General Habitat Description for the Eastern Meadowlark (Sturnella magna)

A general habitat description is a technical document that provides greater clarity on the area of habitat protected for a species based on the general habitat definition found in the Endangered Species Act, 2007. General habitat protection does not include an area where the species formerly occurred or has the potential to be reintroduced unless existing members of the species depend on that area to carry out their life processes. A general habitat description also indicates how the species’ habitat has been categorized, as per the policy “Categorizing and Protecting Habitat Under the Endangered Species Act”, and is based on the best scientific information available.

### HABITAT CATEGORIZATION

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<th>Category</th>
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<td>1</td>
<td>Nest and the area within 10 m of the nest</td>
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<td>2</td>
<td>The area between 10 m and 100 m of the nest or centre of approximated defended territory</td>
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<td>3</td>
<td>The area of continuous suitable habitat between 100 m and 300 m of the nest or approximated centre of defended territory</td>
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**Category 1**

Eastern Meadowlark nests and the area immediately around the nest (i.e., 10 m) are highly sensitive features supporting the species’ reproduction life cycle and have the lowest tolerance to alteration. These are areas the species depends on for egg laying, incubation, and rearing of young. Nests are used daily during the nesting season (~20-30 days). Juveniles continue to receive parental care for 2 weeks following fledging. During the first week after fledging, juveniles are not capable of extended flights and rely on areas surrounding the nest site to gain experience flying and to obtain food. At 1-3 days post-fledging, juvenile movements are restricted to hopping through grass and short flights or glides between 5 and 10 m (Kershner 2004). The area immediately surrounding the nest (i.e., 10 m) is important to maintain the microclimate around the nest and provide cover from predators.

It is important to note that Eastern Meadowlark nests are rarely identified due to their cryptic nature. It is inadvisable to search for nests as this may inadvertently jeopardize the nesting site and/or offspring. However, if a nest is identified, it and the area within 10 m shall be categorized as Category 1.
**Category 2**
The area between 10 m and 100 m of the nest or centre of approximated defended territory is included in Category 2 and is considered to have a moderate level of tolerance to alteration. This area includes the species’ defended territory and is depended on daily for courtship, mating, rearing of young, feeding, resting, and bathing. Suitable habitat for this species includes but is not limited to pastures, hayfields, old or abandoned fields, and native prairies and savannahs (McCracken et al. 2013). Breeding males demonstrate strong territoriality during the breeding season (COSEWIC 2011). Eastern Meadowlark defended territories range from 1.2-6.1 ha and are on average 2.8-3.2 ha in size (or approximately the area within 100 m of a nest) (Lanyon 1995). Due to the polygynous nature of Eastern Meadowlarks, one territory may support multiple females and their nests. Both males and females show site fidelity to previously used breeding sites (Lanyon 1957, 1995).

**Category 3**
The area of continuous suitable habitat between 100 m and 300 m of a nest or centre of approximated defended territory is included in Category 3 and will be considered to have a high level of tolerance to alteration. Eastern Meadowlarks depend on this area for feeding, rearing of young, resting, dispersal and concealment from predators. This area also helps maintain the function of both Category 1 and 2 habitat. Suitable habitat for this species includes but is not limited to pastures, hayfields, old or abandoned fields, and native prairies and savannahs (McCracken et al. 2013). Eastern Meadowlarks are grassland-dependent species but may not be strongly area-sensitive (McCracken et al. 2013). Studies in the U.S. have shown that breeding density was not influenced by patch size and the species was not affected by edge density, distance to another patch of grassland or forest, cover, patch size or core area of grassland (Bollinger 1995, Winter 1998, Horn et al. 2000, McCracken et al. 2013). Nevertheless, other studies have suggested that large tracts of grasslands are preferred over smaller fragments (Herkert 1991, Vickery et al. 1994) and that there may be regional differences in the degree of sensitivity to habitat fragmentation (O’Leary and Nyberg 2000, Hull 2003, Renfrew and Ribic 2008). Minimum patch area requirements to support breeding habitat for the species have been reported at 5 ha (Herkert 1994) however abundance and productivity are higher in larger patches and in patches surrounded by other open habitats (Herkert et al. 2003, Bollinger and Gavin 2004, Ribic and Sample 2005, Keyel et al. 2011, McCracken et al. 2013).

**Activities in Eastern Meadowlark habitat**
Activities in general habitat can continue as long as the function of these areas for the species is maintained and individuals of the species are not killed, harmed, or harassed.

*Generally compatible:*
- Continuation of existing agricultural practices and planned management activities such as annual harvest, mowing, and rotational cattle grazing.
- Hiking and non-motorized vehicle use on existing recreational trails.
- General yard work such as lawn care and gardening.

*Generally not compatible:*
- Development activities that result in significant fragmentation or removal of large tracts of suitable grasslands.
- Indiscriminate application of pesticides within habitat.

* If you are considering an activity that may not be compatible with general habitat, please contact your local MNR office for more information.
Sample application of the general habitat protection for Eastern Meadowlark

Reference


