

Memorandum

To/Attention Andrew Giesen, CET, PMP **Date** June 26, 2023
From Erin Hellinga, B.Sc. **Project No** 141098
cc sandra.hayman@ibigroup.com, evan.burns@ibigroup.com,
cascaden@middlesexcentre.ca, gregory.johnstone@ibigroup.com
Subject Old River Road Natural Heritage Site Investigation

On June 23, 2023, an Arcadis IBI Group ecologist (Erin Hellinga) conducted a field investigation, with two Municipality of Middlesex Centre staff (Andrew Giesen and Robert Cascaden), along the Old River Road right-of-way, in Municipality of Middlesex Centre. The purpose of the field investigation was to inspect a previously reported animal den and surrounding habitat as well as one tree identified as having a potential Pileated Woodpecker nest cavity. The investigation was carried out by the group between 9:40am and 12:35pm, with additional investigations carried out by Erin Hellinga between 12:35pm and 1:50pm. During the investigation weather conditions included air temperature ranging from 20 to 22°C, light wind conditions, and precipitation ranging from overcast skies to light rain.

Den Inspection

Previous site investigations conducted by an Arcadis IBI Group certified arborist (Gregory Johnstone) reported observations of a den (Photos 1-3), tree markings (Photo 4), and a deceased and partially eaten duck near the north end of the project site. These observations prompted the June 23, 2023 investigations and plans for Municipality of Middlesex Centre staff to erect two trail cameras at one of three den entrances, which appear to be most active.

Two trees where trail cameras should be mounted were marked with orange and black dot flagging tape.

Relevant Legislation

The location of the den as well as signs (i.e., duck remains and tree scratching) indicate that this site may currently be used or may have previously been used by an American Badger. American Badger is listed as Endangered under the Ontario *Endangered Species Act, 2007*. As such, this species is afforded protection to individuals and their habitat.

Other wildlife species that may have created and/or used this den include Eastern Cottontail, Woodchuck, Striped Skunk, and Red Fox. These species are all protected under the Ontario *Fish and Wildlife Conservation Act, 1997* such that, without a permit, it is illegal to damage or destroy the den of habitual dwelling of a furbearing mammal.

Cavity Tree Inspection

Previous site investigations conducted by an Arcadis IBI Group certified arborist (Gregory Johnstone) reported signs of Pileated Woodpecker activity and one potential nest cavity in a Sugar Maple tree (ID 512), in front of 11067 Old River Road (Photo 5). Further inspection with binoculars and a telephoto camera (Photo 6) during the June 23, 2023 investigation confirmed that the cavity is unlikely to be created by or used by a Pileated Woodpecker for the following reasons:

Andrew Giesen, CET, PMP – June 26, 2023

- Tree trunk is completely hollow (i.e., in an advanced state of decay) at the site of the cavity – whereas Pileated Woodpeckers typically use solid trees, with heart rot for nesting.
- Tree trunk has another large hole / crack near the cavity site.
- Cavity entrance is oblong (approximately two times taller than wide) – rather than circular or slightly oval.
- Interior of cavity is easily visible due to extensive decay on the trunk's interior and light entering the tree from both the cavity entrance and the hole /crack in the side of the trunk – rather than appearing dark from the outside.

Although this tree (ID 512) was concluded to not contain a Pileated Woodpecker nest cavity many other trees along the Old River Road right-of-way showed signs of recent Pileated Woodpecker foraging activity (Photo 7). As such, there is potential for new Pileated Woodpecker nest cavities to be excavated in any breeding season.

Relevant Legislation

As per the federal *Migratory Birds Regulations, 2022*, Pileated Woodpecker (in addition to 17 other bird species) have year-round nest protection, unless the nest has been shown to be abandoned. To be considered abandoned: 1) The Minister must be notified, via an online registration system (the Registry for Abandoned Nests), that the nest does not contain a live bird or viable egg; and 2) The nest is to remain unused by migratory birds during the designated wait time for the species that created the nest (i.e., 36 months for Pileated Woodpecker).

Incidental Wildlife Observations

During the June 23, 2023 site investigation, a number of wildlife species were seen and/or heard. These species and their status are documented in Table 1 (enclosed).

Conclusion

Based on the findings of the June 23, 2023 site investigation it has been concluded that the use of trail cameras over multiple weeks will confirm wildlife activity at the den near the northern extent of the site. From the findings, next steps will be determined - with respect to mitigation and protection.

With respect to Pileated Woodpeckers, no nest cavities were observed; however, signs of Pileated Woodpecker activity confirms that the species uses the area for foraging and there is potential for nesting activity in the future. Additional inspections of trees prior to removal is recommended to ensure compliance with the *Migratory Birds Regulation, 2022*. Furthermore, removal or disturbance of trees or vegetation should be avoided during April 1 through August 31 to minimize potential for incidental take of active bird nests of species protected under the *Migratory Birds Convention Act*.

