



2010

Wildlife Monitoring Report



What we do on the land is mirrored in the water

Working In Partnership:



Report No.: 2011-01MR

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EXECUTIVE SUMMARY

Wildlife occupy almost every habitat niche in the CLOCA jurisdiction, so monitoring them is an effective means of assessing the quality of our habitat areas. In 2010, bird monitoring occurred throughout the Lynde Creek watershed and within the Lynde Shores, Heber Down, Crow's Pass, Audley Road Woods Valleylands, and Long Sault C.A.s, as well as at each of the Coastal Wetlands in the jurisdiction. The results of these surveys included the presence of numerous area-sensitive and forest interior birds, which are indicators of habitat size and quality. This suggests that within CLOCA's conservation areas, and in some areas across the watershed, there continues to be habitat that supports many of our more sensitive bird species. Only one Species at Risk, the Bobolink, was found over the course of the surveys.

In 2010 nocturnal owl surveys were added to the wildlife monitoring program. These surveys will be conducted at select locations across each of CLOCA's watersheds and will be monitored in the same order as the watershed bird surveys. This year the Bowmanville – Soper watershed was monitored. No owls were detected.

Finally, salamander searches at Crow's Pass this year uncovered a high diversity of salamander species. In total, 4 species were found: Red Eft, Eastern Redback Salamander, Blue-spotted Salamander, and Spotted Salamander. Although salamanders have been seen at the conservation area in the past, this is the first year that staff have put effort into searching for them.



*Bee pollinating flower at Long Sault C.A.
Photo: C. Jones*

1.0 INTRODUCTION

Knowledge about watershed health, and the impacts that development may have on watershed health, is the backbone of all sound planning decisions. In order to facilitate such decisions, the Central Lake Ontario Conservation Authority (CLOCA) conducts long-term monitoring for aquatic and terrestrial conditions, as well as water quality and quantity. The information gathered through these programs enables CLOCA to better understand the existing conditions within a watershed, determine ecological trends over time, and provide guidance to planning agencies to assist them in making informed land-use decisions.

1.1 Background

The CLOCA jurisdiction is approximately 638 km² and its boundaries are defined by the 15 watersheds that drain this area into Lake Ontario. 7 of these watersheds are large, originating on the Oak Ridges Moraine. They are:

- Lynde Creek
- Oshawa Creek
- Black-Harmony-Farewell Creeks, and
- Bowmanville-Soper Creeks.

These watersheds, as they have been grouped, define the monitoring areas for watershed management and planning. The remaining watersheds are relatively small and for monitoring purposes are generally grouped together and labeled “small watersheds”. This grouping, from west to east, includes:

- Cranberry
- Pringle Creek
- Corbett Creek
- Pumphouse
- Robinson Creek
- Tooley Creek
- Darlington Creek
- Bennett Creek, and
- Westside Creek.

Seven municipalities are located in whole or in part within the CLOCA jurisdiction. They are the Cities of Oshawa and Pickering, the Towns of Ajax and Whitby, the Municipality of Clarington, and the Townships of Scugog and Uxbridge. CLOCA is entirely located within the Regional Municipality of Durham. The Authority works in partnership with each of these planning agencies to provide information on the terrestrial and aquatic conditions within their boundaries, and assists them in making planning decisions that are consistent with the natural heritage values set out in the Provincial Policy Statement (2005).

Figure 1 depicts the CLOCA jurisdiction, its watersheds, and the lower tier municipalities within its boundaries.

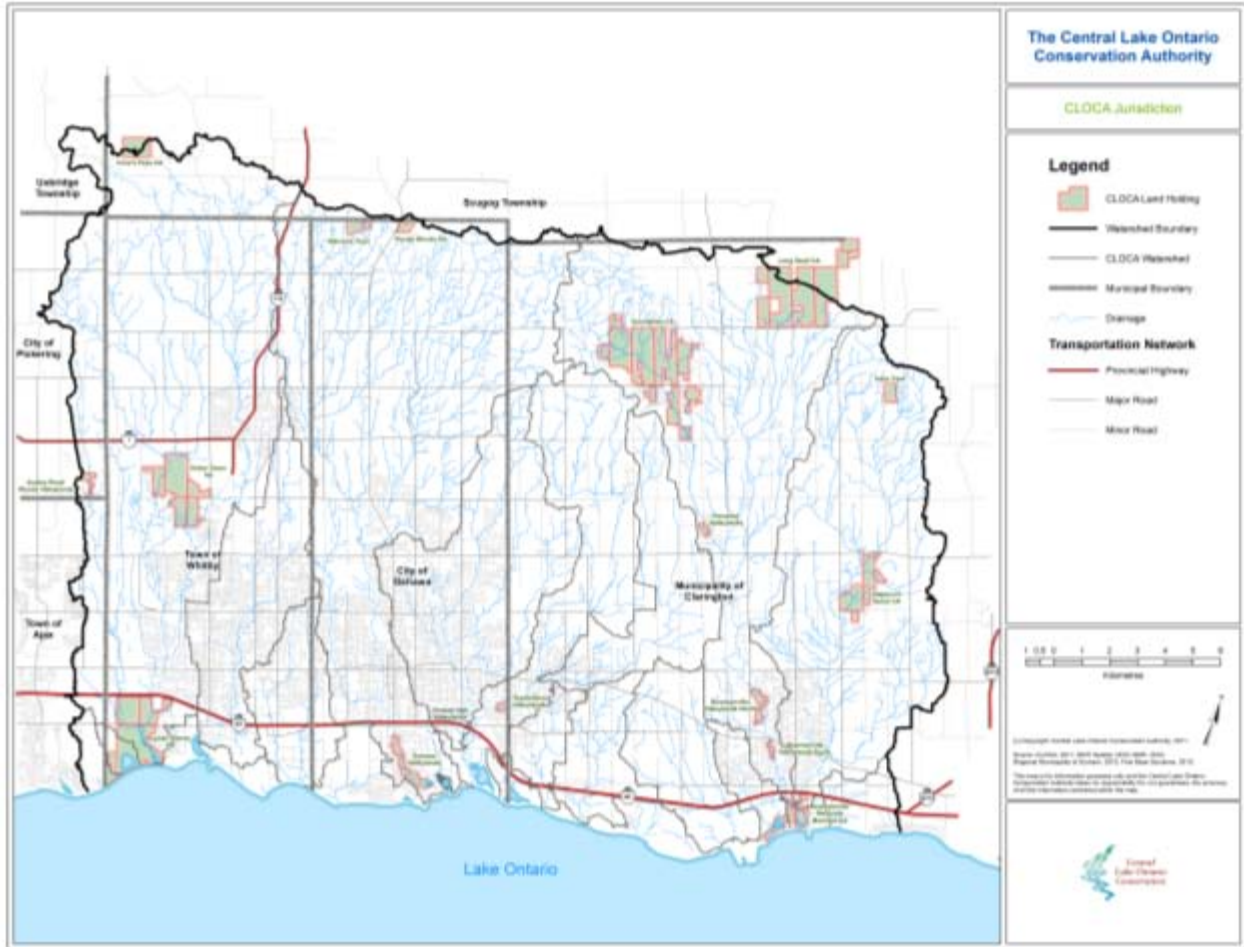


Figure 1: CLOCA jurisdiction.

1.2 Monitoring Wildlife

Wildlife occupy virtually every niche and habitat type in the CLOCA jurisdiction: some species are specialized to one habitat type and others can thrive in almost any habitat, but the presence or absence of any given species can offer some insight into the overall health of the ecosystem. This is the importance of monitoring wildlife in the CLOCA jurisdiction.

Birds and amphibians are the most commonly monitored wildlife because they attract mates using songs, and consequently can be readily counted and identified. Furthermore, both of these wildlife groups contain some individuals that are more sensitive to habitat change or degradation and others that are more tolerant. The identification of certain species in a monitoring location, therefore, can be used to assess the overall quality of that habitat.

Knowing where high quality habitats exist in a watershed is important not only for assessing the overall health of each watershed, but also improving land management and guiding development. Without this knowledge, sensitive habitat and the wildlife that depend on them are at risk of being lost.

2.0 BIRD MONITORING

2.1 Conservation Area Management

Bird monitoring has occurred in each of CLOCA's Conservation Areas in the past, however due to resource constraints it is not possible to conduct bird monitoring annually at every location. As such, CLOCA's Conservation Area bird monitoring program is generally set up to coincide with the development of Conservation Area and Watershed Management Plans so that current data can be incorporated into these documents.

As Table 1 outlines, Lynde Shores, Heber Down, Long Sault, Bowmanville-Westside Marshes, Audley Road Woods Valleylands, and Crow's Pass were targeted for bird monitoring in 2010.

