

# **BIRD FRIENDLY CALGARY**

#### **APPLICATION FOR CONSIDERATION**

A volunteer group of community members and organizations came together to form a team called Bird Friendly Calgary. We are pleased to submit this application to Nature Canada for formal certification of Calgary, Alberta as a Bird Friendly City.

We celebrate that years of work by community members, organizations, stakeholders and public servants will be acknowledged with this certification. This is also a tremendous opportunity for a refreshed collaborative approch for continous improvement. Our goal is to not only achieve Bird Friendly City certification for Calgary, but to promote continual improvement to ensure that Calgary is a model city in bird - and consequently, biodiversity - conservation.

Based upon the close review by the Bird Friendly Calgary team, we submit that we will achieve **41 out** of a possible **50 points total**. In two of the three categories, we achieve a "high" rating, whereas the first category is an "entry rating". We respectfully submit that Calgary meets the requirements set out by Nature Canada to be a formally certified "Bird Friendly City".

The Bird Friendly Calgary team would like to extend their sincere appreciation to the municipal representatives, public servants, and community organizations who provided support in the preparation of this application.

Any questions or concerns may be directed to the team at: BirdFriendlyCalgary@gmail.com

All supporting documents referred to in this application are available here.

We honour and acknowledge the traditional Treaty 7 territory and oral practices of the Blackfoot confederacy: Kainai-Blood Tribe, Siksika, Peigan-Piikani and Aamskapi Pikuni, as well as the Îyâxe Nakoda and Tsuut'ina nations. We acknowledge that this territory is home to the Métis Nation of Alberta, Region 3 within the historical Northwest Métis homeland. Finally, we acknowledge all Nations – Indigenous and non – who live, work and play on this land, and who honour and celebrate this territory.

# TABLE OF CONTENTS

Letter from Mayor Nenshi	0
Mandatory Criteria	1
Section 1: Threat Reduction	
Section 2: Habitat Protection, Restoration, and Climate Resiliency	30
Section 3: Community Outreach/Education	43
Rubric with Scoring	57
Bird Friendly Calgary Contact Information	74



April 16, 2021

Aly Hyder Ali Urban Nature Organizer Nature Canada Suite 300, 240 Bank St. Ottawa, ON K2P 1X4

Dear Mr. Ali,

#### Re: City of Calgary - Bird Friendly Certification Confirmation of Commitment

This letter is confirming The City of Calgary (The City) support of Calgary becoming one of the first certified Bird Friendly Cities in Canada under Nature Canada's Program.

This is a tremendous opportunity for The City of Calgary to be recognized for its existing programming and ongoing efforts to benefit birds, wildlife, and urban habitat. We recognize that this recognition is one that requires ongoing stewardship, and The City is committed to continue partnering with community stakeholders to update The City's policies and programming to further support our Bird Friendly Certification status.

The Bird Friendly Calgary committee is preparing an application with the goal of achieving Calgary's Bird Friendly City certification of announcement at International Migratory Bird Day celebrations in Calgary on May 8, 2021.

Thank you for considering our application.

Sincerely,

Naheed K. Nenshi MAYOR

cc: City Councillor Druh Farrell Calgary BiodiverCity Committee Bird Friendly Calgary

# M-1 – ESTABLISHMENT OF BIRD TEAM

#### DESCRIPTION

Establish a Bird City Team (standing committee) to drive the project forward. Try to ensure that your team represents different perspectives and has a liaison with the municipality.

#### SCORING INDICATORS

Provide a list of the bird team members, affiliations and contact information.

# HOW CRITERIA IS MET

The Establishment of a standing committee has been completed, with a sincere effort and interest to be inclusive of different perspectives, inclusive of local Indigenous community members. Our team includes a liaison with the municipality. Bird Friendly Calgary is comprised of three groups: the core team, a supporting team and members of the community or organizations who have made themselves available to assist when called upon. Our membership includes those representing organizations, and many who are acting as interested individuals with a variety of backgrounds and experiences.

# **EVIDENCE AND DOCUMENTATION**

Please see the attached list of the Bird Friendly Calgary team members (core and supporting members), current as of April 2021.

Criteria Complete or Undertaken to Complete?	Yes
Confirmed by Scoring Committee as having met Standard?	

# M-2: INDIGENOUS PEOPLES, LAND AND INCLUSION

#### DESCRIPTION

Provide evidence you have determined in which indigenous traditional territory(ies) your municipality occurs and that you are encouraging the participation and perspective of the local Indigenous community in the initiative.

#### **SCORING INDICATORS**

Provide the name of the relevant Indigenous Nation(s) and report on the outcome of an invitation to participate in the initiative.

### **HOW CRITERIA IS MET**

We honour and acknowledge the traditional Treaty 7 territory and oral practices of the Blackfoot confederacy: Kainai-Blood Tribe, Siksika, Peigan-Piikani and Aamskapi Pikuni, as well as the Îyâxe Nakoda and Tsuut'ina nations. We acknowledge that this territory is home to the Métis Nation of Alberta, Region 3 within the historical Northwest Métis homeland. Finally, we acknowledge all Nations – Indigenous and non – who live, work and play on this land, and who honour and celebrate this territory.

