
To: Rob MacNeil
Ottawa, ON

From: Lindsay Bennett
Ottawa, ON

File: 16041614

Date: June 9, 2021

Reference: Ottawa Community Housing – Gladstone Village – Species at Risk Screening Report

INTRODUCTION

Stantec Consulting Ltd. (Stantec) was retained by Ottawa Community Housing (OCH) to complete a species at risk (SAR) screening in support of the proposed Gladstone Village development at 933 Gladstone Avenue, Ottawa, Ontario (18T 444063E, 5028243N; the Site) (**Attachment A**). The SAR screening included a desktop review of potential SAR occurrences and/or habitat accompanied by a single site visit.

This memorandum presents the results of Stantec's site visit, as well as identifies potential environmental constraints and recommendations with respect to SAR and their potential habitat directly within the Site, as well as adjacent lands within 120 meters (m) of the Site; herein referred to collectively as the Study Area.

METHODS

SOURCES OF BACKGROUND DATA COLLECTION

As part of this SAR screening and habitat assessment, the following background documentation and related information sources were reviewed to identify natural heritage features and constraints in the Study Area:

- Ontario's Natural Heritage Information Centre (NHIC; MNRF 2020a)
- Land Information Ontario (LIO 2020)
- Agricultural Information Atlas (Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) (OMAFRA 2020)
- Satellite imagery (Google Earth Pro 2020)
- Rideau Valley Conservation Authority's (RVCA) GeoPortal Mapping Public Browser (RVCA 2020)
- City of Ottawa's Official Plan (City of Ottawa 2019)
- geoOttawa (City of Ottawa 2020a)

Natural heritage information gathered during the literature review was used to identify potentially significant natural heritage features in the Study Area.

A list of SAR and species of conservation concern (SOCC) with potential to occur in the Study Area was developed by reviewing the following sources:

- Ontario's NHIC (MNRF 2020a)
- Species at Risk Public Registry (ECCC 2020)
- Fisheries and Oceans Canada (DFO) Aquatic Species at Risk Mapping (DFO 2019)
- Species at Risk in Ontario List (SARO; MNRF 2020b)
- Ontario Breeding Bird Atlas (OBBA; Cadman et al. 2007)
- Atlas of Mammals in Ontario (AMO; Dobbyn 1994)
- Ontario Reptile and Amphibian Atlas (ORAA; Ontario Nature 2019)
- Ontario Butterfly Atlas Online (OBAO; Toronto Entomologists' Association 2019)
- iNaturalist Canada (iNaturalist 2020)

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- eBird Canada (eBird 2020)

Some of the sources above provide data at a scale as large as 10 km X 10 km. Results were screened to assess their relevance to the Study Area and species were removed from consideration if no suitable habitat was observed in the satellite imagery of the Study Area (e.g., aquatic species). Only recent observations (i.e., at least one recorded observation since 2000) were carried forward throughout this memo.

DEFINITIONS FOR SPECIES AT RISK AND SPECIES OF CONSERVATION CONCERN

The *Species at Risk Act* (SARA) provides a framework across Canada to prevent the extinction of wildlife species and support actions for their recovery. Tenants on federal lands are responsible for preventing the disappearance of endangered or threatened species on their properties and to implement management plans to comply with the SARA. The *Endangered Species Act, 2007* (ESA) was created to protect SAR and their habitats in Ontario. Work on public or private land (excluding federal lands) that may harm or harass designated species (e.g., threatened, or endangered) or impact their habitat requires approval from the Ministry of Environment, Conservation, and Parks (MECP).

For the purpose of this screening, SAR are defined as:

- Endangered and threatened species that are listed on Schedule 1 of the federal SARA and protected by the SARA
- Endangered and threatened species that are on the Species at Risk in Ontario (SARO) list and protected by the provincial ESA

SOCC are defined as:

- Species with special concern status assigned by the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) regardless of its listing on Schedule 1 of SARA
- Special concern species on the SARO list
- Species with provincial ranks of S1 to S3

Provincial ranks (S ranks) are used by the NHIC to set protection priorities for rare species and vegetation communities. They are based on the number of occurrences in Ontario and are not legal designations. Species with provincial ranks of S1 to S3 are tracked by the Ministry of Natural Resources and Forestry (MNR) and considered SOCC. Provincial S ranks are defined as follows:

- S1: Critically imperiled; usually fewer than 5 occurrences
- S2: Imperiled; usually fewer than 20 occurrences
- S3: Vulnerable; usually fewer than 100 occurrences
- S4: Apparently secure; uncommon but not rare, usually more than 100 occurrences
- S5: Secure, common, widespread, and abundant

AGENCY CONSULTATION

Agency consultation has moved to a proponent driven process for the provincial agency responsible for SAR (i.e., MECP) and proponents are directed to review the background documentation and related information sources outlined above. As such, specific information request packages were not submitted for provincially designated features, SOCC and/or SAR.