Table 1: Bird Monitoring efforts within CLOCA's Conservation Areas

CONSERVATION AREA	2010 BIRD MONITORING (PROGRAM*)
Lynde Shores	Yes (CAMP/MMP/WMP)
Heber Down	Yes (CAMP/FBMP/WMP)
Crow's Pass	Yes (WMP)
Audley Road Woods Valleylands	Yes (CAMP/WMP)
Purple Woods	No
Rhamani	No
Toadhollow	No
Oshawa Valleylands	No
Bowmanville-Westside Marshes	Yes (MMP)
Bowmanville Valleylands	No
Stephen's Gulch	No
Enniskillen Valley	No
Hampton Pond	No
Cane Tract (New acquisition)	No
Long Sault	Yes (FBMP)

*MMP (Marsh Monitoring Program); FBMP (Forest Bird Monitoring Program); WMP (Watershed Management Planning); CAMP (Conservation Area Management Planning)

The rationale for this monitoring schedule is as follows:

- Lynde Creek and Cranberry Marshes (part of Lynde Shores C.A.), and Bowmanville and Westside Marshes (part of Bowmanville – Westside Marshes C.A.) are coastal wetlands and as such are monitored annually in conjunction with the Durham Region Coastal Wetland Monitoring Project (DRCWMP);
- Heber Down C.A. and Long Sault C.A. are monitored as part of Environment Canada's Forest Bird Monitoring Program (FBMP) and are therefore surveyed annually; and,
- All other conservation areas within the Lynde Creek watershed were monitored in 2010 as part of the Lynde Creek Watershed Management Plan. These areas included the terrestrial part of

Lynde Shores C.A., Audley Road Woods Valleylands, additional areas within Heber Down C.A., and Crow's Pass C.A.

The data collected from each of these initiatives is discussed in the subsections below.

2.1.1 Durham Region Coastal Wetland Monitoring Project

Wildlife data collected through the DRCWM Project is published annually by CLOCA. Please refer to the Durham Region Coastal Wetland Monitoring Report 2010 for information relating to this project.

2.1.2 Forest Bird Monitoring Program

Table 2 outlines the 2010 FBMP results for Heber Down Conservation Area and Table 3 contains the 2010 FBMP results for Long Sault. The locations of these monitoring stations are shown in Figure 2 and Figure 3 respectively. No species at risk, either federal or provincial, or species tracked by the Natural Heritage Information Centre (NHIC), were observed during the course of any of the FBMP surveys.

Area sensitive and/or forest interior birds, including Black-throated Green Warbler, Ovenbird, Broad-winged Hawk, Northern Waterthrush and Winter Wren were identified at stations throughout the Heber Down survey area.



The complete list of area sensitive / forest interior birds can be found in Table 2; they are marked with an asterisk. Many of the same species, such as Ovenbird, Winter Wren, Northern Waterthrush and Black-throated Green Warbler have been recorded along this route for numerous years. This is a

good indication that the forest habitat within this Conservation Area, and specifically within this forest block, continues to be of relatively good quality and adequate size for some of the more habitat-sensitive wildlife.

Although it is not possible to determine if all of the birds observed during the FBMP surveys were breeding, or were successful in their breeding attempts, it can be assumed that if a species was heard in suitable habitat, it is a *Possible Breeder*. Birds that were recorded in suitable habitat at the same station on both visits can be considered *Probable Breeder*. These species are highlighted in Table 2 in bold font.

Table 2: Forest Bird Monitoring Program results for Heber Down C.A. (2010)

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Station A						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station B						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Brown Creeper*	<i>Certhia americana</i>			5	2	No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station C						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Downy Woodpecker	<i>Picoides pubescens</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station D						
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Broad-winged Hawk*	<i>Buteo platypterus</i>			5	1	No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Station E						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Winter Wren*	<i>Troglodytes troglodytes</i>			5	3	No
Station F						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
American Woodcock	<i>Scolopax minor</i>			5	4	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Northern Waterthrush*	<i>Seiurus noveboracensis</i>			5	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Winter Wren*	<i>Troglodytes troglodytes</i>			5	3	No

*Species that are Area Sensitive or require Interior habitats; Species in bold are considered *Probable Breeders*.

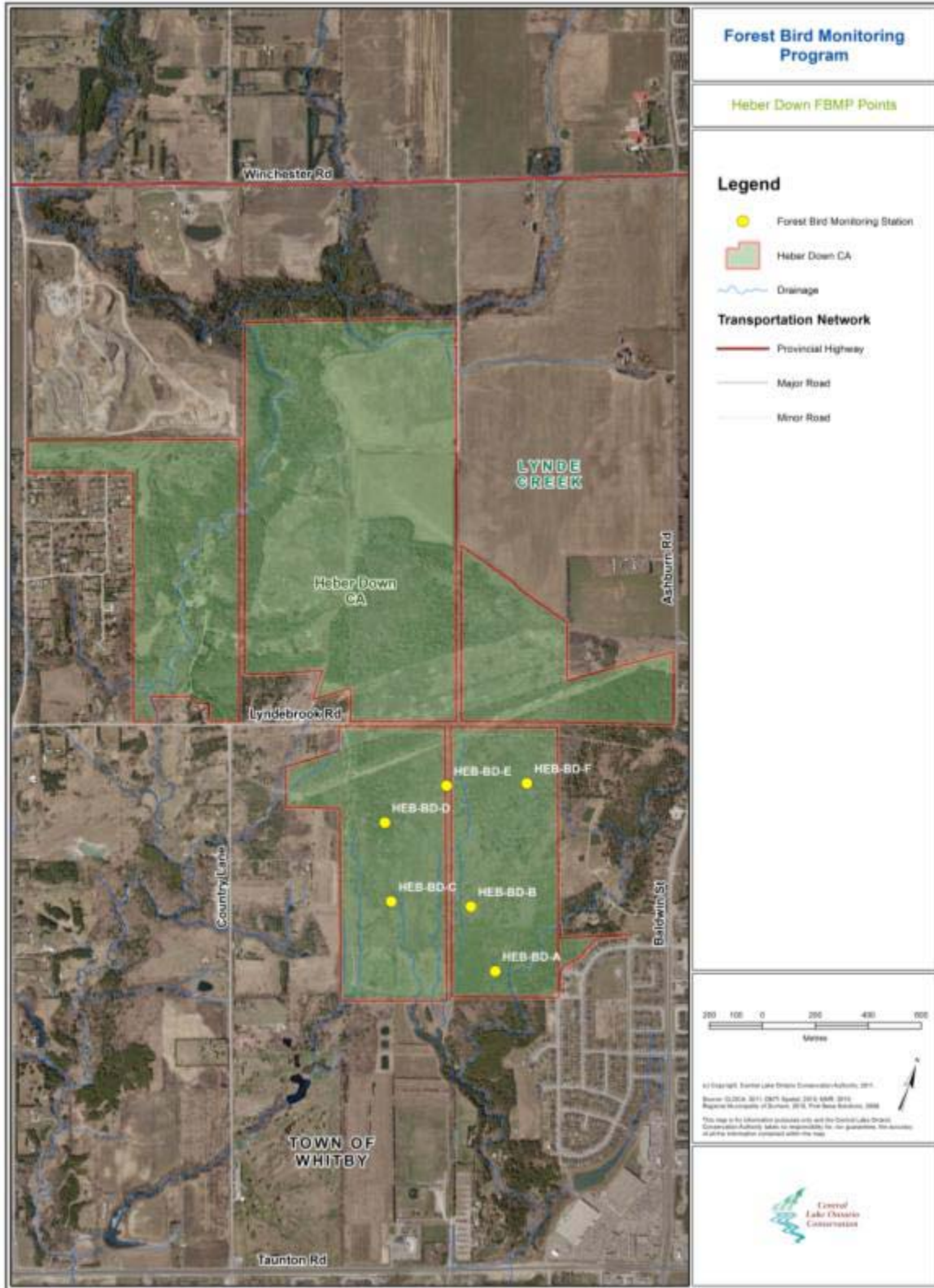


Figure 2: Forest Bird Monitoring Program point count locations at Heber Down C.A.

Area sensitive / forest interior birds recorded within the Long Sault Conservation Area included Black-throated Blue Warbler, Red-shouldered Hawk, Ovenbird, White-breasted Nuthatch, Veery, Scarlet Tanager, and Pileated Woodpecker. The Northern Goshawk nest that was found in 2009 was not present in 2010.

As has been observed at Heber Down C.A., many of these sensitive/specialist species are recorded along this route every year, which is a positive sign that the quality and size of forest habitat at this conservation area continues to be good.

Table 3: Forest Bird Monitoring Program results for Long Sault C.A. (2010)

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Station A						
American Robin	<i>Turdus migratorius</i>			5		No
Black-throated Blue Warbler*	<i>Dendroica caerulescens</i>			5	3	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station B						
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station C						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Ovenbird	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Station D						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Pileated Woodpecker*	<i>Dryocopus pileatus</i>			4	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-shouldered Hawk*	<i>Buteo lineatus</i>		N	4	1	Yes
Station E						
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Brown Creeper*	<i>Certhia americana</i>			5	2	No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-breasted Nuthatch*	<i>Sitta canadensis</i>			5	3	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station F						
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Canada Goose	<i>Branta canadensis</i>			5		No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Pileated Woodpecker*	<i>Dryocopus pileatus</i>			4	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No

*Species that are Area Sensitive or require Interior habitats; Species in bold are considered *Probable Breeders*.