It was apparent early on that that inclusion and diversity were sincere priorities common with each member or members of Bird Friendly Calgary. Outreach to date includes: Blackfoot Confederacy Tribal Council, Blood Tribe Land Management, Land Needs Guardians and Îyâxe Nakoda First Nation. We are grateful for representation of Blood Tribe Land Management. Further invitations and collaboration will be sought for a more diverse representation, especially as we learn of more contacts who have interest in birds, wildlife and ecology. We begin each meeting with a Land Acknowledgment. We also successfully obtained funding (from Nature Canada) and hosted two Indigenous focused learning events. We carry out these important efforts not because they are a requirement on this application, but because of the values held by the team itself.

# **EVIDENCE AND DOCUMENTATION**

Please see our Bird Friendly Calgary list for membership. Links for the recordings of the two events recently held:

- March 20, 2021: Indigenous Scientist Speakers Series: "Saving Birds... the Traditional Way" Special guest Bradford Kasberg, Miami Tribe of Oklahoma. A dynamic Wetlands Restoration Specialist joined us from Audubon Great Lakes. Brad shared his exciting work with bird and habitat conservation, keeping traditional ecological methods in active practice!
- March 27, 2021: Indigenous Scientist Speakers Series: "Bison and Birds" Mike Bruised Head (Chief Bird) and Alvin First Rider shared insights of ecological monitoring and conservation efforts on the traditional lands of Kainai First Nation, including the recent reintroduction of free-roaming bison!

Criteria Complete or Undertaken to Complete?	Yes
Confirmed by Scoring Committee as having met Standard?	

# M-3: FORMAL MUNICIPAL SUPPORT

#### DESCRIPTION

Pass a council resolution nominating/ supporting your municipality's efforts to be a Bird Friendly City OR a letter of support from a high ranking city official

#### SCORING INDICATORS

Willingness to pass council resolution within the first year of certification OR a letter of support for the certification program from a high ranking city official (mayor, CEO, etc).

# **HOW CRITERIA IS MET**

We are honoured and very pleased to provide this Letter of Support from His Worship Naheed Nenshi, the Mayor of the City of Calgary.

# **EVIDENCE AND DOCUMENTATION**

Please see this link for a copy of the letter.

Criteria Complete or Undertaken to Complete?	Yes
Confirmed by Scoring Committee as having met Standard?	

### M-4: ANNUAL REPORT

#### DESCRIPTION

Once your municipality has been accorded Bird City Status, the Bird Team must provide an annual report card on activities related to your Bird City status.

#### **SCORING INDICATORS**

Provide Annual Report card (calendar year) by February 1.

### **HOW CRITERIA IS MET**

The first report will be due February 1, 2022, and Bird Friendly Calgary is happy to prepare and present this report annually.

# **EVIDENCE AND DOCUMENTATION**

This report will be provided in early 2022, prior to the deadline, and on an annual basis thereafter.

Criteria Complete or	Future
Undertaken to Complete?	Requirement
Confirmed by Scoring Committee as having met Standard?	

### M-5: CITY WEBSITE

#### DESCRIPTION

Include information about Bird Friendly City on the City website somewhere it can be easily found. SCORING INDICATORS Provide link and proof of posting.

### **HOW CRITERIA IS MET**

The City of Calgary has undertaken to include information about the Bird Friendly Initiative on their website.

# **EVIDENCE AND DOCUMENTATION**

The City estimates that this will be completed by August 30, 2021. The Facebook page for our group can be found here.

Criteria Complete or Undertaken to Complete?	In Progress
Confirmed by Scoring Committee as having met Standard?	

### M-6: RENEWAL

#### DESCRIPTION

Complete a renewal application as required every 2 years to keep your status as "active."

#### **SCORING INDICATORS**

Renewals are up to date. There will be a one-year grace period for a renewal to occur.

# **HOW CRITERIA IS MET**

The first renewal will be due in May 2023. Bird Friendly Calgary is pleased to undertake the coordination of this task.

# **EVIDENCE AND DOCUMENTATION**

Once renewals are underway, we will provide documentation and/or a link for evidence (May 2023).

Criteria Complete or	Future
Undertaken to Complete?	Requirement
Confirmed by Scoring Committee as having met Standard?	

# **SECTION 1:** THREAT REDUCTION

# 1.1 (A) OWNED CATS

#### DESCRIPTION

Regulatory and educational measures taken to help control and reduce populations of cats roaming at large:

(A) Coordinated efforts directed at cat owners to reduce the number of owned cats outside such as educational campaigns, licensing and no-roam bylaws.

#### **SCORING INDICATORS**

Proof of each action required. Two points per action. Generally if you can demonstrate some level of progress for each action, you will be awarded one point. Two points will be limited to comprehensive efforts to address that one issue. For example, for (A) to get 2 points, you we need to have a noroam bylaw AND demonstrate both enforcement of the bylaw and an educational campaign to make cat owners aware of the bylaw.

# **HOW CRITERIA IS MET**

The City of Calgary has a *Responsible Pet Ownership Bylaw* and accompanying education on City of Calgary website regarding responsible pet ownership. With this bylaw it is illegal for owned cats to be off of the owner's property which helps to reduce cats at large. A low income spay/neuter program is also available from the City of Calgary which helps to reduce unowned cat populations. This low income program is partially funded by cat and dog licensing through the City.

