

Memorandum

Date: August 19, 2022

Project #: 2110801

To: Heather Currie

From: Angela Zhou and Rosalind Chaundy, Palmer

Re: Species at Risk Assessment – 718073 Highway 6, Georgian Bluffs

1. Introduction

Palmer is pleased to provide this letter memo for a Species at Risk (SAR) Assessment for 718073 Highway 6, Township of Georgian Bluffs. It is our understanding that a single-family dwelling is proposed to be built in the northwest corner of a severed lot (herein the “Study Area”) (**Map A**). The Study Area is approximately 1.8 ha in size. The proposed parcel will have frontage onto Grey Road 17 (or Gordon Sutherland Parkway), with the driveway located along the northerly limit of the lot and the building site within an open field area.

This letter memo has been prepared to satisfy the request by review agencies to assess for potential Species at Risk (SAR) within the open field area in the Study Area to ensure conformity with the *Endangered Species Act (ESA), 2007*. This letter memo identifies the presence/absence of suitable habitat for SAR recorded in the vicinity of the Study Area based on natural heritage background data review and three (3) field investigations to screen for the presence of suitable habitat.



Map A: Study Area is open habitat within area outlined in red.

2. Methods and Field Investigations

2.1 Background Information Review

Records of SAR for the general area were queried through the Ministry of Natural Resources and Forestry (MNRF) Natural Heritage Information Centre (NHIC) database (MNRF, 2021). A screening for potential SAR habitat opportunities was completed for the open field area in the northwest corner of the Study Area. Habitat opportunities for SAR in the open field area were then assessed by comparing habitat preferences of species deemed to have potential to occur against current site conditions.

2.2 Field Investigations

Four field investigations were conducted between October 2021 and July 2022. Weather conditions and survey type are described in **Table 1**. The site visit on October 20, 2021, included vegetation community delineation and description based on the best fit to community classifications within the standard systems provided in the *Ecological Land Classification for Southern Ontario* (Lee *et al.*, 1998).

Three field investigations were conducted on May 25, June 30, and July 7, 2022, in the morning between 5:30 to 10:00 am to survey for Bobolink and Eastern Meadowlark based on the *Survey Protocol for Eastern Meadowlark (Sturnella magna) in Ontario* (Ontario Ministry of Natural Resources, 2013) protocol.

Table 1. Field investigations for SAR birds on the Subject Property

| Date | Survey Type | Weather Conditions |
|------------------|--|-------------------------------------|
| October 20, 2021 | Ecological Land Classification, Flora Inventory, SAR Habitat Screening | 13°C, 90% cloud cover, 13 km/h wind |
| May 25, 2022 | SAR Bird Screening | 6°C, 20% cloud cover, 5 km/h wind |
| June 30, 2022 | SAR Bird Screening | 18°C, 0% cloud cover, 10 km/h wind |
| July 7, 2022 | SAR Bird Screening | 17°C, 0% cloud cover, 7 km/h wind |

3. Existing Environmental Conditions

3.1 Vegetation Communities

Dry-Moist Old Field Meadow (CUM1-1)

The open field is characterized as a Dry-Moist Old Field Meadow. This vegetation community has no trees within it and a few shrubs such as Wild Red Raspberry (*Rubus idaeus*), providing less than 10% cover. This herbaceous layer is dominated by Orchard Grass (*Dactylis glomerata*), Creeping Thistle (*Cirsium arvense*), Late Goldenrod (*Solidago altissima*), Grass-leaved Goldenrod (*Euthamia graminifolia*), Smooth Brome (*Bromus inermis*), providing greater than 60% cover (**Photo 1**). This vegetation community is approx. 0.35 ha in size and is surrounded by regenerating field with a dense young canopy cover immediately to the north and a mid-aged Sugar Maple Forest on all other sides of the open field. Other nearby open areas are active agricultural fields (i.e., corn and hay), and old fields with scattered shrubs.



Photo 1. Dry-Moist Old Field Meadow (CUM1-1). May 25, 2022.

4. Species at Risk Habitat Screening

4.1 Background Review

Based on a review of the NHIC database and professional experience, Bobolink (*Dolichonyx oryzivorus*) and Eastern Meadowlark (*Sturnella magna*) have been identified as having potential to occur within the Dry-Moist Old Field Meadow (CUM1-1) in the Study Area. Through vegetation community classification findings obtained from the field investigation for potentially suitable habitat, a habitat screening and assessment of on-site habitat suitability was completed for each of these identified species (**Table 1**). This includes a review of the habitats and the current status of each species and whether general habitat or regulated habitat protection applies under Section 10 of the provincial *ESA*.