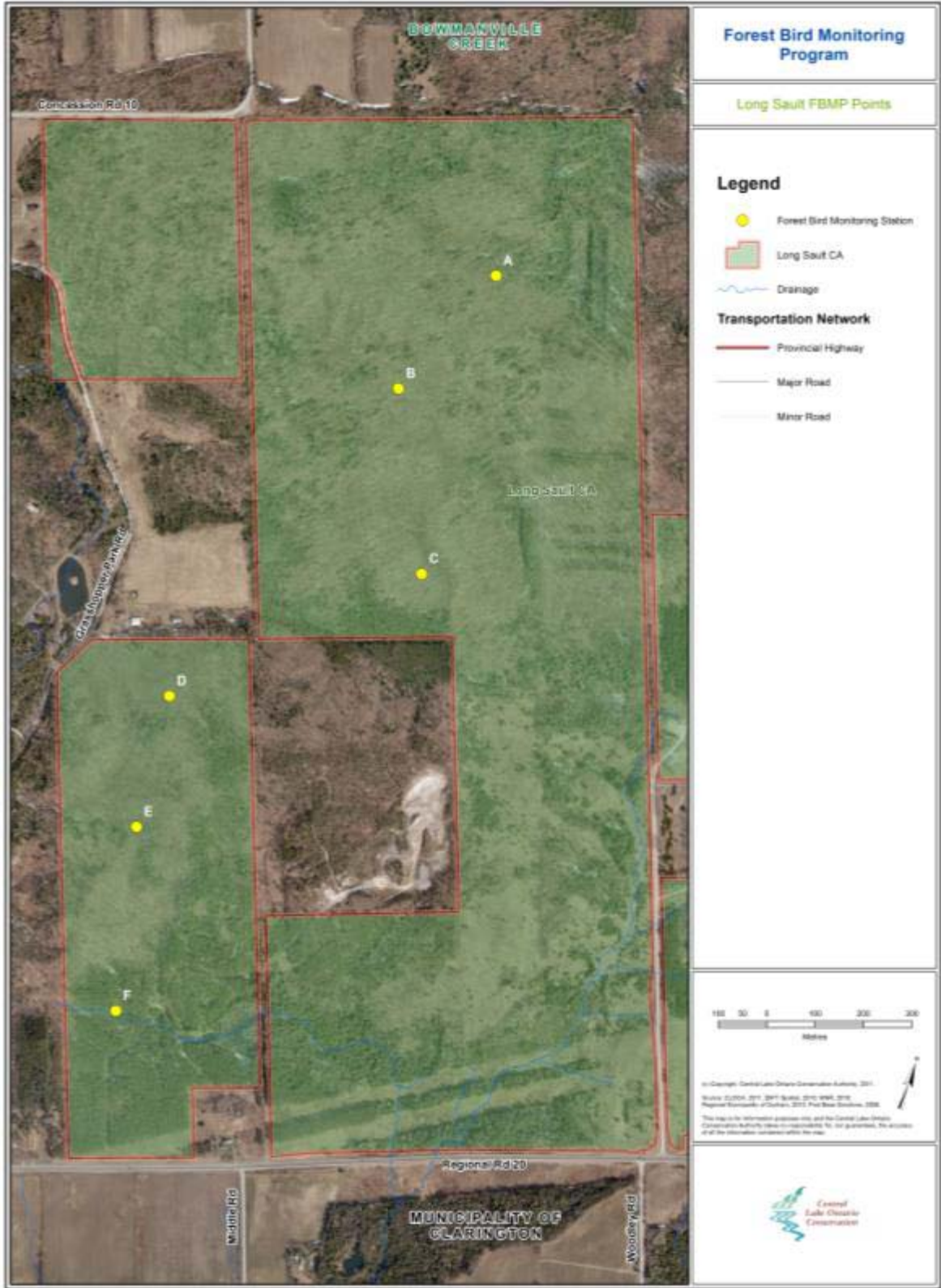


Figure 3: Forest Bird Monitoring Program point count locations at Long Sault C.A.

2.1.3 Conservation Area Management Planning

In 2010, Heber Down, Audley Road Woods Valleylands, Crow’s Pass, and Lynde Shores Conservation Areas were targeted for monitoring to coincide with the development of new C.A. management plans, update existing plans, or contribute to the watershed-wide monitoring effort conducted in the Lynde Creek watershed. The following sections contain the data collected for each conservation area as well as a brief discussion about the findings at each location.

Monitoring points were established in each of the C.A.s according to the standards set out in the Forest Bird Monitoring Program, although point locations were not limited to forest habitats. As with the FBMP surveys, these points were visited twice within the breeding season and breeding status was assigned based on whether an individual was heard in suitable habitat in the same location on both visits. As before, species heard only once were considered *Possible Breeders* and individuals heard on both visits were considered *Probable Breeders*.

HEBER DOWN CONSERVATION AREA

As has been previously discussed, the southern portion of Heber Down C.A. is surveyed annually via the FBMP (see Figure 2), so survey points were only established in the north part of the conservation area. The location of these points is identified in Figure 4.

Species diversity was very good, which is not surprising given the diversity of habitat types present within this C.A. Area sensitive species were recorded at every station, which is a positive reflection of the habitat quality at Heber Down. Some of those sensitive species included Blackburnian Warbler, Northern Waterthrush, Hairy Woodpecker, Savannah Sparrow, Eastern Meadowlark, and Cooper’s Hawk. The full list of species appears in Table 4.

One species at risk was recorded during the surveys: Bobolink. This species is identified as “Threatened” in Canada and has most recently been added to Ontario’s Species at Risk list as “Threatened” as well. It is considered at risk in large part due to habitat loss (either removal or succession of grasslands) and the intensification of farming practices. Populations of grassland birds have been declining in general, so it is encouraging to see grassland species such as Bobolink and Savannah Sparrow present in the conservation area.

Table 4: Bird monitoring results for Heber Down C.A. (2010)

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Station HD-1						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Blackburnian Warbler*	<i>Dendroica fusca</i>			5	2	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Nashville Warbler	<i>Vermivora ruficapilla</i>			5	1	No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-breasted Nuthatch*	<i>Sitta canadensis</i>			5	3	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station HD-2						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station HD-3						
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Station HD-4						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-and-white Warbler*	<i>Mniotilta varia</i>			5	3	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Blue-winged Warbler	<i>Vermivora pinus</i>			4	1	No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Station HD-5						
American Robin	<i>Turdus migratorius</i>			5		No
Belted Kingfisher	<i>Ceryle alcyon</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Nashville Warbler	<i>Vermivora ruficapilla</i>			5	1	No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station HD-6 (only done once as noise issue during 2nd visit)						
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Chipping Sparrow	<i>Spizella passerina</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Meadowlark*	<i>Sturnella magna</i>			5	3	No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Station HD-7						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Eastern Kingbird	<i>Tyrannus tyrannus</i>			5	3	No
Eastern Meadowlark*	<i>Sturnella magna</i>			5	3	No
European Starling	<i>Sturnus vulgaris</i>					No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Wilson's Snipe	<i>Gallinago delicata</i>					No
Station HD-8						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Redstart*	<i>Setophaga ruticilla</i>			5	2	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Chipping Sparrow	<i>Spizella passerina</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>			4	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Station HD-9						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Cooper's Hawk*	<i>Accipiter cooperii</i>		N	4	3	No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Northern Waterthrush*	<i>Seiurus noveboracensis</i>			5	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Ruffed Grouse	<i>Bonasa umbellus</i>			5	3	No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station HD-10						
Alder Flycatcher	<i>Empidonax alnorum</i>			5	3	No
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Downy Woodpecker	<i>Picoides pubescens</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Hairy Woodpecker*	<i>Picoides villosus</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Mourning Dove	<i>Zenaida macroura</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Swamp Sparrow	<i>Melospiza georgiana</i>			5	2	No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station HD-12						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Downy Woodpecker	<i>Picoides pubescens</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Northern Waterthrush*	<i>Seiurus noveboracensis</i>			5	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Station HD-13						
Alder Flycatcher	<i>Empidonax alnorum</i>			5	3	No
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Downy Woodpecker	<i>Picoides pubescens</i>			5		No
Eastern Kingbird	<i>Tyrannus tyrannus</i>			5	3	No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>			4	2	No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Swamp Sparrow	<i>Melospiza georgiana</i>			5	2	No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station HD-14						
Alder Flycatcher	<i>Empidonax alnorum</i>			5	3	No
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Field Sparrow	<i>Spizella pusilla</i>			5	3	No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Nashville Warbler	<i>Vermivora ruficapilla</i>			5	1	No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
White-throated Sparrow	<i>Zonotrichia albicollis</i>			5	1	No

*Species that are Area Sensitive or require Interior habitats; Species in bold are considered *Probable Breeders*.



