

For information on other DNR programs or publications, or for the office nearest you contact:

DNR Information Center  
500 Lafayette Road  
St. Paul, MN 55155-4040  
Toll Free: 1-888-MINNDNR  
(646-6367)

This document can be made available in alternative formats by calling:

(651) 296-6157 voice,  
toll free: 1-888-MINNDNR  
or (651) 296-5484 TTY.



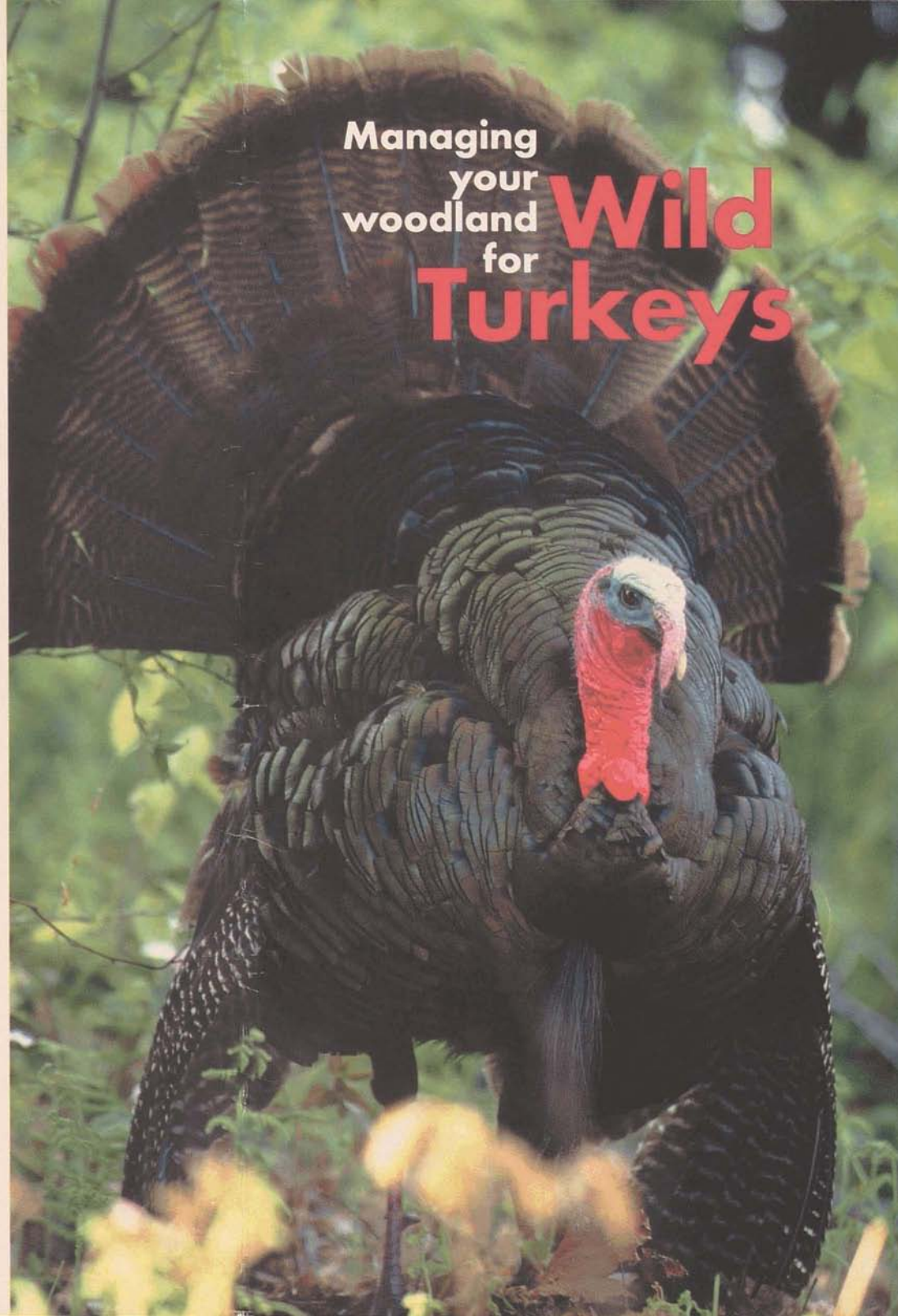
© Copyright 2000,  
State of Minnesota,  
Department of Natural Resources.

Equal opportunity to participate in and benefit from programs of the Minnesota Department of Natural Resources is available to all individuals regardless of race, color, creed, religion, national origin, sex, marital status, status with regard to public assistance, age, sexual orientation, or disability. Discrimination inquiries should be sent to Minnesota-DNR, 500 Lafayette Road, St. Paul, MN 55155-4031; or the Equal Opportunity Office, Department of the Interior, Washington, D.C. 20240.



