PART VIII: SPECIES MANAGEMENT



EASTERN WILD TURKEYS

he eastern wild turkey can be found from northern Florida and Mississippi to Maine and northern North Dakota. Before the first settlers arrived in Michigan, wild turkeys were established mainly in the southern part of the state. They were absent in the northern Lower Peninsula and Upper Peninsula due to the colder weather and deep snows.

Turkeys prosper in a mix of forest and agricultural lands. Because of habitat loss and unregulated market hunting, Michigan wild turkey populations plummeted in the late 1800's and by the turn of the 20th century few observations were reported. By the 1950's Michigan's wildlife biologists began a reintroduction program releasing birds in southwestern Michigan and later in the northern Lower

and Upper Peninsulas. Since the 1960's, turkey populations have grown in northern Michigan ? even though they have been subject to severe win-In many areas of ters. northern Michigan, supplemental feeding seems to play a major role in winter survival. Wild turkeys are located also throughout southern Michigan and flocks are growing and expanding.

The home range of wild turkeys is one to four square miles or about 640 to 2,000 acres. Michigan landowners who are able to provide the necessary habitat components are likely to have turkeys on their property, especially if they live in a region of the state that does not receive more than 60 inches of snow each year.

Turkeys have exceptional hearing and eyesight. The bird's ability to run at 15 to 18 miles per hour and to fly on five-foot-wide wings at speeds approaching 55 miles per hour also make it a challenging quarry for predators. Many landowners simply enjoy seeing turkeys. Because the birds may travel several miles each day, opportunities for seeing them are good if habitat needs are met.

Life Cycle

Turkeys are social birds and in winter often separate into three distinct groups: adult males (toms), young males (jakes), and females (hens) of all ages. These flocks begin to disperse in late winter or early spring when courtship and mating rituals begin. Toms set up territories and begin gobbling, strutting, and displaying in hopes of attracting a harem of hens. Most hens, regardless of age, will breed with a gobbler each spring.

Egg laying begins in April, and each hen will lay a clutch of 11 to 12 eggs over a two-week period. She usually chooses the base of a large, mature tree or stump, such as an oak or beech, in fairly open, isolated woods. However, some hens may nest in idle fields of weeds or grass. Nests are also found next to downed tree tops and brush piles. When the clutch is complete, the hen will incubate $\xrightarrow{\sim}$ her eggs for 28 days. Peak hatching occurs in June in southern Michigan; two to three weeks later in northern Michigan. Until the young poults are able to fly (at about two weeks old) and roost in the branches lower of trees, they are very susceptible to predation.

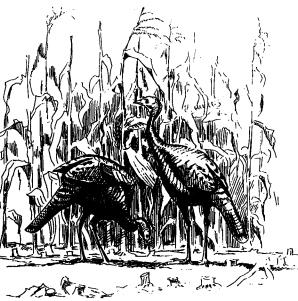
Nest predators such as crows, raccoons, skunks, opossums, domestic pets, and human disturbances are the biggest threat to successful hatching. Adult wild turkeys have few, if any, natural enemies. Although coyotes will sometimes kill an adult bird, turkey densities are seldom significantly affected, even in areas where coyotes are plentiful.

Food and Water

The diet of an adult wild turkey includes about 90 percent plant matter and 10 percent animal matter. Hens consume about 1/3 pound of food daily; adult gobblers may eat 1/2 to 1 pound of food each day. Turkey foods fall into four main categories: mast (nuts and fruits), seeds, greens, and insects. In winter they prefer hard and soft mast including acorns, beechnuts, crabapples, and hawthorns. They will also eat waste grains in harvested fields of corn, buckwheat, soybeans, oats, and grain sorghum.

Turkeys foraging in agricultural areas in the fall and spring eat mostly waste grains, wild plants, insects, and young grasses. Corn, buckwheat, and wheat are outstanding sources of fall, winter, and spring foods. More information on





planting these crops are available in the **Cropland Management** section.

As spring changes into summer, hens typically lead their young to open areas with succulent ground vegetation including grasses, sedges, and a variety of forbs and legumes, especially clover. These fields of grass and legumes contain protein-rich insects, which make up 75 percent or more of the poults' diet until four or five months old. Insects include grasshoppers, ground beetles, flies, caterpillars, ants, and crickets. As the poults grow, the seeds of raqweeds, sunflowers, and grasses are favored along with the fruits of dogwood, wild grape, cherry, sumac, and Wildlife managers blackberries. generally agree that artificial feeding of wild turkeys can overly concentrate the birds in a small area. making them more susceptible to poaching and the spread of disease.

Water is another important necessity. Turkeys need water almost daily, and hens rarely nest farther than a quarter-mile from a reliable water source such as a creek, spring, seep, or farm pond.

Cover

Prime cover includes a mixture of open areas within a mature (or nearly mature) forest containing a variety of tree species including white and red oaks, hickories, ash, beech, and white and jack pine. Turkeys use these mature trees as roosting sites but seldom roost in the same place on successive nights. Therefore, several suitable roosting locations scattered throughout their range are needed. Understory trees, and trees/shrubs at woodland edges or in openings also provide cover. Such trees and shrubs

include ironwood, musclewood, hazelnut, beech, wild plum, serviceberry, mountain ash, wild black cherry, dogwood, crabapple, black locust, hawthorn, and pin and chokecherries.

Although turkeys can survive in areas that are only 10 percent forested, their survival improves when mature woods comprise 30 to 50 percent of the available habi-Turkeys like open, mature tat. woods but will also use timber stands that have grown beyond the small-pole (2-inch to 9-inch diameter) stage, if the understory is not too dense. Turkeys prefer varied habitats and also make use of brushlands and openings as well as pastures and row-cropped and idle farm fields. Travel corridors for turkeys include forested streams and river floodplains, which connect adjacent woody cover.