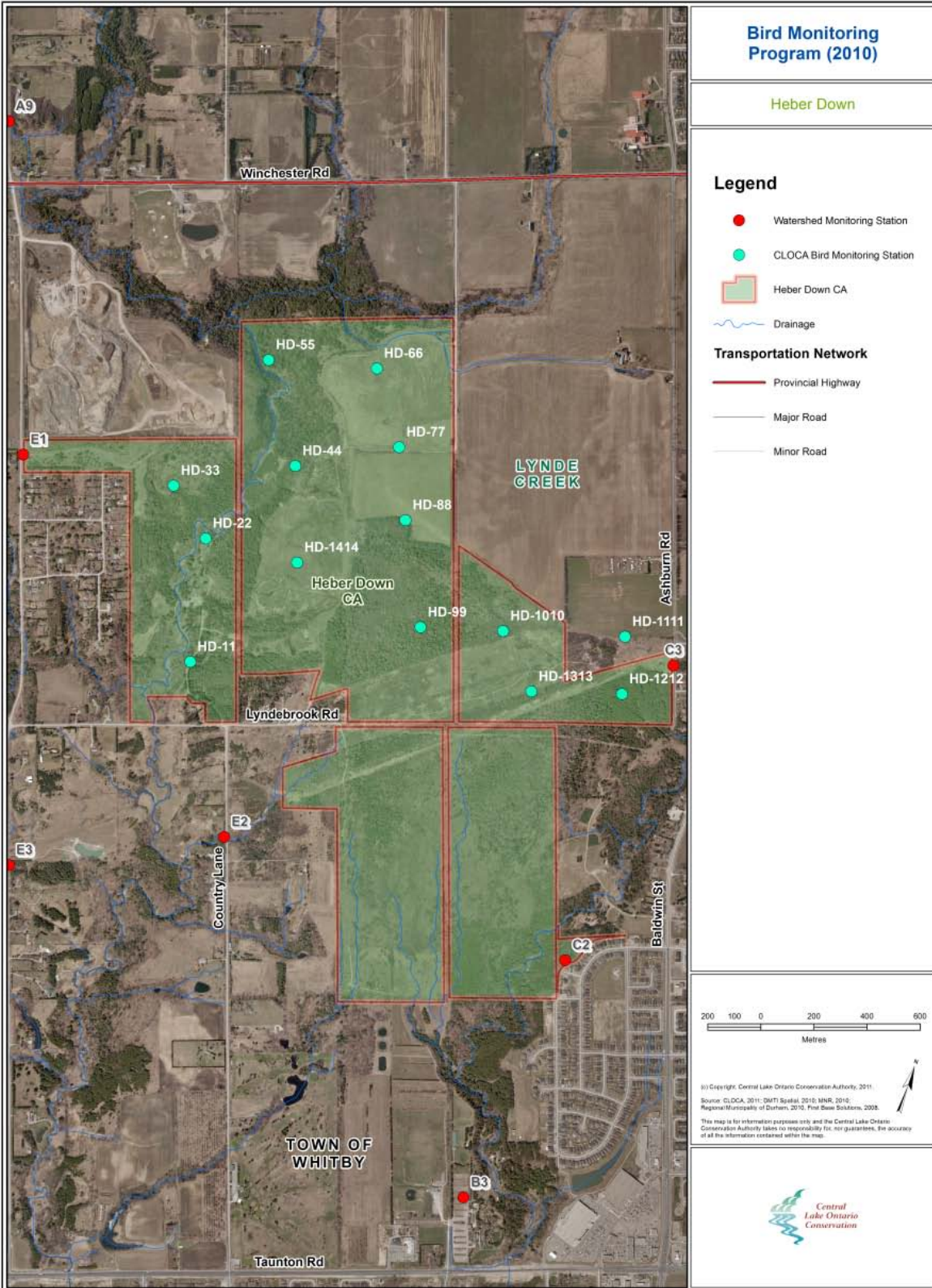


Figure 4: Bird monitoring locations at Heber Down C.A.

LYNDE SHORES CONSERVATION AREA

In addition to the bird monitoring that occurs annually at Lynde Creek and Cranberry Marshes, terrestrial monitoring stations were established in the Lynde Shores Conservation Area in 2010. Three main areas were identified to make surveying easier (Figure 5):

- Lynde Shores North – C.A. lands located north of Victoria Rd.;
- Lynde Shores South – C.A. lands south of Victoria Rd and east of Cranberry Marsh; and,
- Cranberry West – C.A. lands south of Victoria Rd and west of Cranberry Marsh.

The data collected at Lynde Shores is extensive, which is a reflection of the size of the property as well as the diversity of habitats. These habitats include open water marsh, swamp, grassland/fallow field, bluffs, and mature forest, and as expected birds that favour each of these habitats were recorded during the surveys. Area sensitive grassland birds such as Savannah Sparrow, Grasshopper Sparrow, and Bobolink (Threatened) were observed within the C.A. as well as forest breeders, although there are fewer large, high quality forest blocks at Lynde Shores than in some of CLOCA's other C.A.s. Table 5 lists all of the species recorded at the Lynde Shores C.A. as part of this monitoring initiative.

Bobolink was the only Species at Risk identified during the surveys, and as has been previously mentioned, this species is newly listed in Ontario. Its presence at multiple monitoring stations across the property is evidence of the abundance of suitable habitat within the C.A. and evidence of successful breeding was recorded in the south part of Lynde Shores where active mowing has been undertaken by CLOCA to ensure that grassland habitats remain in the conservation area.



Table 5: Bird monitoring results for Lynde Shores C.A. (2010)

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Station A (North)						
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station B (North)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Grasshopper Sparrow*	<i>Ammodramus savannarum</i>			4	3	No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station C (North)						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Redstart*	<i>Setophaga ruticilla</i>			5	2	No
American Robin	<i>Turdus migratorius</i>			5		No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Station D (North)						
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station E (North)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Station F (North)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Blackburnian Warbler*	<i>Dendroica fusca</i>			5	2	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Station E (North)						
Alder Flycatcher	<i>Empidonax alnorum</i>			5	3	No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station A (South)						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Chipping Sparrow	<i>Spizella passerina</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Loon*	<i>Gavia immer</i>		N	4	2	No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Gray Catbird	<i>Dumetella carolinensis</i>			5	4	No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Mallard	<i>Anas platyrhynchos</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station B (South)						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Great Blue Heron	<i>Ardea herodias</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station C (South)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Kingbird	<i>Tyrannus tyrannus</i>			5	3	No
Great Blue Heron	<i>Ardea herodias</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Ring-billed Gull	<i>Larus delawarensis</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station D (South)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station E (South)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Blackpoll Warbler	<i>Dendroica striata</i>			4		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Kingbird	<i>Tyrannus tyrannus</i>			5	3	No
Great Blue Heron	<i>Ardea herodias</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Osprey	<i>Pandion haliaetus</i>			4	2	No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station F (South)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Eastern Kingbird	<i>Tyrannus tyrannus</i>			5	3	No
Great Blue Heron	<i>Ardea herodias</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station A (Cranberry West)						
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Bank Swallow	<i>Riparia riparia</i>			5	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Canada Goose	<i>Branta canadensis</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
European Starling	<i>Sturnus vulgaris</i>					No
Great Blue Heron	<i>Ardea herodias</i>			5		No
House Sparrow	<i>Passer domesticus</i>					No
House Wren	<i>Troglodytes aedon</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Ring-billed Gull	<i>Larus delawarensis</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station B (Cranberry West)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Great Blue Heron	<i>Ardea herodias</i>			5		No
House Sparrow	<i>Passer domesticus</i>					No
Least Flycatcher*	<i>Empidonax minimus</i>			5	3	No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Ring-billed Gull	<i>Larus delawarensis</i>			5		No
Ruby-throated Hummingbird	<i>Archilochus colubris</i>			5	3	No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station C (Cranberry West)						

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Chipping Sparrow	<i>Spizella passerina</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Warbling Vireo	<i>Vireo gilvus</i>			5		No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station D (Cranberry West)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Bank Swallow	<i>Riparia riparia</i>			5	2	No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Great Blue Heron	<i>Ardea herodias</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Ring-billed Gull	<i>Larus delawarensis</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station E (Cranberry West)						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Canada Goose	<i>Branta canadensis</i>			5		No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
House Wren	<i>Troglodytes aedon</i>			5		No
Marsh Wren	<i>Cistothorus palustris</i>			5	2	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Swamp Sparrow	<i>Melospiza georgiana</i>			5	2	No
Station F (Cranberry West)						
American Robin	<i>Turdus migratorius</i>			5		No
Barn Swallow	<i>Hirundo rustica</i>			5	3	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Canada Goose	<i>Branta canadensis</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Great Blue Heron	<i>Ardea herodias</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Killdeer	<i>Charadrius vociferus</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Red-tailed Hawk	<i>Buteo jamaicensis</i>	N		5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Ring-billed Gull	<i>Larus delawarensis</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Station G (Cranberry West)						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Canada Goose	<i>Branta canadensis</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Yellow Warbler	<i>Dendroica petechia</i>			5		No

*Species that are Area Sensitive or require Interior habitats; Species in bold are considered *Probable Breeders*.