Printed on recycled paper  
with 10% postconsumer content.

# Managing your woodland for **Wild Turkeys**





# Wily...clever...smart...



**T**hese words describe wild turkeys. The largest North American game bird was abundant when they became the symbol of the Thanksgiving feast. But disappearing habitat and unregulated hunting decimated turkey populations. Today, however, this game bird is an example of a successful comeback through careful wildlife management.

Minnesota is on the northern fringe of the wild turkey range. But progressive wildlife management techniques and a mature oak-hickory forest have enabled the re-establishment and expansion of wild turkey populations into new areas.

Wild turkeys occupy about 44,000 square miles, mostly in southern Minnesota. Although the best wild turkey habitat is located in the oak-hickory covered hillsides of southeast Minnesota, turkeys have been trapped and transplanted to unoccupied ranges selected by DNR wildlife managers. The presence of good turkey habitat and the absence of free-roaming or feral pen-raised turkeys are important considerations in selecting areas for transplants. Feral turkeys often come in contact with domestic birds around farmyards, contracting disease that may then be transmitted to wild turkey flocks. Release of game-farm or pen-raised turkeys is prohibited without a DNR permit.







Locations of turkey sightings from a recent survey of antlerless-deer hunters in November and December.

## Food and cover

Wild turkeys prefer oak acorns, hickory nuts, sumac berries, dogwood and juniper, wild grapes and clover, although they eat more than 100 different food items. Corn, small grains and alfalfa are an important source of food during both summer and winter. During winter, fields blown clear of snow are important feeding areas when other foods are scarce. Open areas, such as alfalfa fields are the source of grasshoppers and other insects for young turkeys (poults) which provide a high-protein diet necessary for their early growth and development.

## Nesting

Turkeys usually nest around the edges of old fields, in berry thickets, along woodland roads and occasionally in hay fields. During the nesting and brood-rearing seasons, wild turkeys require water on a daily basis and are rarely far from water. The rest of the year, a turkeys need for water is reduced—they meet water requirements in the foods they eat.



DNR photo



Wild Turkey Range

Turkeys per square mile  
 6<  
 6-15  
 16-25

## Range

Individual turkeys range over an extensive area, requiring 500 to 2,000 acres of habitat that includes mature hardwoods interspersed with agricultural lands. Woodland edges provide the best foraging areas, and turkeys tend to avoid areas of dense brush. A relatively open under story in mature oak-hickory woodlands allows turkeys to forage for mast (nuts and berries) more extensively and frequently. Wild turkeys prefer to roost at night in mature, open branched hardwoods or large pine trees near hillsides. These types of trees in your woodland enhances roosting cover for turkeys. South and east facing slopes are preferred by turkeys for early sunlight and for feeding areas sheltered from northwest winds during winter.



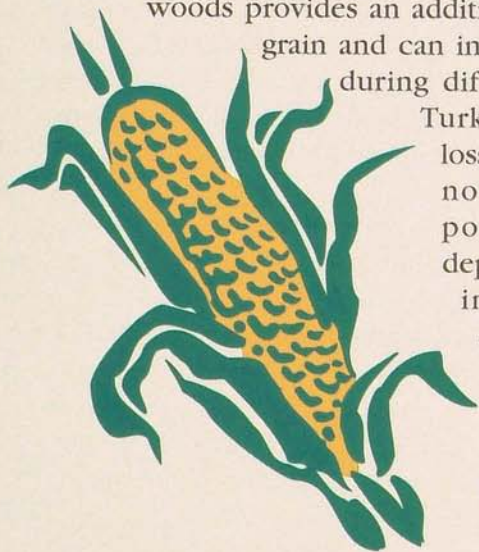
## Seasonal Habitat

In spring, summer and fall, old hay fields, pastures and open woods are important forage areas for insects, berries, green leaves and seeds. Young turkeys need high-protein insects during the first couple months of life. By late fall, turkeys depend on acorns, grains, fruits, berries and flock together for safety.

In Minnesota's severe winter weather, turkeys require a reliable food supply and roosting cover. Acorns are the staple of their winter diet so habitat should include a variety of oaks large enough to produce acorns. An acre or two of standing corn located near a turkey wintering area is an important management tool to ensure winter survival.

South and west facing slopes are important foraging and resting areas as increased snow melt exposes food for these ground-feeding birds. Manure spread on fields adjacent to good turkey woods provides an additional source of grain and can increase survival during difficult winters.

