

MICHIGAN DEPARTMENT OF NATURAL RESOURCES - www.michigan.gov/dnr Wildlife Division

Featured Species Habitat Management Guidance for Wild Turkey

Latin Name: Meleagris gallopavo Scope: Statewide

Rationale - why we value the species and the problem for the species:

The wild turkey is a highly valued game bird in Michigan. During the 2013 spring season, 82,000 hunters spent 340,000 days afield pursuing turkeys. There are three well-established stakeholder groups that support and partner on turkey restoration projects. Due to restoration, turkeys are now present in every county in the state, including counties where they did not exist before (Chadwick 2005). Although turkey population increases have leveled-off, there is concern that land use changes and urbanization will erode the recent advances in turkey numbers. In order to maintain current turkey population levels into the coming decades it will be necessary to offset these anticipated habitat losses by improving brood-production and winter survival on existing turkey range. There is a continued need for public access to hunting opportunities in southern Michigan. This can be addressed in part by maintaining quality turkey hunting on state game and wildlife areas.

Habitat Need - the cause & effect relationship between habitat and species and its primary limiting habitat need:

1) In the turkey's northern range, snow depth is the primary limiting factor that restricts population expansion. Deep snow limits the availability of winter food (Wakeling & Goodwin 1999). 2) Acorns are an important and highly nutritious fall/winter food for turkeys (Dickson 1992). 3) A secondary limiting factor throughout their range is good brood cover. Openings with grasses and forbs and little or no overstory trees are preferred. More broods are produced from herbaceous cover that has abundant insect food and is tall enough to conceal the hen and poults, and yet is short enough to allow the hen to see over the vegetation (Schroeder 1985).

Habitat Objectives - the treatment or management to address the primary limiting habitat need:

- 1) In or north of the snow-belt area, provide sources of winter food that are accessible above the snow (food plots, annual grains, fruit-bearing trees or shrubs). 2) Conserve the oak component in forest stands, promote oak regeneration (use fire, reduce herbivory), and where absent, plant oak. 3) Maintain and increase the number of brood-rearing openings (forest openings, savannas, barrens, hayfields, etc): 3a) select for vegetation with open spaces between plants (warm season bunch grasses, row crops, and drill planted forages); 3b) select for vegetation that is 16-28 inches tall; and 3c) promote Farm Bill programs. 4) Plant food plots on State Wildlife/Game Areas in southern Michigan, to maintain quality turkey hunting on public accessible lands.
- Priority Geographic Areas the specific geographic areas where we should focus management for the species:

 The 27 Regional State Forest Management Plan Management Areas (3 WUP, 1 EUP, and 23 NLP) and 66 WLD Project Areas (4 NLP, 32 SELP, and 30 SWLP) that identify wild turkey as a featured species. Focus winter food management north of the snow-belt line identified by Chadwick (2005) and focus brood-rearing and oak management south of the snow-belt line.
- **Priority Landscapes** the landscape, setting, or cover-type where we should focus management within the areas above: Turkey habitat projects are best near riparian or other wildlife travel corridors, and near sources of water. Most forages, food plots, and fruit-bearing trees or shrubs grow better on loamy and drier (mesic) soils, therefore this soil type can be an indicator.

Population Goal - the goal for the species, its habitat, or a stakeholder's actions: Maintain wild turkey at 2009 population levels.

Evaluation Method - the monitoring method to measure progress towards the goal above: Annually assess population via harvests surveys and the Breeding Bird Survey.

Incidental Species – other species which may benefit from management for this species:

Black bear; elk; red-headed woodpecker; ruffed grouse; white-tailed deer; and wood duck.

References - citation for documents referenced in this guidance:

- Chadwick, S.B. 2005. Factors that influence the distribution of wild turkeys in Michigan. *In* Stewart, C.A. and V.R. Frawley eds. Wild turkey management: accomplishments, strategies, and opportunities. Proceedings of the ninth national wild turkey symposium, Grand Rapids, Michigan, 10-14 December, 2005.
- Dickson, J.G. 1992. The wild turkey: biology and management. Stackpole Books, Mechanicsburg, PA. 455 pp.
- Frawley, B. J., 2014. 2013 Michigan Spring Turkey Hunter Survey Wildlife Division Report No. 3579. Michigan Department of Natural Resources, Lansing, MI.
- National Wild Turkey Federation, 2007. North American Wild Turkey Plan Michigan synopsis. Edgefield, SC.
- Schroeder, R.L., 1985. Habitat suitability index model: eastern wild turkey. USFWS biological report 82(10.106). 33pp.
- Wakeling, B.F. and J.G. Goodwin, Jr. 1999. Merriam's turkey winter survival on the North Kaibab Ranger District following the Bridger Knoll complex fires. Proceedings of the Biennial Conference of Research on the Colorado Plateau 4:123–132.