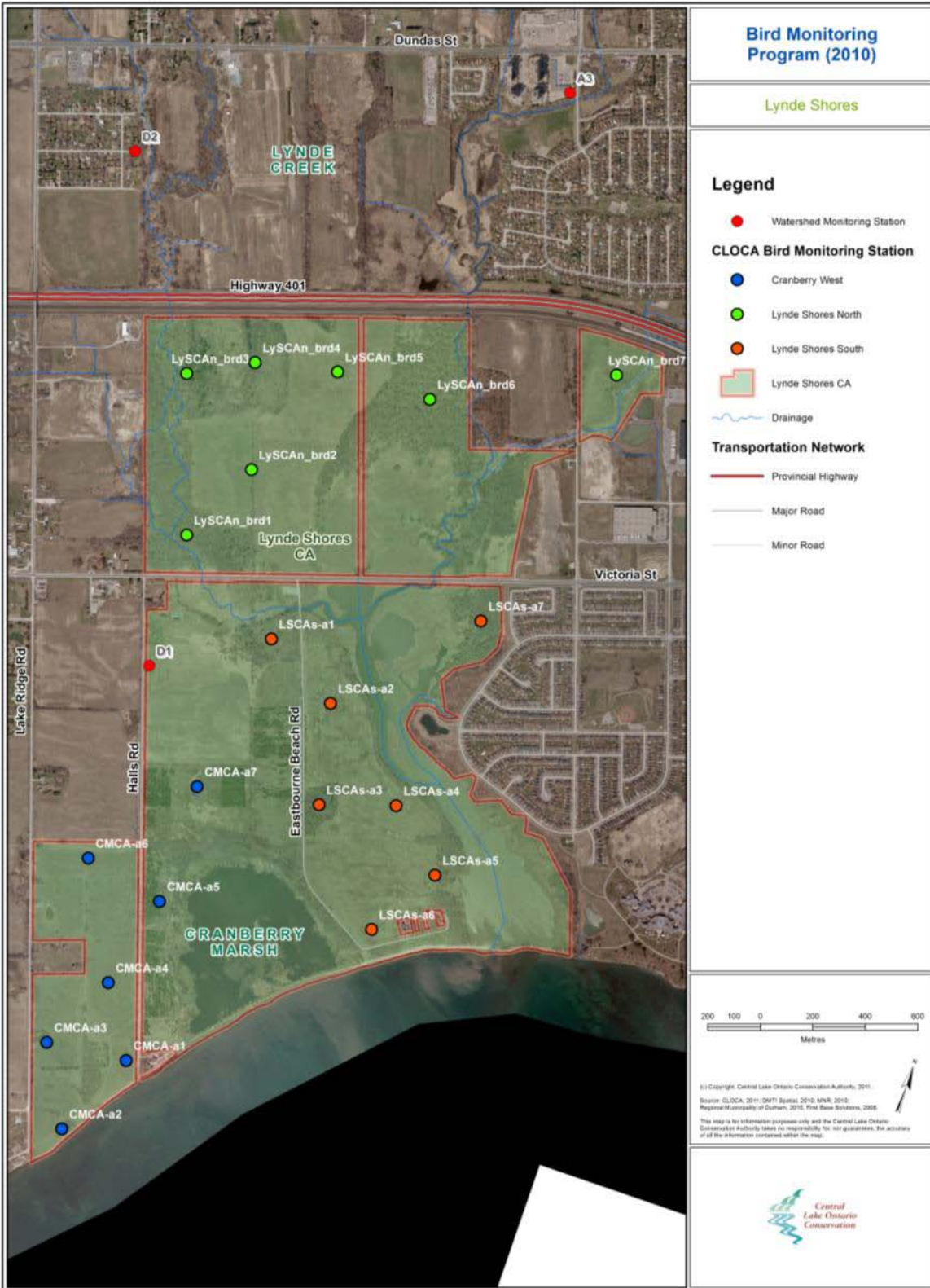


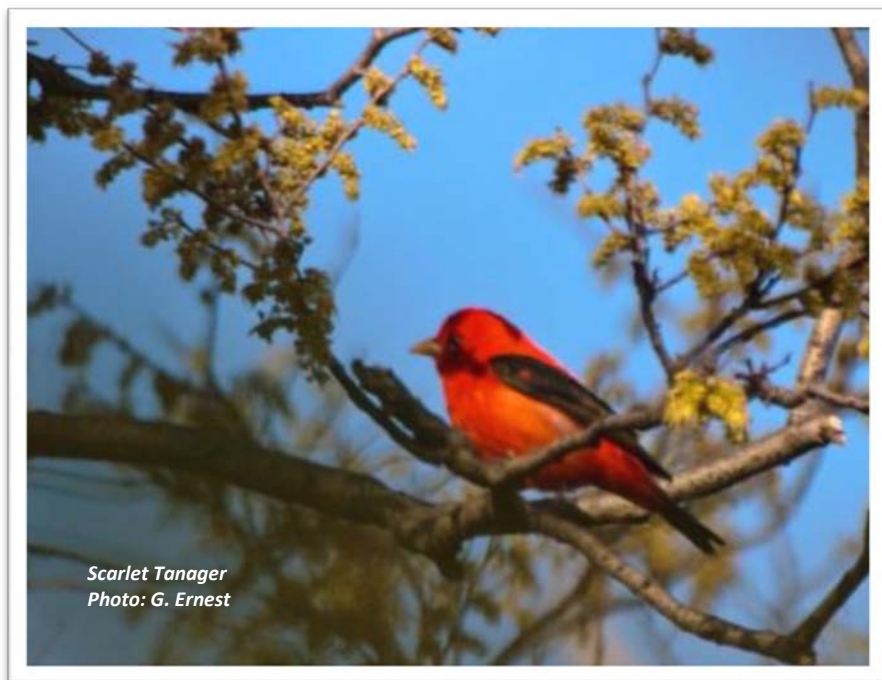
Figure 5: Bird monitoring locations at Lynde Shores C.A.

CROW'S PASS CONSERVATION AREA

Bird monitoring was undertaken at Crow's Pass C.A. in 2010 because of its location in the Lynde Creek watershed, which was being monitored on a watershed-wide basis.

Crow's Pass contains a mix of habitat types, so there was once again a range of species observed, but one habitat of particular note in this C.A. is a large tract of mature deciduous forest that extends north, well beyond the C.A.

boundary. This type of habitat is preferable for raptors such as Red-shouldered Hawk and Broad-winged Hawk, which was observed during this survey. Not surprisingly, forest interior birds such as Veery, Ovenbird, Black-throated Green Warbler, and Scarlet Tanager were abundant in the C.A. as well. A complete list of species observed during the surveys is included in Table 6 and the location of each monitoring station can be found in Figure 6.



No Species at Risk were identified during the surveys, however, a Hooded Warbler (Special Concern in Ontario and Threatened in Canada) was observed by CLOCA staff at the conservation area during an earlier field visit. In addition, Blue-winged Warblers, which are Rare in Durham Region, were frequently observed between the monitoring stations.

Table 6: Bird monitoring results for Crow's Pass C.A. (2010)

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Station A						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Station B						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-and-white Warbler*	<i>Mniotilta varia</i>			5	3	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Chipping Sparrow	<i>Spizella passerina</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Station C						
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Broad-winged Hawk*	<i>Buteo platypterus</i>			5	1	No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Station D						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Hairy Woodpecker*	<i>Picoides villosus</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Station E						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Station F						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Scarlet Tanager*	<i>Piranga olivacea</i>			5	2	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No

*Species that are Area Sensitive or require Interior habitats; Species in bold are considered *Probable Breeders*.