- Responsible Pet Ownership Bylaw and Pet Licensing
- Low Income Spay/Neuter Program from the City of Calgary
- Award from Nature Canada recognizing Calgary's Bylaw Services





Max Points Available	2
Points Submitted	2
Points Awarded (for completion by Nature Canada)	

# 1.1 (B) UNOWNED CATS

#### DESCRIPTION

(B) Within the municipality there is an active strategy to reduce populations of unowned (feral) cats and mitigate their threat to birds (e.g. removing feral colonies from areas of high bird importance).

#### **SCORING INDICATORS**

Evidence of an active program to humanely reduce the number of unowned outdoor cats. 2 points will be awarded for broad, municipal-wide strategies and actions that can demonstrate progress on the goal.

### **HOW CRITERIA IS MET**

The MEOW Foundation, a non-profit organization running in the City, has a trap/neuter release (TNR) program. Cats that are not totally feral and could be placed in a home are taken into care and adopted out or made permanent residents. Citizens are advised to call MEOW for assistance with feral cats located in the city. Formal documentation supporting this program is not currently available. However, in conversation with Director of Operations Debbie Nelson, the program currently has 83 people caring for 211 feral cats primarily concentrated on the east side of the City in neighbourhoods. There are no feral cat colonies located near natural areas.

The City of Calgary has a low income spay/neuter program to help reduce the potential stray/feral cat population.

- An explanation of the MEOW Foundations' TNR program can be found here.
- Numbers for the last year in all their programs can be found here.
- Low Income Spay/Neuter Program from the City of Calgary

Max Points Available	2
Points Submitted	2
Points Awarded (for completion by Nature Canada)	

# 1.1 (C) MONITORING OF ROAMING CATS

#### DESCRIPTION

(C) The bird team and/ municipality either has, or is a partner in programs/ projects to estimate the number and/or distribution of cats outdoors so that progress on reducing the populations of outdoor cats can be tracked over time.

#### **SCORING INDICATORS**

Proof of implementation of a cat counting/estimating protocol to establish baseline numbers or to compare with baseline numbers will be awarded 2 points. Proof of intent to implement such a protocol gets one point.

### **HOW CRITERIA IS MET**

Calgary does not presently have a formal program in place. There are complementary programs which do detect domestic cats on occasion but nothing that would substantiate a request for points on this criteria. There has been interest by local students and organizations to implement such a program so will be happy to update if or when this takes place.

# **EVIDENCE AND DOCUMENTATION**

We will be happy to report an update when that is available.



Max Points Available	2
Points Submitted	0
Points Awarded (for completion by Nature Canada)	

# 1.2 (A) WINDOW COLLISIONS - NEW CONSTRUCTION

#### DESCRIPTION

Demonstrate that your municipality is taking measures to reduce window collisions by: (A) Developing and implementing bird friendly design standards/CSA Bird Friendly Building Design standard for new construction

#### **SCORING INDICATORS**

Proof of each action required.(A) refers to the municipality developing or adopting bird friendly or bird safe standards for new construction. One point is awarded if the standard is a guideline, two points if the standard is a requirement.

### **HOW CRITERIA IS MET**

In March 2011, the City of Calgary adopted the Bird-Friendly Urban Design Guidelines which provide tools for the development of bird friendly buildings and structures. This is a non-statutory document and therefore is a suggestion rather than mandatory in new structure design. This is an area Bird Friendly Calgary hopes to focus on in the future, particularly our member organization, the Calgary Migratory Species Response Team (CMSRT).

- Please see attached supporting document folder for Bird-Friendly Urban Design Guidelines PDF. The goals of the guidelines can be found on pg. 12-29.
- City of Calgary's Existing Bird Friendly Guidelines (March 2011)
- Listed on Planning & Development Resource Library. This guideline is found under the Planning policy tab under non-statutory policies



Max Points Available	2
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

#### 1.2 (B) WINDOW COLLISIONS - EXISTING AND PROPOSED MUNICIPAL BUILDINGS

#### DESCRIPTION

(B) Assessing and mitigating risk to birds from existing and proposed municipal buildings

#### **SCORING INDICATORS**

One point if individuals or a group monitors window collisions, and/or assess risk by using BirdSafe or a similar program.

### **HOW CRITERIA IS MET**

The Calgary Migratory Species Response Team (CMSRT) was formed in the summer of 2019. The objective of CMSRT (a volunteer run community program) is to conduct surveys of the downtown core for birds and bats that may have been injured due to collisions with glass or related urban risks. The animals found alive are rescued and submitted for care by the Calgary Wildlife Rehabilitation Society. Those found deceased are collected for further study by St. Mary's University. All work is conducted under appropriate wildlife permits.

### **EVIDENCE AND DOCUMENTATION**

- CMSRT Website
- Partial data from CMSRT's efforts is available at BirdSafe.

Other evidence of the organization and the work they do can be found on the CMSRT Facebook and Twitter page and news stories and articles, such as:

- Calgary skyscrapers are killing birds so volunteers are studying how to make downtown safer (CBC – SARAH RIEGER)
- Le centre-ville de Calgary : un environnement dangereux pour les oiseaux migrateurs (CBC RADIO-CANADA – ÉMILIE VAST)
- Volunteers count dead, injured birds and bats in downtown Calgary (GLOBAL - CAROLYN KURY DE CASTILLO)



Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

# 1.2 (C) WINDOW COLLISIONS - EDUCATION OF PROPERTY OWNERS

#### DESCRIPTION

(C) Informing and educating property owners and tenants of existing buildings (including home owners) of measures they can take to mitigate bird collision risk

#### **SCORING INDICATORS**

One point is awarded with evidence of educational campaigns focused on the broad public or specific neighbourhoods.

