Appendix E.9 Bobolink Investigation

Species at Risk Survey Memo



LGL Limited

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To: Melinda Thompson-Black, Species at Risk Biologist, Ministry of Natural Resources

From: Ross Harris, Biologist, LGL Limited

CC: Katherine Mitchell, Environmental Planner, LGL Limited

Stephen Keen, Project Manager, HDR | iTRANS

Date: Thursday August 11, 2011

Re: Bobolink Survey Conducted for the Highway 50 Improvements from Castlemore Road

to Mayfield Road, and Mayfield Road from Coleraine Drive to Highway 50, Municipal

Class Environmental Assessment Study.

The Regional Municipality of Peel is undertaking a Schedule 'C' Municipal Class Environmental Assessment (Class EA) for improvements to Highway 50 from Rutherford Road/Castlemore Road to Mayfield Road, and improvements to Mayfield Road from Highway 50 to Coleraine Drive. The study limits are presented on **Figure 1**.

A number of alternatives were considered and evaluated to address future transportation needs, and a preferred alternative was selected. The preferred alternative includes the widening of the Highway 50 corridor to six lanes with a flush median centre left turn lane, and widening of the Mayfield Road corridor to four lanes with a flush median centre left turn lane.

The centreline will remain on the existing alignment, with some exceptions, to avoid sensitive features. The Highway 50 alignment has been shifted slightly to avoid impacting the cemetery on the west side of the right-of-way. The Mayfield Road alignment has been shifted at the intersection of Pillsworth Road to minimize impacts to residents located along Mayfield Road. Given the sensitivity of the fish community on the east side of Highway 50 just north of Mayfield Road, widening has been shifted to the west side, to minimize impacts to fish and fish habitat.

In a letter dated March 24, 2011, the MNR identified the potential for Bobolink (*Dolichonyx oryzivorus*) and Butternut (*Juglans cinerea*) to be present within the study area.

During the Class EA Study, a tree inventory was conducted by a Certified Arborist throughout the Highway 50 and Mayfield Road study area. No Butternut were identified within the study area.

Bobolink is regulated as 'Threatened' under the Ontario *Endangered Species Act*. To address any potential impacts of the preferred alignment on Bobolink, field surveys were undertaken during the spring of 2011. The purpose of this Species at Risk Survey Memo is to present the results of those field surveys, to confirm whether Bobolink are using the study area, and to describe the potential impacts associated with the preferred alternative to Bobolink.

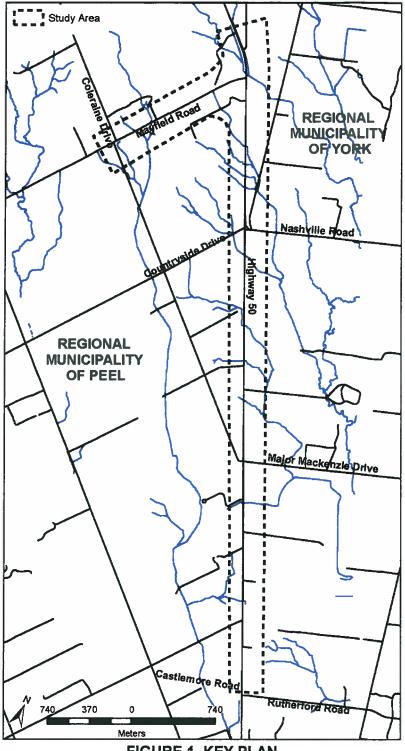


FIGURE 1. KEY PLAN

SURVEY METHODOLOGY

Surveys for Bobolink were conducted along Highway 50 and along Mayfield Road, within the study area, on three dates within the breeding bird window: May 31, June 12, and June 26, 2011. Observations were made during the early to mid-morning hours (approximately 0600 to 1000 h), when Bobolinks are more readily detectable because they typically are more active and sing more frequently. The weather conditions were sunny to cloudy, with light to moderate winds and cool to moderate temperatures (approximate 15° C to 20° C); there was no precipitation during any of the surveys.

Survey methodology consisted of driving and stopping along each shoulder of Highway 50 and Mayfield Road where field habitat existed. Most of the habitat adjacent to those two roads was field habitat. Each stop lasted at least 5 minutes, during which the field was scanned several times using 10x binoculars and the naked eye, and Bobolink songs and calls were listened for. All Bobolink observations were recorded, and the locations marked on a map. Notes also were made describing in a general way the type of habitat at each survey stop (e.g., bare earth, scattered low vegetation, tall grasses and weeds, wheat field).

SUMMARY OF FINDINGS

Bobolinks were found during each of the three surveys: 3 adult males at one location on May 31, 10 adult males scattered at five locations on June 12, and 6 adult males/1 adult female distributed at three locations on June 26, 2011. The locations where the Bobolinks were observed (Site Numbers A to F) are described in **Table 1** and presented on **Figure 2**.

Overall, Bobolinks were found at six different locations during the study, all along Highway 50 (**Table 1**, **Figure 2**). No Bobolinks were recorded along Mayfield Road.

Table 1. Summary of the locations, dates, and descriptions of Bobolink observations recorded during surveys along Highway 50 and along Mayfield Road.