Turkey starvation losses generally do not begin until powdery snow depths exceed 10 inches for 20 consecutive days or when snow cover forms a hard crust.



DNR photo

### WILD TURKEYS NEED TWO KINDS OF SEASONAL HABITAT



DNR photo

## Management Strategies

More than anything, the proper management of oak/hickory woodlands will determine the future success wild turkeys in your woodlands. A properly managed oak/hickory woodland will enhance turkey habitat, and can provide income for the landowner. This combination of benefits is seldom achieved by accident.



## Manage your woodlands for oak

Providing adequate oak regeneration is the most important consideration in planning a timber harvest. Thousands of acres of productive turkey habitat have been degraded by harvesting oak without adequate regeneration. These sites are often lost to other hardwoods of less habitat value. Post-sale treatment is a necessary means of insuring proper oak development. Because oak/hickory stands vary in site characteristics, tree size, age and distribution and the number of seedlings and saplings present, it is critical the landowner consult a professional forester or area wildlife manager for a management prescription. This will assure proper regeneration of the trees cut.



### What is mast?

**Mast is a term used to describe the nuts of forest trees accumulated on the ground, especially as food for wildlife. Many species of wildlife depend on mast as sustenance through winter and early spring.**

Another important consideration in planning the harvest is to reserve 3 to 6 large mast producing trees per acre to supply the important acorn crops essential as wild turkey food sources. Some middle-aged oak and hickory trees should be reserved from harvest to provide future mast crops. Combined with good regeneration after harvest, this will provide a perpetual supply of mast.



DNR photo

Good quality red oak commands a high price and can often be sold commercially and logged professionally to achieve both economic and habitat management benefits. Lower quality hardwoods can be cut for firewood by the landowner to provide habitat benefits at low cost.

Small shelter wood, group selection, or clear cuts with provisions for regenerations provide the best combination of habitat benefits for turkeys. In addition to retaining a dependable acorn crop in woodlands, small cuts stimulate under story vegetation such as fruit and berry producing shrubs, which provide additional wildlife foods.

Dense stands of younger trees can sometimes be thinned to promote acorn production and tree growth. Thinning the canopy near forest edges can promote under story growth. When planning your timber harvest, reserve known turkey roosting trees. If you are uncertain where turkeys are roosting, reserve trees on the south and east facing slopes. Consult a professional forester for advice.



## Maintain and improve openings

Permanent grassy-weedy openings such as old fields and pastures are an important part of turkey habitat. Poults depend on the security of weedy cover while capturing insects and foraging for berries and greens during their early growth. Grassy-weedy openings need to be mowed, burned or treated with herbicides periodically to prevent being overtaken by trees and to stimulate desirable vegetation such as sumac, wild grape, clover and dogwood.



DNR photo

Hayfields are especially valuable to turkeys and should be maintained. Poor fields can be re-seeded to clover and alfalfa to improve their value to turkeys, deer, pheasants and other wildlife.

## Establish and maintain food plots

Leave a few rows of corn along wooded field edges. Corn provides a necessary food source during Minnesota winters when natural food may be snow-covered and unavailable. If deer are also present, plots with at least one acre of corn per 10 wintering deer are recommended. Conservation tillage leaves waste grain available for wildlife.

← Prescribed burns can be planned to improve forest openings to benefit more than 150 wildlife species, including wild turkeys. Prescribed burns achieve a specific objective under appropriate weather conditions at the right time of the year.



DNR photo





DNR photo

## Other tips to improve turkey habitat...

- Harvest timber with a plan to promote oak and hickory growth, and to provide a long-term, dependable mast crop.
- Encourage fruit-bearing shrubs near forest edges by thinning trees.
- Maintain roost trees: broad limbed, open-branched hardwoods and large pines, especially on southeast-facing hillsides.
- Protect woodlands from grazing.
- Maintain grassy openings that contain legumes, clover and grasses.
- Seed forest openings to legumes, clover and grasses.
- Plant or leave food plots of corn or grains near winter cover.
- Construct push-up dams to catch water runoff and prevent soil erosion.
- Delay mowing old fields until late summer.
- Do not release pen-reared or game-farm turkeys.





## For more information:

Through the Private Forest Management (PFM) program, the Department of Natural Resources can help you take an inventory of your property and develop a plan for multiple use management, including wildlife habitat, timber stand improvement, timber harvesting and recreation. The PFM program provides technical advice and assistance in state and federal cost-share programs for landowner participants. Contact your local DNR wildlife manager or district forester for help in preparing a private forest management plan.

For more information, contact the Area Wildlife Manager or Forester in your area.