### **HOW CRITERIA IS MET**

There are several groups working on education for the public with regards to reducing the risk of bird collisions. The first is the Calgary Migratory Species Response Team whose main goal is to significantly reduce fatalities and injuries of birds and bats in the urban environment, particularly related to window collisions. Direct one-on-one education occurs through social media when people post questions regarding window strike prevention. As CMSRT becomes better known, they are often tagged on posts seeking help or insight. During downtown surveys, volunteers from the organization provide contact information to people working at affected buildings with an invitation to contact for further insights. In addition, the team takes all opportunities to: educate through mainsteam media (TV, radio and print); conduct Facebook live events to further engage the public; and speak upon invitation at events.

The Bird Friendly Calgary team also now has a social media presence through Facebook that allows for education and the spread of information regarding ways to mitigate threats to birds including window strikes.

The Calgary Wildlife Rehabilitation Society includes information on their website and in speaking with general public.

The Wild Bird Store sells items to help prevent window strikes including decals and oil-based markers.

Finally, the community birding blog "Birds Calgary" has shared articles on prevention of window strikes in the past. Through all of these groups, education is spread to a variety of audiences.

See also section 3.8 on a business (Men in Kilts) that is considering the viability of including application of "Feather Friendly window treatments" to residential homes as a service.

- CMSRT Website
- Bird Friendly Calgary Facebook Page
- Calgary Wildlife Rehabilitation Society
- Wild Bird Store prevention products
- Birds Calgary Blog

Max Points Available	1
Points Submitted	1
<b>Points Awarded</b> (for completion by Nature Canada)	

# 1.2 (D) TREATED WINDOWS - BASELINE DATA

#### DESCRIPTION

(D) Establishing a baseline and maintaining a database of the number of residences or buildings with treated windows in the city to demonstrate progress over time

#### **SCORING INDICATORS**

Evidence of the database is provided.

### **HOW CRITERIA IS MET**

Calgary does not presently have a formal program in place. There is complementary programming through CMSRT but not formal enough at all that would substantiate a request for points on this criteria. We will be happy to update if or when this takes place.

### **EVIDENCE AND DOCUMENTATION**

We will be pleased to report with an update in the future.

Max Points Available	1
Points Submitted	0
Points Awarded (for completion by Nature Canada)	

# 1.3 (A) LIGHT POLLUTION - REDUCTION STRATEGY (MIGRATION)

#### DESCRIPTION

(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.

#### **SCORING INDICATORS**

One point is given upon evidence of a strategy to reduce light pollution

### **HOW CRITERIA IS MET**

The City of Calgary controls lighting with prescriptive regulations, guidelines, and reportable nuisances.

Regulations and guidelines include:

- Calgary Parks Lighting Plan
- Bird Friendly Urban Design Guidelines
- Municipal Development Plan
- Land use Bylaw
- City Centre Illumination Guidelines

#### **Calgary Parks Lighting Plan**

This plan is based on keeping natural areas unlit as much as possible. In addition, there are some lighting standards in place (and under development) for regional pathways that go through natural areas. For instance, the 5A pathway network standard has principles regarding minimising lighting in natural areas.

Additionally, there are ongoing discussions to include standards such as Parks Canada or US National Parks Service underway. The Parks Lighting policy directs minimal lighting in natural areas and emphasises the value of dark skies

#### **Bird Friendly Urban Design Guidelines**

This non-binding guidelines document include lighting standards specific to mitigating risks to birds

#### **Municipal Development Plan**

The relevant portion of the *Municipal Development Plan Bylaw 24P200* was modified in 2013 by the *Bright Skies Bylaw 11P2013*. As a result of these changes, potential sources of light pollution are regulated at the sources, with controls on brightness and direction. Like all regulations of this nature, constructions and installations that predate the bylaw's implementation are 'grandfathered' in, becoming legal noncompliant.

#### Land Use Bylaw

Within the City of Calgary's Land Use Bylaw 1P2007, there are a number of sections that control lighting rules, including how much nighttime lighting may be employed. Again, like all bylaws of this nature, constructions and installations that predate the bylaw's implementation are 'grandfathered' in, becoming legal noncompliant.

# 1.3 (A) LIGHT POLLUTION - REDUCTION STRATEGY (MIGRATION)

#### DESCRIPTION

(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.

#### **SCORING INDICATORS**

One point is given upon evidence of a strategy to reduce light pollution

### **HOW CRITERIA IS MET (CONTINUED)**

#### **Lighting Rules**

#### PART 3 - DIVISION 4: LIGHTING RULES

Shielding

**63** (1) All outdoor light fixtures must be aimed and shielded in a manner that does not direct illumination onto a street or adjacent residential uses.

(2) Unless otherwise referenced in subsection (3), all outdoor light fixtures must not emit light above the horizontal plane at the bottom of the light fixture.

