. To manage your land for turkeys, you should maintain these hardwood forests in addition to promoting agricultural fields, open grassy areas for breeding, and small, dense softwood for winter roost sites. Promoting fruit- or berry-producing trees and shrubs also attracts turkeys.

NATURAL HISTORY

Vermont's wild turkey is a forest game bird closely associated with mature hardwood stands of mast-producing trees such as beech and oak. These stands were largely eliminated from the state in the late 1800s due to heavy logging, and agricultural expansion resulted in the disappearance of the wild turkey from the state. After the regeneration of Vermont's hardwood forests in the twentieth century, suitable turkey habitat was created and 31 turkeys were relocated from New York to Vermont in 1969 and 1970. There are now an estimated 50,000 turkeys found throughout Vermont, exceeding the bird's ancestral range in the state.

The reproductive cycle for the wild turkey begins in April when the males can be found gobbling and strutting to attract hens. Turkeys are polygamous, and most of the breeding is done by a relatively few dominant gobblers. Turkey chicks usually hatch in late May at which time herbaceous clearings and pastures are used intensively by the hen and her brood in search of the protein-rich insect food necessary for rapid growth. During this stage of development, the poults are quite vulnerable to cold, wet spring weather as well as to predation.

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Figure 28.1Turkeys were successfully reintroduced into Vermont more than 40 years ago.

Turkeys are social birds and their flocking instinct is very strong. Hens and their poults flock in groups of 30 or more with a small flock of attending gobblers from summer through the winter months until breeding season, when courtship and mating rituals resume. Turkeys travel mainly on foot with occasional short flights if alarmed. At dusk, the birds fly up into mature trees to roost, which protects them from ground predators during the night.

The initial insect diet of the young poults is gradually replaced by feeding on grasses and grains, ripening fruit and nut crops of midsummer and fall. In winter, the birds scratch through the accumulating snow for foods such as nuts and seeds. Their search for food becomes very difficult in snow depths over one foot. During these stressful periods, turkeys seek warmer south-facing slopes with less snow and snow-free areas around spring seeps where water continually percolates from the ground.

HABITAT REQUIREMENTS

The wild turkey is a highly mobile species, capable of exploiting a wide range of forest types. In optimum habitat, turkeys may restrict themselves to less than 1,000 acres, depending upon season, food supplies, and cover. In poorer habitats, the birds may fly from one ridge to another, exceeding 4,000 acres in home range.

Good turkey habitat contains a diversity of forest types and age classes, dominated by mast-producing hardwoods, such as oak and beech, which are relatively open under the canopy. Quality habitat includes clearings and openings, groups of conifers, and cultivated land well-interspersed within the forest matrix. Edge openings and forest roads are used in the spring breeding season for courtship activities and strutting displays.

The sites selected by females for their nests vary greatly. The nest itself is a slight depression in the forest litter, usually well concealed by dense vegetation. Thickets, brush piles, fallen trees, and the bases of standing trees between root flares are often used as nest sites.

Brooding habitat is found in sunlit openings, grassy clearings, meadows or "savannah-like" areas such as a pure stand of hophornbeam with a grassy understory, which is used intensively by the hen and her

chicks to search for insects. Adult turkeys are primarily herbivorous ground feeders. In the spring, mature birds occasionally eat insects but favor succulent grasses, sedges, tubers, and blossoms. Their summer diet includes ripening fruits and the seeds of grasses and clovers. Acorns, beech, and hickory nuts are utilized most in the fall and winter, making up a significant portion of the bird's diet when available. In northern Vermont, where oaks are lacking, mature stands of seed-bearing trees including maple and ash supplement beechnuts, and soft mast such as apples, cherries, and hawthorn fruits are very valuable foods.

In winter, when snow conditions make foraging difficult, spring seeps are sought where turkeys can glean insects and herbaceous vegetation. In winter, turkeys forage on fruits that

persist above the snow such as hophornbeam, burdock ash seeds, red cedar berries, grapes, highbush cranberries, beech and hemlock buds, and waste grains from spread manure and corn silage.

Turkeys roost in large diameter trees with strong, horizontal branches and prefer white pine and hemlock in winter for cover from wind and cold temperatures.



MANAGEMENT PRACTICES

Ideally, an area managed for turkeys is about half-forested and half-open lands. Manage the woodland portion to result in mature forest composed primarily of masting hardwood species, particularly oak and beech, with roughly a quarter consisting of conifers such as hemlock and pine. Small, interspersed clearcuts, pastures, and cultivated land in the balance of the managed area will provide the diversity needed to meet breeding, nesting, and brooding requirements. Maintain these openings through regular brush hogging or haying, and seed log landings, logging roads, and rights-of-way with a grass and legume mix.

Maintain a varied composition of food-producing species such as oak, beech, hickory, cherry, ash, and hophornbeam throughout the area to act as a buffer against the natural variability of mast production. During thinnings, favor mast producers and encourage understory species that provide fruit or soft mast. Crop tree management techniques, commonly referred to as Mast Tree Release where there is a wildlife objective, can be used to increase mast production by releasing crowns of mast producers (e.g., oak) from crowns of competing trees. Culling these competing trees will make mast production better in both poor and good mast years. Studies have found that released oak trees may produce up to seven times more acorns than unreleased trees. Even in poor acorn years, released red oak has been found to produce twice the amount of acorns as unreleased trees. At a stand level this difference can be significant, particularly to wildlife experiencing a bad mast year.

One method to create additional brushy habitat is to cut back or heavily thin 50-foot borders around the edges of fields to stimulate brushy growth and provide nesting and feeding cover. This work should be accomplished on a periodic basis so that cutting does not occur all at one time. When reclaiming abandoned fields, pastures, or clearing brushy areas, avoid doing work during the nesting season (mid-April to August 1). For agricultural hayfields, mowing should preferably be delayed until August.

Spring seeps occur where warm ground water percolates to the ground surface and provides open, snow free areas during the winter months that are used by wildlife as feeding sites. In addition to their value as winter food sources for turkeys, spring seeps are also critically important habitats for a number of species of mammals, aquatic invertebrates, and amphibians and should therefore be protected from disturbance.

Maintaining wooded corridors and brushy fence rows, or establishing hedgerows across large fields (10 acres or more) provides valuable travel and escape cover for turkeys between woodlots. Establishing brushy "islands" of hardwoods, conifers, and shrubs can be favorable to help to break up large open areas. Native plantings can include apple species, hawthorn, elderberry, sumac, highbush cranberry, serviceberry, viburnums, cherries, and dogwoods. Turkeys should be allowed access to manure piles and spreadings during winter months. Rows of standing corn can also be left for winter use.



RESOURCES

U.S.D.A. Natural Resources Conservation Service. "What is Forest Stand Improvement?" http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/stelprdb1081110.pdf

—. "Mast Tree Release." http://efotg.sc.egov.usda.gov/references/public/VT/JS666VT_(Mast)_FillableForm.pdf

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