

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

Featured Species Habitat Management Guidance for Golden-winged Warbler

Latin Name: Vermivora chrysoptera Scope: Northern Lower Peninsula

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

The golden-winged warbler (GWWA) has been identified as a SGCN (Michigan DNR 2015) and is a Partners-in-Flight priority species. Michigan populations of this species have experienced significant long term decline of on average 4.93% per year since 1966 (Sauer et al. 2014). Declines have been attributed to loss of breeding habitat, and competition or hybridization with the blue-winged warbler (Confer 1992).

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

GWWA nest in a variety of shrubby and early-successional forest sites including moist woodlands, willow and alder thickets, and young forests of sapling aspen and fire cherry (Ewert 1981). Limited tree canopy cover appears to be important (Confer and Knapp 1981), yet 'residual' trees within clear-cuts, or forest edges adjoining clearings are preferred (Hunter et al. 2001). Frech and Confer (1987) noted that 10 of 12 GWWA territories had large openings: mowed; bare ground; or marsh. Confer (1992) summarized cover needs as: patches of herbs, shrub, and scattered trees plus a forested edge. Blue-winged warblers appear to be replacing GWWA, particularly in the southern part of its range (Dunn and Garrett 1997). Roth and Lutz (2004), Martin et al. (2007), and Hanowski (2002) found high GWWA use in aspen stands up to 10-11 years post-harvest in Wisconsin and Minnesota. Habitat tracts of 25-125 acres can support several pairs and are preferred over both smaller and larger areas (Confer 1992a).

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

Forest management efforts should focus on maintaining a mosaic of lowland and grassland-shrub communities, especially alder thicket, shrub-carr, and young aspen stands (Wisconsin DNR 2005). Within priority landscapes, maintain 25% of aspen associated with lowland shrub and grasslands in the 0-10 year age class. Roth and Lutz (2004) recommended a 40-year rotation of several adjacent aspen stands such that one stand in an area always provides suitable breeding habitat. Strive for stand sizes of between 25 and 125 acres.

Priority Geographic Areas – the specific geographic areas where we should focus management for the species:

The Northern Lower Peninsula's 16 Regional State Forest Management Plan Management Areas that identify the GWWA as a featured species.

Priority Landscapes – the landscape, setting, or cover-type where we should focus management within the areas above: Aspen adjacent to lowland shrub and grasslands where GWWA is currently known to be breeding.

Population Goal - the goal for the species, its habitat, or a stakeholder's actions:

Maintain stable GWWA breeding populations in priority landscapes as indicated by continued presence in occupied stands over the course of the planning cycle.

Evaluation Method - the monitoring method to measure progress towards the goal above:

Propose identifying adequate sample of breeding-season occupied stands in priority landscapes and monitoring annually. Maintain at least 80% occupancy over the planning cycle. Propose annual monitoring for breeding season presence in at least 50% of sample points randomly selected from priority landscapes in lowland shrub stands and aspen in which a harvest was conducted between 1 and 10 years previous.

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

American woodcock; black bear; elk; ruffed grouse; snowshoe hare; wild turkey; and white-tailed deer.

References - citation for documents referenced in this guidance:

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