(3) Outdoor light fixtures may emit light above the horizontal plane at the bottom of the light fixture only where the light fixture:

- (a) is used for accent lighting; or
- (b) has a luminaire wattage 150 watts or less and does not contain a:
  - (i) mercury vapour luminaire;
  - (ii) metal halide luminaire; or
  - (iii) high pressure sodium luminaire; or
- (c) has a luminaire wattage 75 watts or less and contains a:
  - (i) mercury vapour luminaire;
  - (ii) metal halide luminaire; or
  - (iii) high pressure sodium luminaire.

#### Signs

PART 3 - DIVISION 5: SIGNS

**Rules Governing All Signs** 

**73** (5) Signs in residential districts must not be internally illuminated, but may be illuminated indirectly in a manner that prevents the trespass of light onto adjacent parcels.

# 1.3 (A) LIGHT POLLUTION - REDUCTION STRATEGY (MIGRATION)

#### DESCRIPTION

(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.

#### **SCORING INDICATORS**

One point is given upon evidence of a strategy to reduce light pollution

### **HOW CRITERIA IS MET (CONTINUED)**

#### **Digital Messaging Displays**

Rules Governing Signs containing Digital Displays

75 (5.1) All signs containing a digital display must be equipped with an ambient light sensor.

(5.2) A sign containing a digital display must not increase the light levels adjacent to the digital display by more than 3.0 LUX above the ambient light level.

(6) The sign owner must ensure that while the sign is in operation, the light output for the digital display must be set in accordance with the following maximum luminance levels when measured from the sign face at its maximum brightness:

(a) from sunrise to sunset, 7500 Nits in all districts; and

- (b) from sunset to sunrise:
- (i) 500 Nits in the industrial districts;
  - (ii) 350 Nits in the C-COR 1, C-COR2, C-COR3, C-R1, C-R2, C-R3, S-CRI and S-FUD Districts; and
  - (iii) 300 Nits in all other districts not referenced in subsections (i) and (ii).

#### **Community Standards Bylaw**

The City of Calgary also examines the impact of nighttime lighting on third parties as a potential nuisance. This aspect of light pollution falls under the *Community Standards Bylaw 5M2004*. An advantage of this type of bylaw is that problematic lighting is not necessarily 'grandfathered' if it is reported and deemed to be a nuisance.



# 1.3 (A) LIGHT POLLUTION - REDUCTION STRATEGY (MIGRATION)

#### DESCRIPTION

(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.

#### **SCORING INDICATORS**

One point is given upon evidence of a strategy to reduce light pollution

# **HOW CRITERIA IS MET (CONTINUED)**

#### **City Centre Illumination Guidelines**

Although not an enforceable bylaw, the *City Centre Illumination Guidelines* does educate on the topics of the need for complementary darkness, minimizing large-scale flood lighting and being sensitive to birds. The following extracts from that document illustrates these points:

#### 2.0 URBAN DESIGN ILLUMINATION PRINCIPLES

The successful improvement of Centre City lighting requires a common vision. The following Urban Design Illumination Principles provide a general framework for this Guideline and should be applied to the design of lighting improvements as described in this Guideline.

#### 2.1 CREATING CONTRAST

It is important to consider darkness in illumination design as light creates interest only when contrasted with darkness and shadow.

GUIDELINE

- To avoid excessive brightness, designers should consider the environment to find attributes in each project that will remain unlit.
- General floodlighting should be reserved for special events, festivals and concerts, with sensitivity towards bird migratory seasons. Refer to the Bird-Friendly Urban Design Guidelines.
- Some Centre City elements should remain unlit. When choosing to light an element, consider the following: 1. Is the element best experienced in the daylight?
  - 2. Is the element in close proximity to a significantly more prominent or important element?
  - 3. Is there a significant difference between the daytime and night-time visitor experience to the element?

4. Will lighting of the element be restricted due to some other consideration - for example: **bird migratory patterns and seasons**, heritage constraints, airport regulations, provincial or national park restrictions?

#### **General Light Pollution Problems**

#### 2.2 LIGHT TRESPASS

Light pollution is an unwanted consequence of outdoor lighting and includes such effects as sky glow, light trespass, and glare. Light trespass is defined as light that strays from its intended purpose and occurs when spill light is cast where it is not wanted, illuminating adjacent properties and surfaces. Spill light results from excess light from a focused source being cast where it is not useful or desired. Avoid light trespass whenever possible.

# 1.3 (A) LIGHT POLLUTION - REDUCTION STRATEGY (MIGRATION)

#### DESCRIPTION

(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.

#### **SCORING INDICATORS**

One point is given upon evidence of a strategy to reduce light pollution

# **HOW CRITERIA IS MET (CONTINUED)**

#### **General Light Pollution Problems**

GUIDELINE

- Review the City of Calgary Land Use Bylaw to ensure all light sources, and their associated housings and control components meet the City of Calgary Land Use Bylaw requirements.
- Select beam spreads that reduce the possibility of light trespass and light pollution.

Specifically addresses outdoor lighting and birds:

2.8 BIRDS

The illumination of urban landscapes, like Centre City, may influence the migration behaviour of birds that migrate at night (nocturnal migration species).

GUIDELINE

- Section 2.0 identifies illumination principles that contribute to a bird friendly urban environment. Incorporating
  lighting control, creating contrast, limiting light trespass, designing for energy efficiency and careful
  consideration of source selection will limit light pollution (which may confuse nocturnal flyers) while clearly
  identifying solid elements (buildings, trees) in the urban landscape for avian travelers.
- Spring migration is mid-March to the beginning of June. Fall migration is August to mid-November. Search light style effects, and similar sky-lit effects, during these periods should be minimized.
- Reference the City of Calgary's Bird-Friendly Urban Design Guidelines for recommendations for the built environment that are outside the scope of this guideline. (For example, building methods and materials and interior lighting operations.)