On cold, winter nights turkeys often seek two to five acre stands of dense mature conifers, which

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will provide thermal protection as well as roosting sites. Mature woods that contain nut-producing trees (oaks, beeches, hickories) are especially important in winter because they yield carbohydraterich food.

Grass and clover meadows produce high quantities of insects and can provide outstanding brood rearing habitat. Mixes of grasses, clover or alfalfa can be used. Refer to the **Grassland Management** section for more information on grass varieties, seeding rates, and methods.

Habitat Considerations

In Michigan, the ideal habitat mix is 20 to 30 percent bottomland hardwoods, 10 to 30 percent mature oaks, 5 to 10 percent conifers, 10 to 15 percent shrubs, 20 to 30 percent croplands and 15 to 25 percent grasslands, clover pastures or idled fields. In goodquality habitat, the area will safely support one bird per 30 acres or one flock for every 640 to 800 acres. But unless you own a lot of land--1,000 acres or more--it is unlikely that turkeys will remain on your property year-round because they need a large amount of living space. Even so, there are many things you can do to attract wild turkeys to your property at various

times of the year. General management options , include:

(1) managing woodlots of any size to maximize favored wild foods and cover
(2) creating or maintaining openings

(3) providing year round food needs.

The following are specific management considerations for eastern wild turkeys:

•In areas where good thermal cover is limited, and where pines can naturally occur, plant a four to eight acre stand of pines. With proper management in 20 to 40 years this will provide necessary cover.

•Rivers or creek bottoms, swamps and lowland hardwoods should be protected and maintained because of their importance as a corridor to turkey and many other wildlife species. Corridors should be at least 100 feet wide.

•Mature hardwood stands should contain some younger trees that will eventually replace those that are harvested for timber or die of natural causes.

•Manage mixed stands of deciduous (leaf-bearing) trees to maintain and encourage those trees that produce nuts, fruits, or seeds. Encourage these kinds of trees by cutting species



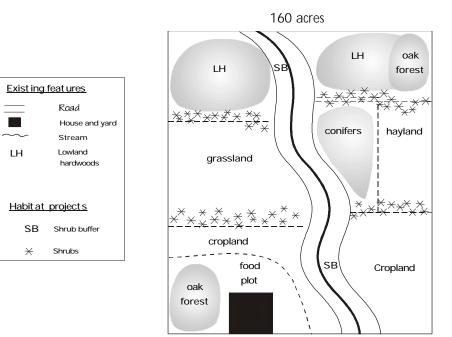
Nuts and berries are essential components of the turkey's diet.

that provide little benefit to turkeys. Proper thinning of trees, therefore, may be necessary. Consult with a professional forester for details and also refer to the **Forest Management** section.

Managing Openings

Openings can vary in size from a half-acre or less to more than 10 acres. Actual size is less important than where the opening is located and what is planted there. Openings should be large enough to admit sunlight to create forage growth. For example, linear openings such as power line rights-ofway, should be at least 60 feet wide. The optimum shape of an opening is long and rectangular with an irregular boundary that follows the land contours, provided you do not create erosion problems. If possible, maintain or enhance existing openings before creating new ones. Too many openings within a small area will fragment your forest and detrimentally impact a variety of wildlife species. Within a 100 acre forest, maintain three to five acres of openings. Several small openings are usually better than a single large one. However, if your area is severely fragmented, do not create more openings.

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eating the new plantings and even killing them. Free-roaming dogs and cats may also be attracted to any habitat that suddenly has an abundance of wildlife.

In summary, eastern wild turkey populations have returned to Michigan and prospered since their reintroduction. If your property contains a mix of forest and agricultural lands, you may be able to manage for turkeys. However, be aware of the negative impacts that this management may have on other wildlife.

This map is an example that demonstrates the many management options discussed throughout this chapter. The option(s) you choose should depend not only on your goals, but the location, condition, and present use of your land.

What to plant in an opening depends on your goals and turkey needs. Do you want to provide an additional source of food or establish permanent brood habitat or both? Are you planning to offer supplementary food during the summer (clover) or winter (corn)? Do you want low-maintenance plants that will be available over several years, or do you want to replant the opening each year with a grain crop?

Concerns

No matter how we manage our property for wildlife, our decisions will always have impacts. For example, if we manage mature woodlands for turkeys we will discourage brushland species such as grouse and catbirds. Creating openings may produce habitat for turkeys and deer, but may increase cowbird or raccoon predation.

Habitat that is managed for wild turkeys also tends to benefit deer, squirrels, black-capped chickadees, and woodpeckers. You should also be aware that creating or enhancing habitats may invite unwanted guests. For example, if you plant trees and shrubs, in the hopes of attracting wild turkeys and songbirds, you most likely will also entice deer, rabbits, and mice that can become a nuisance by

FOR ADDITIONAL CHAPTERS CONTACT: Michigan United Conservation Clubs PO Box 30235 Lansing, MI 48909 517/371-1041



Private Land Partnerships: This partnership was formed between both private and public organizations in order to address private lands wildlife issues. Individuals share resources, information and expertise. This landowner's guide has been a combined effort between these groups working towards one goal: Natural Resources Education. We hope this manual provides you with the knowledge and the motivation to make positive changes for our environment.

FOR ADDITIONAL ASSISTANCE: CONTACT YOUR LOCAL CONSERVATION DISTRICT