Table 2. Species at Risk Habitat Screening

| Common Name | Species at Risk in Ontario Status | Habitat Requirement | Potential Habitat |
|--|-----------------------------------|---|-------------------|
| Bobolink (<i>Dolichonyx oryzivorus</i>) | Threatened (THR) | The bobolink is found in grasslands and hayfields, and feeds and nests on the ground. This species is widely distributed across most of Ontario; however, are designated at risk because of rapid population decline over the last 50 years (Ministry of Natural Resources and Forestry, 2014). The historical habitat of the bobolink was tallgrass prairie and other natural open meadow communities; however, as a result of the clearing of native prairies and the post-colonial increase in agriculture, bobolinks are now widely found in hayfields. Due | Y |

| Common Name | Species at Risk in Ontario Status | Habitat Requirement | Potential Habitat |
|--|-----------------------------------|---|-------------------|
| | | to their reproductive cycle, nesting habits, and use of agricultural areas, bobolink nests and young are particularly vulnerable to loss as a result of common agricultural practices (i.e. first cut hay). | |
| Eastern Meadowlark (<i>Sturnella magna</i>) | Threatened (THR) | The eastern meadowlark is a bird that prefers pastures and hayfields, but is also found to breed in orchards, shrubby fields and human use areas such as airports and roadsides. Eastern meadowlarks can nest from early May to mid-August, in nests that are built on the ground and well-camouflaged with a roof woven from grasses. The decline in population of these species is thought to be at least partially related to habitat destruction and agricultural practices (Ministry of Natural Resources and Forestry, 2014). | Y |

Bobolink and Eastern Meadowlark are dependent on grasslands, including anthropogenic grasslands habitat such as hayfields and pastures, and are known to nest in a wide variety of grassland habitats such as weedy meadows, grain fields, and herbaceous fencerows (MECP, 2019).

For Bobolink, territory size also depends on habitat, with smaller territories occurring in high-quality habitats. Reports of mean territory size range from about 0.4 ha to about 2.0 ha (MECP, 2019). They generally occur in very open grasslands, or hayfields, but could occur in this location.

For Eastern Meadowlark, territory sizes range by region but typically average 2.8 ha (MECP, 2019). This species is more likely to be present in the study area than Bobolink, since it is often found in habitats that contain scattered shrubs and young trees. Territories of Eastern Meadowlark are often quite large and an on-site territory could include lands to the north which are also suitable habitat.

4.2 Field Survey Results

No Bobolink or Eastern Meadowlark were observed or heard singing within the Study Area during any of the three surveys conducted in 2022. Bobolink and Eastern Meadowlark were observed approximately 190 m southwest of the Study Area in the adjacent parcels of agricultural and cultural meadow habitat during the May 25, 2022, survey.

5. SAR Impact Assessment and Mitigation

Since no presence of Bobolink or Eastern Meadowlark in the Study Area were detected during the targeted 2022 SAR surveys, it is felt that neither species is using the Study Area as breeding habitat, thus there is no SAR habitat present

Unrelated to SAR concerns, but relating to avian habitat, we remind the landowner that in order to avoid and mitigate impacts to other breeding birds in general, and to ensure compliance with the federal Migratory Convention Act (MBCA), removal of vegetation should ideally be completed outside of the breeding bird

season (April 1 – August 31). However, should development timing require clearing within that time, it is recommended that a qualified biologist complete an active nest search (“nest sweep”) of the trees and vegetation proposed for removal, to ensure that there are no conflicts with the MBCA. Depending on the time of year, vegetation clearing activities generally have to occur within a few days of nest search surveys. If activity is detected, clearing activities should be delayed until it can be determined that the birds have fledged and left the nest.

6. Conclusions

Based on the SAR habitat screening and field investigations for the proposed development, we anticipate no impacts to potential SAR or their habitat and no contravention of the *ESA* with the proposed single-dwelling development.

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References

- Lee, H.T., W.D. Bakowsky, J. Riley, J. Bowles, M. Puddister, P. Uhlig and S. McMurray. 1998. Ecological Land Classification for Southern Ontario: First Approximation and Its Application. Ontario Ministry of Natural Resources. SCSS Field Guide FG-02. 225 pp.
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