# Report on Survey of Early Breeding Birds Highway 113 Project

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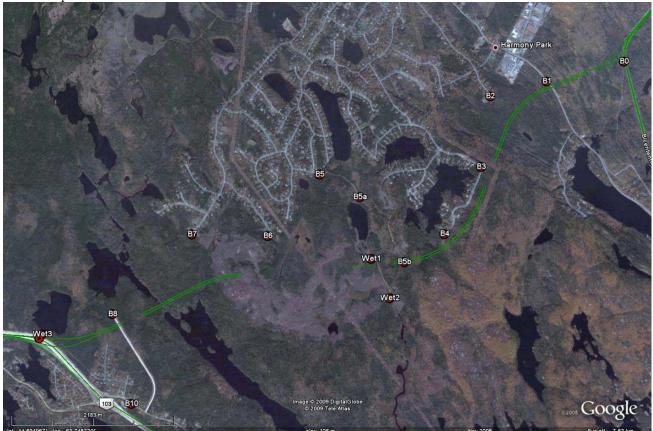
> For: Dillon Consulting May 12, 2009

#### Introduction

This document reports on the results of a survey for early breeding birds, with a special focus on owls and woodpeckers, for the area to be impacted by the proposed construction of Highway 113 near Hammonds Plains, Nova Scotia.

### Methods

The survey was conducted at point count locations established in a previous bird survey as part of the environmental assessment of this project. The location of these point counts can be seen in the map below.



Since point B5b was difficult to access and is close to the point Wet 1, it was not surveyed. The nocturnal owl survey was conducted on the evening May 8, 2009 between 2057 hours and 2312 hours according to the owl surveying protocols of Bird Studies Canada. This consists of listening for 2 minutes at each point count and then periodically broadcasting the calls of two different owl species and listening for an additional nine minutes. Point counts for owls were not conducted at 5 points located in residential neighbourhoods where there were two houses within 50 metres of the broadcast point. Point counts for owls were also not conducted at the two points located on the 100 series highways since traffic noise drowned out the broadcast. Thus, owl point counts were conducted at 5 forested areas and 2 residential areas away from houses.

All diurnal bird species were surveyed on the morning of May 9, 2009 between 0601 hours and 1034 hours at all point counts. Point counts followed the protocols of the Canadian Wildlife Service and lasted for 10 minutes. Each bird was recorded by noting its distance from the observer in the categories of less than 50 metres, between 50 and 100 metres, and greater than 100 metres, or flying overhead.

#### Results

The results of the surveys are shown in the table below which summarizes the birds seen at all distances at each point count.

Species	B0	B1	B2	B3	B4	B5	B 5a	Wet 1	Wet 2	B6	B7	B8	B9/ Wet 3	В 10	Total
American Black Duck	1					3						-			4
Common Loon			2	1				1							4
Ruffed Grouse									1						1
Mourning Dove			1				1	1	1		1				5
Great Horned Owl						1									1
Downy Woodpecker			1												1
Hairy Woodpecker														1	1
Northern Flicker				2				2	3	2	1	1			11
Blue-headed Vireo			1		1	2									4
Blue Jay	1				2	5	1	2						1	12
American Crow	4	3		1	1	4					2	3	3	4	25
Common Raven		1	2												3
Black-capped Chickadee			2	1						1				1	5
Boreal Chickadee							1								1
Red-breasted Nuthatch			1											1	2
Winter Wren									1						1
Ruby-crowned Kinglet			2		1	1									4
Hermit Thrush	1			1	3			2		1					8
American Robin		1	3	1	1			1	2	3		5			17
European Starling											1				1
Yellow-rumped Warbler	3	2		2	2	1	1	2		2		1	1	1	18
Black-throated Green		4												4	0
Warbler Palm Warbler		_ 1												1	2 3
Black-and-White Warbler									2		1				3
							_ 1 _		_ 1 _						
Ovenbird Song Sparrow		1		1					1		1	2	1		6
White-throated Sparrow	1	1		1 2	4	1		7	5	5	1 5	2			33
Dark-eyed Junco		1	1	2 1	4	1		1	5	5 1	5	2 1		3	10
Purple Finch		1	1		1	1	1			2	1	1	1	3	7
American Goldfinch	-		2					1	2	2	2				7
Legend			2						2		2				
Breeding Season	Migrating Season							Resident or Migrant: Not Vet Breeding							
Dieeulity Season	wigrating Season							Resident or Migrant: Not Yet Breeding							

Only 1 breeding season owl, a Great Horned Owl, was heard during the nocturnal survey. Sixteen species of early breeding birds were seen or heard during the diurnal point counts. The most abundant of these were American Crow, Yellow-rumped Warbler, American Robin, Blue Jay, and Northern Flicker, in order of abundance. Thus among the woodpecker species, Northern Flicker was fairly widespread through the project area while Hairy and Downy Woodpeckers were seen or heard only once each.

The most common bird of the survey was the White-throated Sparrow which was still in its migration season. However many of these sparrows are most likely already on their breeding territory in the project area. Other migrating species for which seven or more individuals were seen or heard were Hermit Thrush, Purple Finch, and American Goldfinch.

The Mourning Doves, Boreal Chickadee, and Red-breasted Nuthatches observed during the survey were likely local residents but had not yet entered their breeding season.

## Species of Concern

No birds listed as endangered, threatened, or of special concern by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) were seen or heard during the survey. Two species listed as having "yellow" status by the Nova Scotia Department of Natural Resources, Common Loon and Boreal Chickadee, were recorded during the surveys. Yellow status indicates that these species are sensitive to human activities or natural events.