# 1.3 (A) LIGHT POLLUTION - REDUCTION STRATEGY (MIGRATION)

#### DESCRIPTION

(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.

#### **SCORING INDICATORS**

One point is given upon evidence of a strategy to reduce light pollution

### **EVIDENCE AND DOCUMENTATION**

- Calgary Parks Lighting Plan, 5A Pathway Network Standard
- See supporting document folder, Bird-Friendly Urban Design Guidelines PDF (p.7, 9, 26-28), for specific information regarding light pollution.
- Municipal Development Plan, in particular:

f. The design of buildings, open spaces, pathways and parking areas should adhere to the principles of Crime Prevention Through Environmental Design (CPTED) while ensuring light spill into adjacent property or the surrounding environment is minimized. A reduction in light spill should be achieved by minimizing the intensity of light sources and directing light only to where it is needed

- Land Use Bylaw
- Community Standards Bylaw 5M2004

PART 10 – NUISANCES ESCAPING PROPERTY Light

43. No owner or occupier of a Premises shall allow an outdoor light to shine directly into the living or sleeping areas of an adjacent dwelling house unless the outdoor light is permitted or required pursuant to the Land Use Bylaw 1P2007, a development permit or a similar approval.

(35M2004, 2004 May 03)

(51M2016, 2016 December 14)

City Centre Illumination Guidelines

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

# 1.3 (B) LIGHT POLLUTION - NEW DEVELOPMENTS / RETROFIT

#### DESCRIPTION

(B) Light pollution mitigation standards for all new developments and/or retrofit program to replace street lamps with energy-efficient shielded fixtures

#### **SCORING INDICATORS**

One point given for either proof of mitigation standards (e.g., bylaw or guidance), and/or proof of a retrofit program (e.g., retrofitting standard street lights with downward directional street lighting). To attain "high level" certification, there must be evidence of both standards for new development and a retrofit program

### **HOW CRITERIA IS MET**

The City of Calgary has been a world leader on streetlight retrofits to reduce light pollution. Calgary Roads began North America's first largescale residential and major roadway streetlight retrofit project in late 2000. The project replaced over 40,000 residential, semi-cut off streetlights with full cut off streetlights that waste less light. Along with this change, the highpressure sodium (HPS) lamp wattage on residential streets was reduced from 200 and 250 W to 100 and 75 W. These changes reduced electricity consumption, light trespass, and sky glow.



These changes also improved visibility for drivers and pedestrians by reducing glare. The complete city retrofit was planned to be finished in 2007, but electricity cost savings were so great that the self-funded project was mostly complete three years early. Minor incremental retrofits continued to about 2010. Additional electrical efficiencies that LED streetlights provided meant that as it was time to replace end-of-life HPS lamps starting in 2015, LEDs were used in the replacement program. The LED conversion of residential streetlighting was essentially complete by spring of 2020.

All new streetlighting must meet the same standards.

The following International Space Station orthorectified image from January 2020 shows that the bulk of the orangehued HPS residential streetlights have been converted to the more energy efficient whiter LED versions.

# **EVIDENCE AND DOCUMENTATION**

See supporting document folder, Bird-Friendly Urban Design Guidelines PDF (p.7, 9, 26-28), for specific information regarding light pollution.

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

# 1.3 (C) LIGHT POLLUTION - OUTREACH CAMPAIGN

#### DESCRIPTION

(C) Outreach campaign for residents and businesses to promote responsible light control practices within the municipality.

#### **SCORING INDICATORS**

One point for educational and outreach campaigns to reduce light attraction during migration periods such as the "lights out Toronto" campaigns of the past.

### **HOW CRITERIA IS MET**

Calgary has been a leader in light pollution abatement outreach, nationally and internationally. The Royal Astronomical Society of Canada (RASC), Calgary Centre, established the first Light Pollution Abatement (LPA) Committee of any local RASC chapter, and helped develop and chair the national committee in 1989. Since its inception, the national LPA Committee has had 4 chairs, 3 have been from Calgary. Key projects include lobbying municipal and provincial governments, designating dark sky preserves and creating educational content.

To support, educate and communicate light pollution abatement policies, there are a number of RASC social media channels run by a Calgary-based volunteer.

The Calgary Centre of the RASC also has an eye-catching display about the negative impacts of light pollution as well as what some of the mitigation strategies there are. This display is set up (in non-COVID years) 3-5 times per year at public outreach events. The City of Calgary Roads department asked the Calgary Centre of the RASC to show that display during a number of public consultation engagement events for the initial streetlight retrofit program (EnviroSmart).

Outreach presentations about the negative impacts of light pollution by the Calgary Centre of the RASC happen 4-8 times per year (pre-COVID) and reach 200-400 people annually. One such talk, entitled *Death Trapped: Birds in the Land of Artificial Light*, is specifically about the negative impacts of light pollution on nocturnally-migrating birds.

In addition, there have been several talk and poster presentations to oil and gas companies and to industry conferences.