		Survey Results		
Site	Location	May 31	June 12	June 26
Α		No Bobolinks observed	No Bobolinks observed	1 male: flight songs
В		No Bobolinks observed	3 males: flight songs	4 males and 1 female: flight songs and chases
С		No Bobolinks observed	1 male: perched and singing	No Bobolinks observed
D		No Bobolinks observed	2 males: perched and singing	No Bobolinks observed
E		3 males: perched and flight songs	1 male: perched and singing	No Bobolinks observed
F		No Bobolinks observed	3 males: flight songs; 1 land on roadside fence	1 male: perched and flight song

The observations made during these field investigations indicate that the territories of Bobolinks observed at most locations were not adjacent to Highway 50 (**Figure 2**). In all but one case the Bobolinks were >100 m from Highway 50, and in several cases >200 m. The one exception was of a male Bobolink in a field adjacent to the east side of Highway 50 approximately 400 m south of Mayfield Road (Site F). That Bobolink was >100 m from Highway 50 for most of the period it was being observed, during both June 12 and June 26, but it did fly to and perch momentarily on the roadside fence on June 12. Part of the territory of that bird likely was adjacent to Highway 50.

Most observations of Bobolinks were of adult males perched atop weed or grass stalks, and/or performing flight songs, sometimes in small groups of three to four individuals. During June 26, one male was seen chasing a female (Site B). While those observations do not confirm nesting, they do suggest that Bobolinks were possibly nesting. Bobolinks were observed on two surveys at three of the six locations (Table 1), which suggests that nesting was probable at those sites (Sites B, E, and F). No Bobolinks were seen at any site during all three surveys. The number of nests that these observations correlate to is not known. Bobolinks are strongly polygynous, so each observed male may have mated with several females. It is also possible that some males were unmated.

PRESENCE OF BOBOLINK WITHIN THE IMPACT ZONE OF HIGHWAY 50 IMPROVEMENTS

The impact zone within which Bobolinks may be affected includes the actual area of road widening, and potentially also a larger area of temporary disturbance associated with construction activities. Bobolinks were observed adjacent to Highway 50 only at Site F, along the east side of Highway 50 south of Mayfield Road (Figure 2). All other sites where Bobolink were observed were well outside the road-widening zone (>100 m). The zone of potential temporary disturbance is not known but is expected to be in the order of a few tens of metres. The size of the disturbance zone would vary with the time of year, and the location and extent of construction activities. For example, there would be no or minimal disturbance effects if construction activities were conducted outside of the Bobolink nesting period.

In this study area, Bobolink were observed in field habitats altered by man — agricultural and fallow fields. The locations of these habitats vary from year to year as farmers rotate their crops. Consequently, it is difficult to predict where Bobolinks may nest within the study area in future years, and thus where impacts may occur. Bobolinks will move to suitable habitat, if necessary.

CONCLUSION

Based on the results of the 2011 field surveys, potential impacts associated with the proposed road improvements to Highway 50 and Mayfield Road, to nesting Bobolinks, would occur only at Site F. The extent of potential impacts to nesting Bobolinks at that site would depend on the location of construction activities and road widening there, and to what extent those overlap with Bobolink nesting territories.

There may also be impacts to Bobolink nesting habitat associated with the proposed road improvements. However, given the narrow width of road widening, the potential loss of nesting habitat is expected to be very small and not biologically significant. The loss of habitat associated with the road improvements will be irrelevant in comparison to the future development that is likely to occur along Highway 50 following road improvements.

Please advise of any requirements for permits under the Ontario *Endangered Species Act*, based on the above findings. You may contact me directly at rharris@lgl.com, or by phoning me or Katherine Mitchell, Environmental Planner at 905-833-1244.



Ministry of Natural Resources Ministere des Richesses Naturelles Southern Region Aurora District Office 50 Bloomington Road West Aurora, ON L4G OL8

October 17, 2011

Katherine Mitchell, MCIP, RPP Environmental Planner, LGL Limited 22 Fisher Street, P.O. Box 280 King City, Ontario Canada L7B 1A6

Tel: (905) 833-1244 email: kmitchell@lgl.com

RE: Highway 50 from Castlemore Road to Mayfield Road, and Mayfield Road from Coleraine Drive to Highway 50

Dear Ms. Mitchell,

The Ministry of Natural Resources has reviewed the information that you provided on your proposed project to assess the potential impacts of the proposal on Redside Dace. From the information provided, it is our understanding that the proposed project falls within the following parameters:

- All observations of Bobolink made by your firm were outside of the area in which the road widening will occur
- Minimal work will occur in the habitat of Bobolink during the widening of the road
- No Butternuts were identified within the study area

Based on a review of the above information, Ministry staff have determined that the activities associated with the project, as currently proposed, will not adversely effect Bobolink provided the following conditions are implemented:

- 1) All works will be conducted outside of the breeding season for Bobolink
- 2) All disturbed areas will be restored immediately after construction is complete

If these conditions are implemented, the activity would not be prohibited under Section 9 (species protection) or Section 10 (habitat protection)] of the *Endangered Species Act*, 2007. Failure to carry out these projects as described above could result in contravention of the *Endangered Species Act 2007*.

Please be advised that it is your responsibility to comply with all other relevant provincial or federal legislation, municipal by-laws, other MNR approvals or required approvals from other agencies. Should any of the project parameters change, please notify the MNR Aurora District office immediately to obtain advice on whether the changes may require authorization under the *Endangered Species Act 2007*.

MNR File # AU-LOA-053-11



Ministry of Natural Resources Ministere des Richesses Naturelles Southern Region Aurora District Office 50 Bloomington Road West Aurora, ON L4G OL8

If you have any concerns or questions please contact me at 905-713-7425 or at melinda.thompson-black@ontario.ca.

Sincerely,

Melinda Thompson-Black

Melinda Thompson-Black, Species at Risk Biologist Aurora District, Ontario Ministry of Natural Resources

CC: Mark Heaton, Area Biologist, Aurora District OMNR