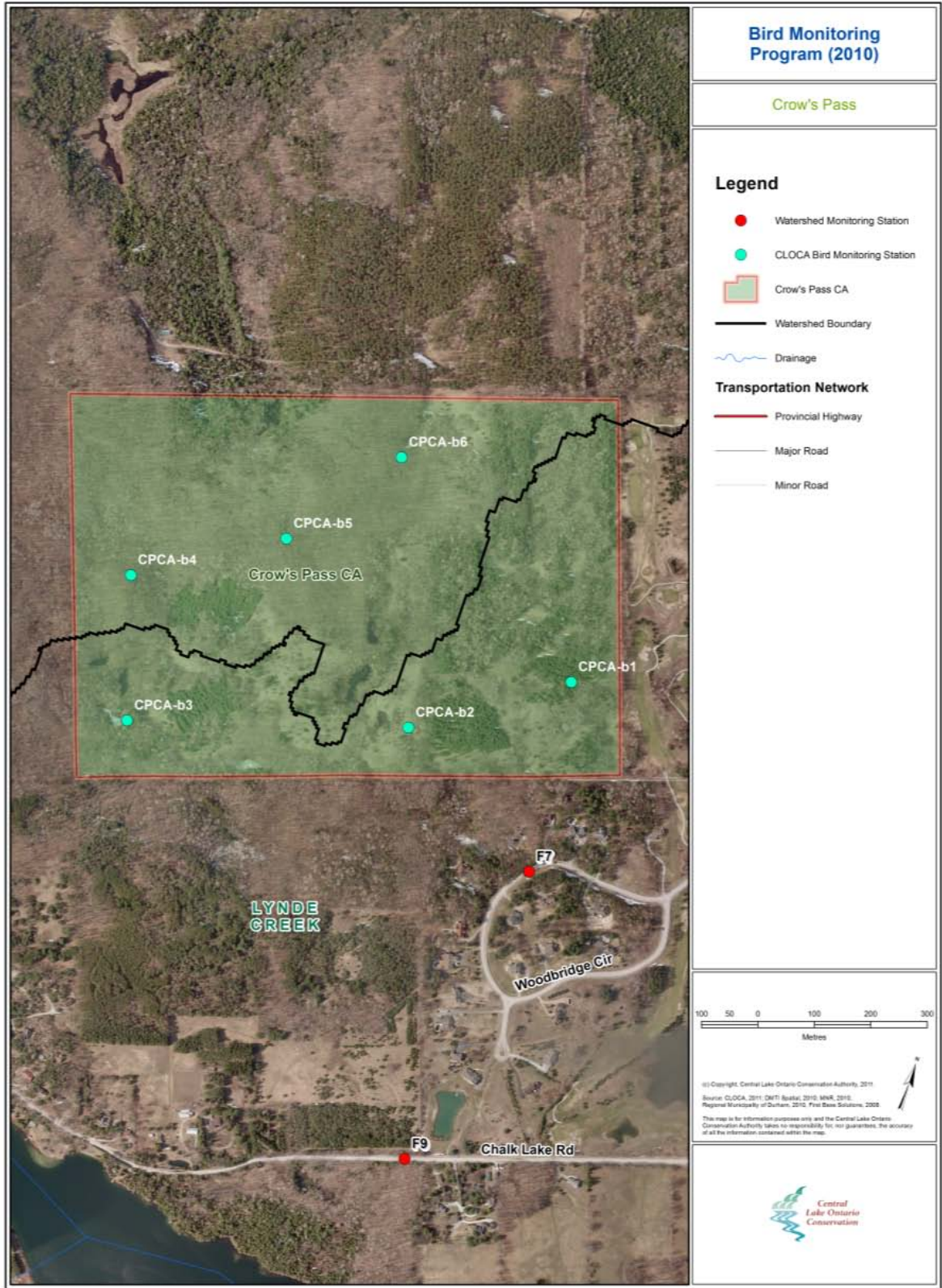


Figure 6: Bird monitoring locations at Crow's Pass C.A.

AUDLEY ROAD WOODS VALLEYLANDS

This area is located on the east side of Audley Rd. between 5th Concession and Hwy 7 in Pickering. Although it is a relatively small forested property, the presence of area sensitive / forest interior species, such as Ovenbird and Veery, suggests that the habitat is generally undisturbed and of good quality.

The species observed during the surveys at this C.A. are listed in Table 7 and the locations of each station appear in Figure 7. No species at risk were identified in this conservation area.

Table 7: Bird monitoring results for Audley Road Woods Valleylands (2010)

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Station 1						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-breasted Nuthatch*	<i>Sitta canadensis</i>			5	3	No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Wild Turkey	<i>Meleagris gallopavo</i>			4		No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station 2						
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Station 3						
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Robin	<i>Turdus migratorius</i>			5		No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Hairy Woodpecker*	<i>Picoides villosus</i>			5		No
House Wren	<i>Troglodytes aedon</i>			5		No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No

*Species that are Area Sensitive or require Interior habitats; Species in bold are considered *Probable Breeders*.



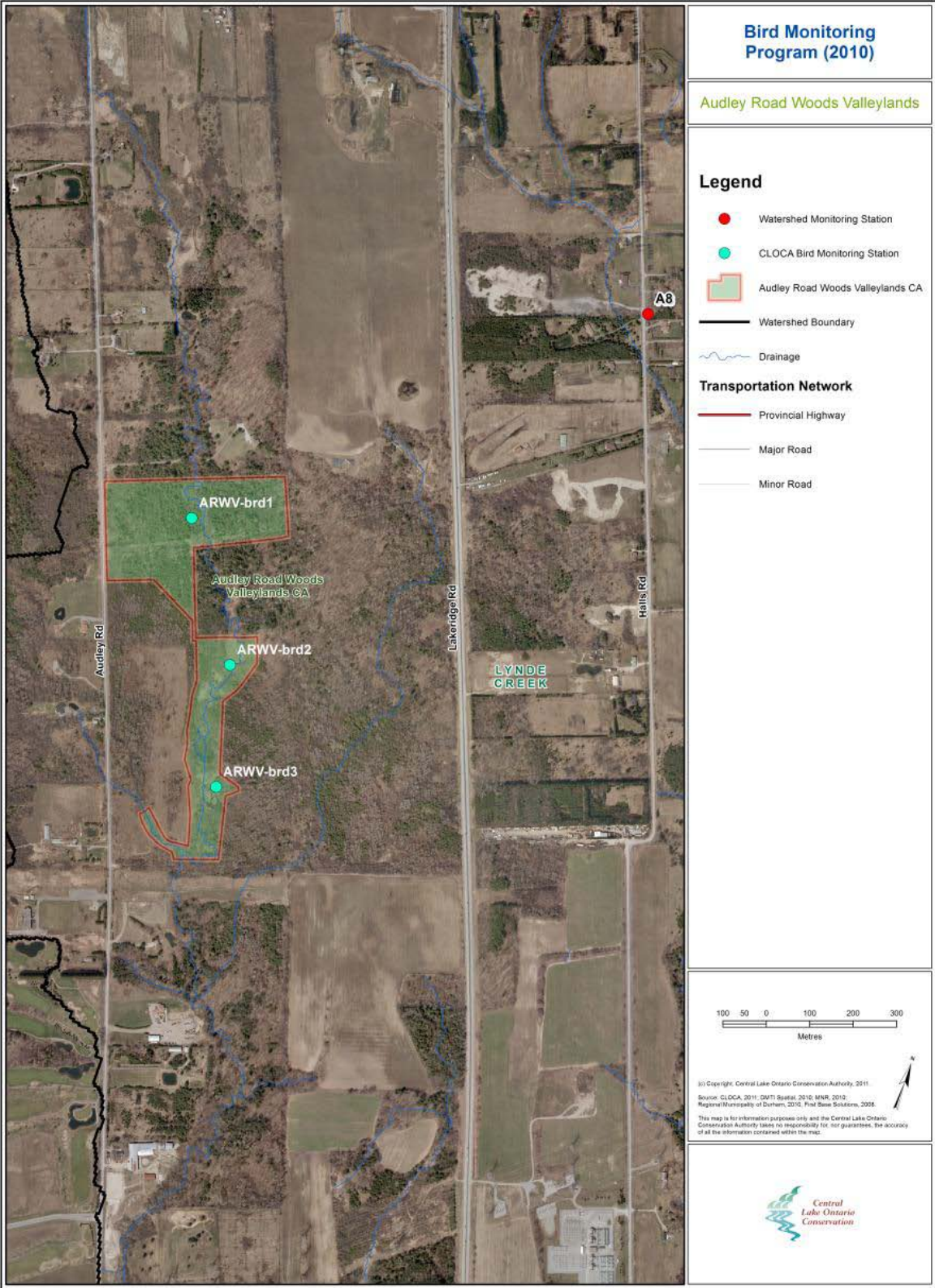
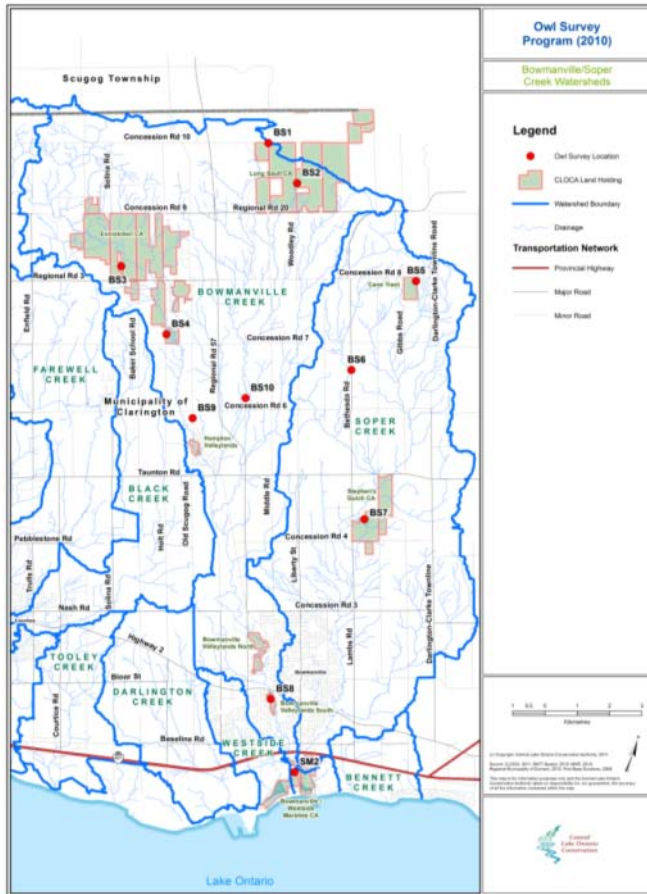


Figure 7: Bird monitoring locations at Audley Road Woods Valleylands

2.2 Watershed Management

2.2.1 Bowmanville-Soper watershed



In 2009, the Bowmanville – Soper watershed was monitored to gather information on habitat quality and wildlife diversity for inclusion in the Bowmanville – Soper Watershed Existing Conditions Report (Draft Report due out in 2011). The data can be found in the 2009 Wildlife Monitoring Report. To supplement this monitoring effort, owl surveys were also conducted throughout this watershed in March 2010. The monitoring program followed the Ontario Breeding Bird Atlas Standardized Owl Surveys protocol (March 2002), which involved playing back Boreal Owl/Barred Owl or Eastern Screech Owl calls followed by silent listening periods at strategic locations throughout the watershed. Figure 8 shows the locations of these monitoring sites. No owl responses were heard throughout the survey.