The Royal Astronomical Society of Canada (RASC), Calgary Centre, works in concert with other local organizations to mitigate light pollution and to educate on the negative health, social and environmental impacts of waste light at night.

The University of Calgary's Rothney Astrophysical Observatory has an extensive outreach program about light pollution. Their website features many other local organizations.

# 1.3 (C) LIGHT POLLUTION - OUTREACH CAMPAIGN

#### DESCRIPTION

(C) Outreach campaign for residents and businesses to promote responsible light control practices within the municipality.

#### **SCORING INDICATORS**

One point for educational and outreach campaigns to reduce light attraction during migration periods such as the "lights out Toronto" campaigns of the past.

### **HOW CRITERIA IS MET (CONTINUED)**

For example, the Ann & Sandy Cross Conservation Area, together with the Rothney Astrophysical Observatory and the Calgary Centre of the RASC has produced a series of videos about light pollution:

The Calgary Migratory Species Response Team uses Twitter and Facebook page to raise awareness of the role that light at night plays in bird-building collisions.

The New Bird Friendly Calgary Facebook page also has content about artificial light at night and birds.

### **EVIDENCE AND DOCUMENTATION**

#### Twitter

@RASC\_LPA - general light pollution environmental news

#### Facebook

Royal Astronomical Society of Canada Dark-Sky Preserve Program – general light pollution environmental news Songways - initiative to protect nocturnal migratory flyways for birds from disruptive light pollution by linking existing RASC Dark-Sky Preserves

University of Calgary's Rothney Astrophysical Observatory Light Pollution Video Series (Ann & Sandy Cross Conservation Area, the Rothney Astrophysical Observatory, and the Calgary Centre of the RASC) Calgary Migratory Species Response Team (Twitter, and Facebook) New Bird Friendly Calgary Facebook

Max Points Available	1
Points Submitted	0
<b>Points Awarded</b> (for completion by Nature Canada)	

# 1.4 PESTICIDE USE

#### DESCRIPTION

Municipality has a policy to reduce or eliminate non-essential pesticide use that directly or indirectly harms birds, on public and private land that is implemented through local bylaws. This policy should include restrictions on pesticides used to control nuisance insects such as mosquitos (such as BTI) unless there is a demonstrated health risk (such as proof of West Nile in larvae).

#### **SCORING INDICATORS**

Proof of the policy is provided. Examples of such policies would include a ban on cosmetic use of pesticides. The use of BTI to control mosquitos and blackflies is controversial, in that it is increasingly used by municipalities to kill mosquito and fly larva in wetlands in response to neighbourhood pressure. There is strong evidence that this reduces the available food for aerial insectivores like swallows and has a negative impact on their populations.

### **HOW CRITERIA IS MET**

The City of Calgary has an Integrated Pest Management Plan that aims to reduce the use of pesticides/herbicides through alternative methods of control and to minimize toxicity of those used. West Nile Virus is present in mosquitoes in Calgary and represents a public health risk, so larvicides containing BTI (*Bacillus thuringiensis israelensis*) are used when necessary. Use of pesticides on private land is regulated by the federal and provincial governments.

# **EVIDENCE AND DOCUMENTATION**

- City of Calgary Pest Management Program
- Pesticide Use on Public Land

Further information can be found in the supporting document folder under 1.4 Threat Reduction.



Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

# 1.5 PLASTICS

#### DESCRIPTION

Municipality takes regulatory measures and encourages voluntary measures to reduce the amount of plastic waste generated (e.g. banning of single use plastics).

#### **SCORING INDICATORS**

Provide proof of regulatory (e.g. a municipal bylaw) and voluntary measures (e.g. a local business) such as a ban on single use plastics, shopping bags, plastic straws, etc.

#### **HOW CRITERIA IS MET**

Calgary does not presently have a formal program in place. There is complementary programming through Plastic Free YYC. There is potential that other companies such as Cascades who has a facility in Calgary may complement this work, but further exploration is needed before we can request points. We will be happy to update if or when this takes place.

### **EVIDENCE AND DOCUMENTATION**

We will be pleased to report with an update in the future.

- Plastic Free YYC
- Cascades

Max Points Available	1
Points Submitted	0
<b>Points Awarded</b> (for completion by Nature Canada)	

# **1.6 VEHICLES**

#### DESCRIPTION

Measures in place to reduce bird collisions with vehicles such as lower speed limits when passing through important bird habitat, and measures to reduce the number of vehicles on the roads (such as a good public transit system and cycling infrastructure).

#### **SCORING INDICATORS**

Provide proof of measures to protect birds from vehicle collisions. For example, at locations where a busy road cuts through a wildlife corridor, evidence of mitigation would include lower speed limits, signage about wildlife crossing, or proof of engineered solutions such as wildlife underpasses or overpasses.

### **HOW CRITERIA IS MET**

Calgary does not presently have such a program in place. We will be happy to update if or when this takes place.

### **EVIDENCE AND DOCUMENTATION**

We will be pleased to report with an update in the future.



Max Points Available	1
Points Submitted	0
<b>Points Awarded</b> (for completion by Nature Canada)	

# **1.7 HABITAT DISTURBANCE**

#### DESCRIPTION

Municipality has policy and practices to prohibit or mitigate disturbance of birds from humans or their pets at natural areas or important bird habitat (e.g., leash bylaw, no-go zones certain times of year).

