MICHIGAN DEPARTMENT OF NATURAL RESOURCES – <u>www.michigan.gov/dnr</u> Wildlife Division



Featured Species Habitat Management Guidance for Eastern Meadowlark

Latin Name: Sturnella magna

Scope: Statewide

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

The Eastern Meadowlark (EM) is a SGCN (Michigan DNR 2015) and is listed as a focal species for the UMRGLR Joint Venture (Potter et al. 2007). Breeding Bird Survey data for Michigan indicate an average annual decline in EM of 4.8% per year over the past 46 years (Sauer et al. 2014). Declines are thought to be due to a loss and degradation of nesting habitat caused by changes in grassland agricultural practices and conversion of grassland to other cover types (Lanyon 1995; Potter et al. 2007).

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

Preferred nesting habitat is described as: (1) moderately tall grasslands 5 - 14 inches as grasslands < 1 inch or > 30 inches are unsuitable; (2) abundant litter cover; (3) high proportion of grass for optimum coverage is 90%; and (4) having adequate song perches, either shrub coverage of 5 - 35% or artificial posts or poles greater than 6 feet (Hull 2003). The EM is not considered an area sensitive species. Breeding territories are as large as 12 acres (Hull 2003). The presence of forbs improves insect diversity for food (Lanyon 1995; Hull 2003).

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

- 1) Maintain or, where possible, increase the amount of grassland acres. The minimum patch size should be 12 acres or larger.
- 2) Where possible connect or position grassland patches as close together as possible to create larger grassland complexes.
- 3) Mow at intervals less than every three years and burn every 3 to 5 years (Hull 2003). Avoid mowing or burning during breeding season (May through August). In larger grasslands, if mowing or burning must be executed during breeding season, disturb no more than one third of the patch per season.
- 4) Where possible, select for grass varieties that grow no taller than 30 inches, or for optimum benefit, grow less than 14 inches.
- 5) Provide song perches, either shrubs amounting to less than 35% of cover or post/poles approximately 6 feet or taller.
- **Priority Geographic Areas** the specific geographic areas where we should focus management for the species: Dickinson and Menominee counties; the eastern portion of Chippewa and Mackinac counties; and all of the Lower Peninsula.
- Priority Landscapes the landscape, setting, or cover-type where we should focus management within the areas above: Prairies, savannahs, CRP lands, waterfowl production areas, hayfields, pastures, old fields, or wet meadows. Shrubland that can be converted to more open grassland types. Grasslands adjacent to row crops, alfalfa, small grain, or orchards.
- **Population Goal** the goal for the species, its habitat, or a stakeholder's actions: Increase in the number of EM.
- **Evaluation Method** the monitoring method to measure progress towards the goal above: Annually assess statewide population trends in breeding bird survey (BBS) data.
- **Incidental Species** other species which may benefit from management for this species: Bobolink; eastern bluebird; eastern cottontail; elk; and ring-necked pheasant.

References - citation for documents referenced in this guidance:

- Hull, S.D. 2003. Effects of management practices on grassland birds: Eastern Meadowlark. Northern Prairie Wildlife Research Center, Jamestown, ND. 35 pages.
- Lanyon, W.E. 1995. Eastern Meadowlark (*Sturnella magna*). *in* The Birds of North America, No. 160. (A. Poole and F. Gill, editors.) The Academy of Natural Sciences, Philadelphia, PA and The American Ornithologists' Union, Washington, D.C.
- Michigan Department of Natural Resources (DNR). 2015. Michigan Department of Natural Resources (DNR) online list of Frequently Asked Questions on the 2009 Revision of the State Endangered Species List. < <u>http://www.michigan.gov/dnr/0,1607,7-153-10370_12141-213610--,00.html</u> >. Accessed 9 Sept. 2015.
- Potter, B.A., G.J. Soulliere, D.N. Ewert, M.G. Knutson, W.E. Thogmartin, J.S. Castrale, and M.J. Roell. 2007. Upper Mississippi River and Great Lakes Region Joint Venture Landbird Habitat Conservation Strategy. U.S. Fish and Wildlife Service, Fort Snelling, MN. 124pp.
- Sauer, J. R., J. E. Hines, and J. E. Fallon, K. L. Pardieck, D. J. Ziolkowski, Jr., and W. A. Link. 2014. The North American Breeding Bird Survey, Results and Analysis 1966 - 2012. Version 02.19.2014. USGS Patuxent Wildlife Research Center, Laurel, MD