Figure 8: Nocturnal owl survey points in the Bowmanville-Soper watershed.

2.2.2 Lynde Creek watershed

In total, 77 different bird species were observed in the various habitats within the Lynde Creek watershed (Table 8). Bobolink was the only species at risk identified, however, numerous area sensitive / forest interior birds were recorded. Area sensitive species are generally sensitive to disturbance and prefer to nest in large, contiguous habitat patches so it is not surprising that most of these species were found in the north half of the watershed where urban development is less intense. Area sensitive species observed in 2010 includes Black-throated Green Warbler, Bobolink, Eastern Meadowlark, Grasshopper Sparrow, and Yellow-bellied Sapsucker, and their presence generally indicates that there are some higher quality wildlife habitats available in this watershed. Additional area sensitive / forest interior species are indicated in Table 8 with an asterisk.

Species highlighted in bold are confirmed breeders as they were observed nest-building, feeding young, or sitting on a nest. All other species on the list are considered *possible breeders* because the watershed surveys were only conducted once, so it is not possible to assign a higher breeding certainty.

None of the species observed are tracked by the NHIC, however, several species of conservation concern were noted. These include Black-throated Green Warbler, Brown Thrasher, Chestnut-sided Warbler, Eastern Bluebird, and Savannah Sparrow. Generally, species included on this list are done so because of habitat loss, so the presence of some higher priority species in the watershed is encouraging.

Incidental observations of other wildlife, such as Midland Painted turtle, green frog, and white-tailed deer were also recorded during the surveys. These observations are also included in Table 8.

Figure 9 shows the locations of all of the bird monitoring stations across the Lynde Creek watershed.

Table 8: Wildlife observed throughout the Lynde Creek watershed in 2010.

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Amphibians						
Green Frog	<i>Rana clamitans</i>			5		No
Birds						
Alder Flycatcher	<i>Empidonax alnorum</i>			5	3	No
American Crow	<i>Corvus brachyrhynchos</i>			5		No
American Goldfinch	<i>Carduelis tristis</i>			5	3	No
American Kestrel	<i>Falco sparverius</i>			5	2	No
American Robin	<i>Turdus migratorius</i>			5		No
Baltimore Oriole	<i>Icterus galbula</i>			5		No
Bank Swallow	<i>Riparia riparia</i>			5	2	No
Black-and-white Warbler*	<i>Mniotilta varia</i>			5	3	No
Black-billed Cuckoo	<i>Coccyzus erythrophthalmus</i>			4	2	No
Black-capped Chickadee	<i>Poecile atricapillus</i>			5	4	No
Black-throated Green Warbler*	<i>Dendroica virens</i>			5	1	No
Blue Jay	<i>Cyanocitta cristata</i>			5		No
Blue-gray Gnatcatcher*	<i>Poliophtila caerulea</i>			4		No
Bobolink*	<i>Dolichonyx oryzivorus</i>	T	T	4	2	No
Brown Thrasher	<i>Toxostoma rufum</i>			5	1	No
Brown-headed Cowbird	<i>Molothrus ater</i>			5		No
Canada Goose	<i>Branta canadensis</i>			5		No
Cedar Waxwing	<i>Bombycilla cedrorum</i>			5		No
Chestnut-sided Warbler	<i>Dendroica pensylvanica</i>			5	1	No
Chipping Sparrow	<i>Spizella passerina</i>			5		No
Common Grackle	<i>Quiscalus quiscula</i>			5		No
Common Loon*	<i>Gavia immer</i>	N		4	2	No
Common Raven*	<i>Corvus corax</i>			5		No
Common Yellowthroat	<i>Geothlypis trichas</i>			5		No
Downy Woodpecker	<i>Picoides pubescens</i>			5		No
Eastern Bluebird	<i>Sialia sialis</i>	N		4	1	No
Eastern Meadowlark*	<i>Sturnella magna</i>			5	3	No
Eastern Phoebe	<i>Sayornis phoebe</i>			5	3	No
Eastern Wood-pewee	<i>Contopus virens</i>			5		No
European Starling	<i>Sturnus vulgaris</i>					No
Field Sparrow	<i>Spizella pusilla</i>			5	3	No
Grasshopper Sparrow*	<i>Ammodramus savannarum</i>			4	3	No

Common Name	Scientific Name	COSSARO	COSEWIC	Provincial Rank	BSC Priority	NHIC
Gray Catbird	<i>Dumetella carolinensis</i>			5	4	No
Great Blue Heron	<i>Ardea herodias</i>			5		No
Great Crested Flycatcher	<i>Myiarchus crinitus</i>			5		No
Green Heron	<i>Butorides virescens</i>			4	4	No
Hairy Woodpecker*	<i>Picoides villosus</i>			5		No
House Finch	<i>Carpodacus mexicanus</i>					No
House Sparrow	<i>Passer domesticus</i>					No
House Wren	<i>Troglodytes aedon</i>			5		No
Indigo Bunting	<i>Passerina cyanea</i>			5		No
Killdeer	<i>Charadrius vociferus</i>			5		No
Mallard	<i>Anas platyrhynchos</i>			5		No
Mourning Dove	<i>Zenaida macroura</i>			5		No
Mourning Warbler	<i>Oporornis philadelphia</i>			5	2	No
Northern Cardinal	<i>Cardinalis cardinalis</i>			5		No
Northern Flicker	<i>Colaptes auratus</i>			5		No
Northern Goshawk*	<i>Accipiter gentilis</i>	N		4	2	No
Northern Mockingbird	<i>Mimus polyglottos</i>			4	1	No
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>			5	2	No
Ovenbird*	<i>Seiurus aurocapillus</i>			5	4	No
Pine Warbler*	<i>Dendroica pinus</i>			5	3	No
Red-breasted Nuthatch*	<i>Sitta canadensis</i>			5	3	No
Red-eyed Vireo	<i>Vireo olivaceus</i>			5		No
Red-tailed Hawk	<i>Buteo jamaicensis</i>	N		5		No
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			5		No
Ring-billed Gull	<i>Larus delawarensis</i>			5		No
Rock Dove	<i>Columba livia</i>					No
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			5		No
Savannah Sparrow*	<i>Passerculus sandwichensis</i>			5	1	No
Song Sparrow	<i>Melospiza melodia</i>			5		No
Spotted Sandpiper	<i>Actitis macularia</i>			5	3	No
Swamp Sparrow	<i>Melospiza georgiana</i>			5	2	No
Tree Swallow	<i>Tachycineta bicolor</i>			5		No
Veery*	<i>Catharus fuscescens</i>			4	3	No
Warbling Vireo	<i>Vireo gilvus</i>			5		No
White-breasted Nuthatch*	<i>Sitta carolinensis</i>			5		No
Wild Turkey	<i>Meleagris gallopavo</i>			4		No
Willow Flycatcher	<i>Empidonax traillii</i>			5		No
Wood Thrush	<i>Hylocichla mustelina</i>			5	4	No
Yellow Warbler	<i>Dendroica petechia</i>			5		No
Yellow-bellied Sapsucker*	<i>Sphyrapicus varius</i>			5	1	No
Mammals						
Eastern Cottontail	<i>Sylvilagus floridanus</i>			5		No
White-tailed Deer	<i>Odocoileus virginianus</i>			5		No
Reptiles						
Midland Painted Turtle	<i>Chrysemys picta marginata</i>			5		No