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FIELD INVESTIGATIONS

A site visit was completed on May 13th, 2021 to assess the Site for SAR and/or their potential habitat(s) as well as to confirm the natural heritage features in the Study Area that were identified through the background data collection process (e.g., wooded areas). Environmental conditions at the time were warm and sunny (16°C) with zero cloud cover. The SAR assessment at the Site was conducted on foot by employing meandering transects throughout the Site. Areas within the Study Area adjacent to the Site, where access was not permitted, were observed using binoculars. SAR habitat observations were recorded and mapped in the field using a camera and hand-held global positioning system (GPS).

RESULTS

BACKGROUND DATA COLLECTION

Natural Heritage and Planning Documentation

City of Ottawa Official Plan

The City of Ottawa's *Official Plan, Annex 2A* shows that the Site is in the following hierarchy of watersheds with the Rideau Valley Conservation Authority's jurisdiction: Lower Rideau (watershed) – Rideau River-Long Island (subwatershed).

Natural Heritage Information Centre

The province's NHIC database identifies a Wooded Area associated with rail corridor west of the Site.

Species of Conservation Concern

The background documents and related information sources yielded the following results of SOCC that could be present within the Study Area:

- Black Tern (*Chlidonias niger*) (special concern), S3B (Ontario Nature)
- Bald Eagle (*Haliaeetus leucocephalus*) (special concern) S2N (Ontario Nature)
- Eastern Milksnake (*Lampropeltis triangulum*) (special concern) S3 (Ontario Nature)
- Eastern Musk Turtle (*Sternotherus odoratus*) (special concern) S3 (Ontario Nature)
- Eastern Wood-pewee (*Contopus virens*) (special concern), S4B (Ontario Nature)
- Grasshopper Sparrow (*Ammodramus savannarum*) (special concern), SB4 (Ontario Nature)
- Monarch (*Danaus plexippus*) (special concern), S4B (NHIC, Ontario Nature)
- Northern Map Turtle (*Graptemys geographica*) (special concern), S3, (NHIC, Ontario Nature)
- Peregrine Falcon (*Falco peregrinus*), S3B (NHIC, Ontario Nature)
- Short-eared Owl (*Asio flammeus*) (special concern), S2N (Ontario Nature)
- Snapping Turtle (*Chelydra serpentina*) (special concern), S3, (NHIC, Ontario Nature)
- Red-shouldered Hawk (*Buteo lineatus*) (special concern) S4B (Ontario Nature)
- Yellow-banded Bumble Bee (*Bombus terricola*) (special concern) S5 (NHIC, Ontario Nature)

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Species at Risk

A desktop background review resulted in a total of 25 SAR, summarized in **Table 1**, that have been previously documented as historically occurring or have the potential to occur within the Study Area.

Table 1: Species at Risk with potential to occur within the Study Area

Species	Status		Suitable Habitat present on- site? (Y/N)	Suitable Habitat present within 120m? (Y/N)
	Ontario ESA	Federal SARA, Schedule 1		
Plants				
Butternut (<i>Juglans cinerea</i>) ^{1,5}	Endangered	Endangered	N	N
Arthropods				
Rusty- patched Bumble Bee (<i>Bombus affinis</i>) ¹	Endangered	Endangered	N	Y
Nine- spotted Lady Beetle (<i>Coccinella novemnotata</i>) ¹	Endangered	No Status	N	N
Reptiles				
Blanding's Turtle (<i>Emydoidea blandingii</i>) ^{1,2}	Threatened	Threatened	N	N
Fish				
Lake Sturgeon (<i>Acipenser fulvescens</i>) ¹	Threatened	No Status	N	N
Birds				
Common Nighthawk (<i>Chordeiles minor</i>) ³	Special Concern	Threatened	N	N
Eastern Whip-poor-will (<i>Antrostomus vociferus</i>) ³	Special Concern	Threatened	N	N
Chimney Swift (<i>Chaetura pelagica</i>) ^{1,3}	Threatened	Threatened	N	Y
Least Bittern (<i>Ixobrychus exilis</i>) ³	Threatened	Threatened	N	N
Red-headed Woodpecker (<i>Melanerpes erythrocephalus</i>) ³	Special Concern	Threatened	N	N
Olive-sided Flycatcher (<i>Contopus borealis</i>) ³	Special Concern	Threatened	N	N
Loggerhead Shrike (<i>Lanius ludovicianus</i>) ³	Endangered	Endangered	N	N
Bank Swallow (<i>Riparia riparia</i>) ³	Threatened	Threatened	N	N
Barn Swallow (<i>Hirundo rustica</i>) ^{1,3}	Threatened	Threatened	N	N
Wood Thrush (<i>Hylocichla mustelina</i>) ^{1,3}	Special Concern	Threatened	N	N