Andrew Giesen, CET, PMP – June 26, 2023

Sincerely,

IBI Group Professional Services (Canada) Inc.

Written by:



Erin M. Hellinga, B.Sc.
Senior Ecologist

Reviewed by:



Alex Zeller, M.Sc.
Manager, Natural Systems

Enclosure:

June 23, 2023 Site Photos
Table 1: Incidental Wildlife Observations

Andrew Giesen, CET, PMP – June 26, 2023



Photo 1: Den entrance (1 of 3) in middle of photo. View from north side of wire fence, near railway tracks.



Photo 2: Den entrance (2 of 3) in middle of photo. View from north side of wire fence, near railway tracks.

Andrew Giesen, CET, PMP – June 26, 2023



Photo 3: Den entrance (3 of 3). View from south side of wire fence, within poplar stand.



Photo 4: Suspected territorial marking on tree near den.

Andrew Giesen, CET, PMP – June 26, 2023



Photo 5: Tree ID 512 with cavity.



Photo 6: Close up of cavity in Tree ID 512.

Andrew Giesen, CET, PMP – June 26, 2023



Photo 7: Tree ID 405. Evidence of Pileated Woodpecker foraging activity.



Photo 8: Yellow-throated Vireo.

Andrew Giesen, CET, PMP – June 26, 2023

Table 1: Incidental Wildlife Observations along Old River Road, Municipality of Middlesex Centre on June 23, 2023

Common Name	Scientific Name	Provincial Status	Federal Status	Provincial Rank
Birds				
American Crow	<i>Corvus brachyrhynchos</i>			S5B
American Goldfinch	<i>Spinus tristis</i>			S5B
American Robin	<i>Turdus migratorius</i>			S5B
Baltimore Oriole	<i>Icterus galbula</i>			S4B
Barn Swallow	<i>Hirundo rustica</i>	SC	TH	S5B
Belted Kingfisher	<i>Megaceryle alcyon</i>			S4B
Black-capped Chickadee	<i>Poecile atricapillus</i>			S5
Blue Jay	<i>Cyanocitta cristata</i>			S5
Brown-headed Cowbird	<i>Molothrus ater</i>			S4B
Carolina Wren	<i>Thryothorus ludovicianus</i>			S4
Cedar Waxwing	<i>Bombycilla cedrorum</i>			S5B
Cooper's Hawk	<i>Accipiter cooperii</i>			S4
Downy Woodpecker	<i>Picoides pubescens</i>			S5
Eastern Phoebe	<i>Sayornis phoebe</i>			S5B
Eastern Towhee	<i>Pipilo erythrophthalmus</i>			S4B
European Starling	<i>Sturnus vulgaris</i>			SNA
Gray Catbird	<i>Dumetella carolinensis</i>			S4B
Hairy Woodpecker	<i>Picoides villosus</i>			S5
Indigo Bunting	<i>Passerina cyanea</i>			S4B
Mallard	<i>Anas platyrhynchos</i>			S5
Mourning Dove	<i>Zenaida macroura</i>			S5
Northern Cardinal	<i>Cardinalis cardinalis</i>			S5
Northern Cardinal	<i>Cardinalis cardinalis</i>			S5
Northern Flicker	<i>Colaptes auratus</i>			S4B
Northern Rough-winged Swallow	<i>Stelgidopteryx serripennis</i>			S4B
Orchard Oriole	<i>Icterus spurius</i>			S4B
Red-bellied Woodpecker	<i>Melanerpes carolinus</i>			S4
Red-winged Blackbird	<i>Agelaius phoeniceus</i>			S4
Rose-breasted Grosbeak	<i>Pheucticus ludovicianus</i>			S4B
Scarlet Tanager	<i>Piranga olivacea</i>			S4B
Song Sparrow	<i>Melospiza melodia</i>			S5B
Warbling Vireo	<i>Vireo gilvus</i>			S5B
Wood Thrush	<i>Hylocichla mustelina</i>	SC	TH	S4B
Yellow Warbler	<i>Setophaga petechia</i>			S5B
Yellow-billed Cuckoo	<i>Coccyzus americanus</i>			S4B
Yellow-Throated Vireo	<i>Vireo flavifrons</i>			S4B
Reptiles				
Eastern Gartersnake	<i>Thamnophis sirtalis sirtalis</i>			S5

Andrew Giesen, CET, PMP – June 26, 2023

Common Name	Scientific Name	Provincial Status	Federal Status	Provincial Rank
Amphibians				
American Toad	<i>Anaxyrus americanus</i>			S5
Mammals				
Eastern Chipmunk	<i>Tamias striatus</i>			S5

Notes:

Species Status:

SC = Special Concern

THR = Threatened

Provincial Rank:

S4 Common and apparently secure in Ontario; usually with more than 100 occurrences in the province.

S5 Very common and demonstrably secure in Ontario.

S#B Conservation status refers to the breeding population of the species in the nation or state/province..

SNA Not applicable because the species is not a suitable target for conservation activities.