*Area-sensitive; **Confirmed breeding**

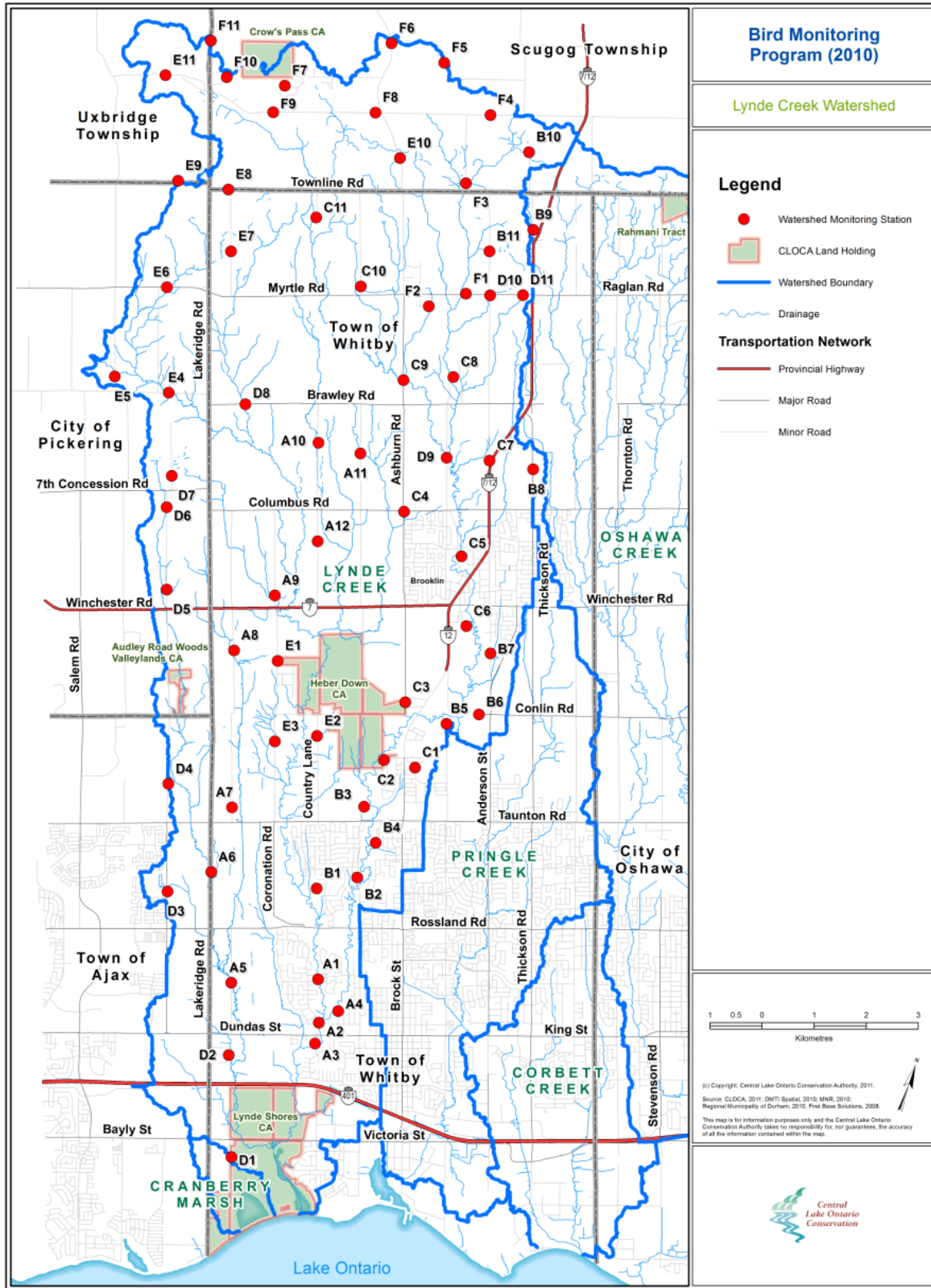


Figure 9: Bird monitoring points in the Lynde Creek watershed.

3.0 AMPHIBIAN MONITORING

3.1 Frogs & Toads

3.1.1 Durham Region Coastal Wetland Monitoring Project

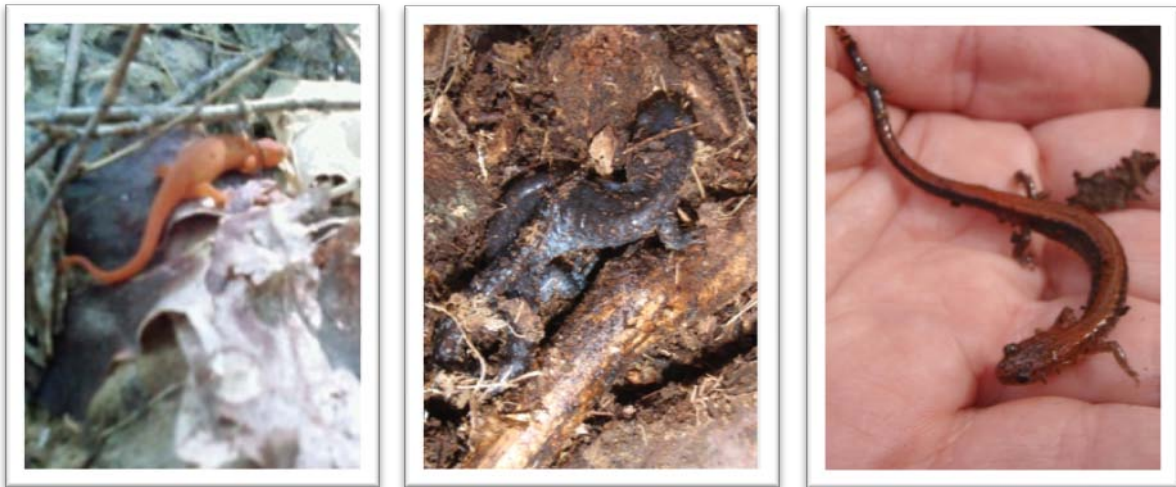
Amphibian data for all of the coastal wetlands in the CLOCA jurisdiction is collected through the DRCWM Project. Please refer to the Durham Region Coastal Wetland Monitoring Project Annual Report 2010 for amphibian information from the coastal wetlands.

3.2 Salamanders

Salamander plots were established in 2006 within the Heber Down and Lynde Shores Conservation Areas. Monitoring procedures for these plots follow the EMAN protocol (Parks Canada, 2004) which is discussed in detail in the CLOCA Wildlife Monitoring Program Report (2008).

These plots were surveyed in early March and no salamanders were found.

An informal search for salamanders at Crow's Pass C.A. in April uncovered 2 individuals each of 3 different salamander species: Spotted Salamander, Blue-spotted Salamander, and Eastern Redback Salamander. A large number of Red Efts (terrestrial stage of the Red-spotted Newt) were also found in early June. None of these species are at risk. Although the Blue-spotted Salamanders were not sampled for genetic testing to determine their relationship, if any, to the endangered Jefferson Salamander, it is expected that they are dominant Blue-spotted Salamanders, which are not protected under the Species at Risk Act. Genetic testing may occur in the future at MNR's discretion.



*Red Eft, Blue-spotted Salamander, and Eastern Redback Salamander
Crow's Pass C.A.*

4.0 SPECIES AT RISK

This year CLOCA received funding from the Ministry of Natural Resources Species at Risk Stewardship Fund to review some of its records for Endangered and Threatened species. The project was largely a database review, but some fieldwork was involved. The field aspect involved re-visiting the sites of Endangered and Threatened species reported to the Natural Heritage Information Centre (NHIC) and assessing whether the habitat at that location was still suitable to support the species identified in the report.

No Endangered or Threatened species were found over the course of the project and many of the habitats of older records had long since been developed. Suitable habitat still exists within many of CLOCA's Conservation Areas however.

It is expected that this verification exercise will be valuable in streamlining future land use planning assessments as well as private landowner permit applications where a species at risk record exists.



5.0 SUMMARY

Overall, the 2010 monitoring program was completed successfully without incident and the results were generally as expected.

The Forest Bird monitoring program continued at Heber Down and Long Sault as in the past and contributed valuable data to Environment Canada for their long-term monitoring program.

Important wildlife data was collected at Crow's Pass, Audley Road Woods Valleylands, Heber Down and Lynde Shores Conservation Areas to assist with the development of Conservation Area Management Plans and updates. Data was also collected throughout the Lynde Creek watershed as part of the ongoing watershed management planning program. Information from both the watershed and the Conservation Areas is valuable for long-term land use management and planning.

6.0 RESOURCES

- Atlas of the Breeding Birds of Ontario. March 2002. Standardized Owl Surveys: Instruction Manual.
- Cadman, M.D., D.A. Sutherland, G.G. Beck, D. Lepage, and A.R. Couturier (eds.). 2007. Atlas of the Breeding Birds of Ontario, 2001-2005. Bird Studies Canada, Environment Canada, Ontario Field Ornithologists, Ontario Ministry of Natural Resources, and Ontario Nature, Toronto, xxi + 706 pp.
- CLOCA, 2008-01MM. Central Lake Ontario Conservation Authority, Wildlife Monitoring Program. August 2008.
- DRCWMP, 2010. Durham Region Coastal Wetland Monitoring Annual Report. March 2010.
- Couturier, A. 1999. Conservation Priorities for the Birds of Southern Ontario. Unpublished Bird Studies Canada Report, 17pp (plus appendices).
- Marsh Monitoring Program Participant's Handbook for Surveying Amphibians. 2008 Edition. 13 pages. Published by Bird Studies Canada in cooperation with Environment Canada and the U.S. Environmental Protection Agency. February 2008.
- Parks Canada/EMAN. July 2004. Joint EMAN/Parks Canada National Monitoring Protocol for Plethodontid Salamanders. Accessed on October 29, 2008. [<http://www.eman-rese.ca/eman/ecotools/protocols/terrestrial/salamanders/salamander.pdf>]