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Bobolink (<i>Dolichonyx oryzivorus</i>) ^{1,3}	Threatened	Threatened	N	N
Eastern Meadowlark (<i>Sturnella magna</i>) ^{1,3}	Threatened	Threatened	N	N
Golden-winged Warbler (<i>Vermivora chrysoptera</i>) ³	Special Concern	Threatened	N	N
Cerulean Warbler (<i>Setophaga cerulea</i>) ³	Threatened	Endangered	N	N
Canada Warbler (<i>Cardellina canadensis</i>) ³	Special Concern	Threatened	N	N
Mammals				
Small-footed myotis (<i>Myotis leibii</i>) ⁴	Endangered	No Status, No Schedule	N	Y
Little Brown myotis (<i>Myotis lucifugus</i>) ⁴	Endangered	Endangered	N	Y
Northern myotis (<i>Myotis septentrionalis</i>) ⁴	Endangered	Endangered	N	Y
Tri-colored bat (<i>Perimyotis subflavus</i>) ⁴	Endangered	Endangered	N	Y

¹ NHIC

² Ontario Nature

³ Ontario Breeding Bird Atlas (2001-2005)

⁴ Dobbyn, 1994

⁵ iNaturalist

Species at risk that were outlined above in **Table 1** as having potentially suitable habitat within the Site and/or Study area have the respective habitat descriptions listed below.

Chimney Swift – Chimney Swift primarily breed in urban and suburban habitats and are associated with chimneys or other artificial sites with vertical surfaces and low light (e.g., air vents, old wells, barns) which are used for nesting and roosting. An aerial insectivore which hunts primarily during the day above open habitat including wetlands, ponds, rivers, meadows, and parks (COSEWIC 2018b). The site visit yielded no Chimney Swift observations. There were also no potential Chimney Swift breeding structures identified within The Site. However, adjacent residential areas (CVR) have the potential to provide appropriate nesting habitat (e.g., uncapped chimneys) (**Attachment B**) and the open habitat associated with the Site may provide suitable overhead foraging habitat.

Small-footed Myotis, Little Brown Myotis, Northern Myotis, and Tri-colored Bat (SAR bats) – These bat species share similar habitat preferences during their active season and are described together. These species will use trees as small as 10 cm diameter at breast height (DBH) with cavities, loose bark, and leaves to nest and day roost as well as for maternity roosting purposes, usually >10 m high on trees exhibiting early stages of decay (COSEWIC 2013, ECCC 2018). Additionally, these species are known to use anthropogenic structures for roosting as well. There were no suitable trees or features observed to be present within The Site itself. However, The Study Area contains older residential neighborhoods and business buildings with mature trees that could provide suitable maternity roost habitat for SAR bats (**Attachment B**). There are no overwintering features (e.g., caves, abandoned mines) for SAR bats observed within the Study Area.

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FIELD INVESTIGATIONS

The prescribed site visit yielded no SAR observations. However, potentially suitable habitat for a handful of SAR was identified both within the Site and/or Study area. Potentially suitable nesting/roosting habitat was observed for Chimney Swift and potentially suitable maternity roosting habitat for SAR bats within the adjacent residential areas to The Site.

GENERAL SITE CONSTRAINTS AND RECOMMENDATIONS

PROTECTION OF MIGRATORY BIRDS

The *Migratory Birds Convention Act* (MBCA) provides legal protection of migratory birds and their active nests in Canada. The loss of migratory bird nests, eggs and or nestlings due to tree cutting or other vegetation impacts can be avoided by limiting impacts to vegetation to occur outside of the general nesting period for forest nesting migratory birds in this region (C2) as identified by Environment and Climate Change Canada (ECCC) (i.e., between April 1 and August 31) (ECCC 2020). If work must be performed within this window, a pre-clearing survey for active nests or breeding activity should be conducted by a qualified biologist before work commences and additional mitigation measures (e.g., implementation of avoidance distances during construction) implemented, if required.

PROTECTION OF SPECIES AT RISK

SAR Bats

There is potential for SAR bats to be encountered within the Study Area, immediately adjacent to Gladstone Avenue within the residential area. To reduce the likelihood of harm to bats, it is recommended that trees ≥ 10 cm DBH be removed outside the bat maternity roost season. Myotis species typically give birth in late-May to early-June, and females fly with newborn young attached until they become excessively heavy. Young begin to fly in mid- to late-June, at age three to four weeks. Rearing is completed by August and bats move to hibernacula features in August or September (Broders et al. 2006, Cagle and Cockrum 1943, Gerson 1984). Therefore, tree removal is not recommended between April 1 to November 1 (MECP correspondence). However, as mentioned above, there were no trees observed to be suitable within The Site.

CONCLUSION

Overall, The Site is not likely to contain any SAR. This is based off a lack of suitable habitat and structures for the various SAR that were identified during a desktop background review. During the single site visit no SAR were observed, and no further survey and/ or mitigation is recommended.

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A handwritten signature in black ink, appearing to read 'Lindsay Bennett', with a stylized, cursive script.

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Attachment: Attachment A – Figure 1 – Natural Environment Existing Conditions and Constraints
Attachment B – Photographic Record of Site Conditions

c. Josh Mansell

Reference: Ottawa Community Housing – Gladstone Village – Species at Risk Screening Report

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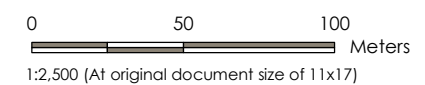
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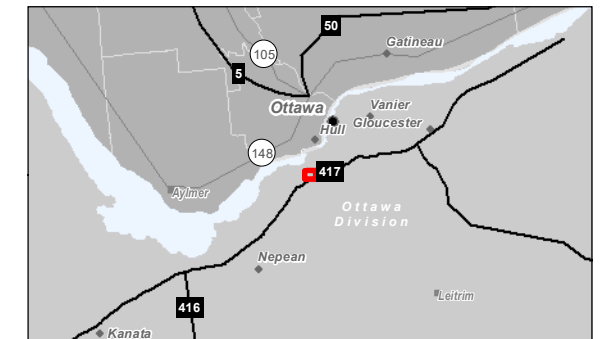
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- Legend**
- Study Area
 - Highway
 - Major Road
 - Minor Road
 - Railway
 - Wooded Area
 - Study Area Buffer (120m)
 - ELC Boundary
- CVR - Residential
 CVL1 - Transportation
 CVC - Commercial and Institutional
 CGL - Green Lands
 CGL4 - Recreational



- Notes**
1. Coordinate System: NAD 1983 UTM Zone 18N
 2. Base features produced under license with the Ontario Ministry of Natural Resources and Forestry © Queen's Printer for Ontario, 2019.
 3. Orthoimagery © FirstBase Solutions, 2021. Imagery date 2017.



Project Location: City of Ottawa
 Prepared by PRM on 2021-06-09
 Technical Review by JM on 2021-06-09

Client/Project: 933 GLADSTONE AVE., OTTAWA, ONTARIO

Figure No.: **1**
 Title: **Natural Environment Existing Conditions and Constraints**



Photo 1: Site conditions on 933 Gladstone Av. Facing north.



Photo 2: Site conditions on 933 Gladstone Av. Facing east.



Photo 3: Site conditions on 933 Gladstone Av. Facing south.



Photo 4: Site conditions on 933 Gladstone Av. Facing southwest.



Photo 5: Site conditions on 933 Gladstone Av. Facing west

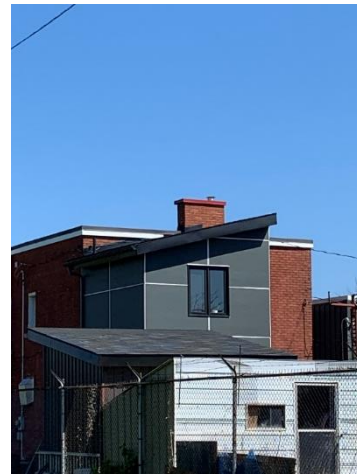


Photo 6: Houses adjacent to study site with potential to provide SAR bat and CHSW habitat. Facing east.