#### **SCORING INDICATORS**

Provide proof of policy and examples of implementation such as signage at important bird habitat (e.g. a natural area, wetland or known migratory stopover site) or evidence of a bylaw in place. Provide evidence that important bird habitats/ biodiversity hotspots are recognized within an official policy document.

### **HOW CRITERIA IS MET**

The City of Calgary has policy and practices to prohibit or mitigate the disturbance of birds and other wildlife by Calgarians and their pets in natural areas and has a suite of policies aimed at preventing disturbance by city workers and contractors. Biodiversity hotspots are recognised by designation of natural areas as areas of "special protection", "major", "supporting" or "parks with natural area zones". They are also recognized in the City's "*Open Space Plan 2002*".

Bylaw 11M2019 Parks and Pathway Bylaw includes the following:

- Section 7(c)(i) no damage to vegetation or wildlife habitat
- Section 9(1) requires permits for various activities. The reviewing of these permits includes potential impacts on birds and my include mitigations. For example, approval for firework placement is made by City of Calgary with consultation of Canadian Wildlife Services to reduce impact.
- Section 11(1) drones less than 250g are allowed in designated areas within Calgary Parks, and drones over 250g require a permit (see above regarding permtis).
- Section 12 no dogs in the river
- Section 15 rules for off-leash
- Section 25 wildlife protection in Parks

Inglewood Bird Sanctuary does not allow dogs or bicycles in the Park.

All parks have signage regarding on-leash and off-leash areas and requirements. This information is also on the Calgary Parks website.

- Natural Area Management Plan
- Please see supporting document folder for Open Space Plan PDF.
- Bylaw 11M2019 Calgary Parks and Pathway Bylaw
- Inglewood Bird Sanctuary information

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

# SCORING

#### ENTRY

9 points from at least 3 categories.

#### INTERMEDIATE

12 points from at least 5 categories including at least 1 category worth 2 or more.

#### HIGH

14 points or more. Must include at least 2 points in categories 1 and 2.

# **ENTRY SCORING**

Points from 5 of the 7 possible categories are submitted as having achieved consideration.

Max Points Available	18
Points Submitted	<mark>11</mark>
<b>Points Awarded</b> (for completion by Nature Canada)	

# SECTION 2: HABITAT PROTECTION, RESTORATION, AND CLIMATE RESILIENCY

# HABITAT PROTECTION, RESTORATION, AND CLIMATE RESILIENCY

### 2.1 NATURAL AREAS

#### DESCRIPTION

Natural areas within the municipal boundaries are protected within the Municipal Plan and there is a commitment to increase this area. Plan distinguishes between natural areas and other types of municipal space such as recreational parks.

#### **SCORING INDICATORS**

Provide proof of the policy. To maintain this criterion, the city must document the size of the area protected, and demonstrate a commitment to increase in this area over time. Any municipal plan that includes protection of natural area spaces will receive one point. Additional points are based on the evidence of implementation and whether there are ambitious targets to increase the number and size of the protected areas.

### **HOW CRITERIA IS MET**

The first document that supports this action item is the Biodiversity Strategic Plan which has a target of restoring 20% of Calgary's open space for biodiversity. According to the Our Biodivercity, in 2015, 19% of Calgary was considered natural area.

In addition, the Municipal Development Plan (MDP) supports an ecological network which has been delineated by the City. The ecological network contains 4 types of habitat, core natural areas greater than 30 hectares in size, stepping stone habitat which are natural areas 5-30 hectares in size, small natural areas that are 5 hectares or less and non-natural green space. These are connected by primary movement corridors along the river and secondary movement corridors that directly connect habitat patches. Natural Areas in the City of Calgary are being expanded two main ways:

- 1. Adding them to the inventory through the development process as Environmental Reserve as per section 664 of the Provincial Municipal Government Plan, and Municipal Ecological Reserve Setback Policy.
- 2. Naturalization of Municipal Reserves and other areas.

In addition there is conservation tools website available.

- Our Biodivercity Calgary's 10-year Biodiversity Strategic Plan (p. 5, 36 specifically)
- Muncipal Development Plan (the whole document provides sections supporting this, however section 2.6.4 is most pertinent)
- Natural Area Management Plan
- Provincial Municipal Government Plan
- Municipal Ecological Reserve Setback Policy
- Naturalization of Municipal Reserves and other areas
- Additional conservation tools website

Max Points Available	3
Points Submitted	3
Points Awarded (for completion by Nature Canada)	

# HABITAT PROTECTION, RESTORATION, AND CLIMATE RESILIENCY

# 2.2 BIOLOGICAL DIVERSITY

#### DESCRIPTION

Municipality has policy and practices to prohibit or mitigate disturbance of birds from humans or their pets at natural areas or important bird habitat (e.g., leash bylaw, no-go zones certain times of year).

#### **SCORING INDICATORS**

Provide proof of policy and examples of implementation such as signage at important bird habitat (e.g. a natural area, wetland or known migratory stopover site) or evidence of a bylaw in place. Provide evidence that important bird habitats/ biodiversity hotspots are recognized within an official policy document.

# **HOW CRITERIA IS MET**

The Biodiversity Strategic Plan supports increasing ecological resilience and habitat connectivity for wildlife. As noted in the 2.1, the Plan has a target for success of restoring 20% of Calgary's open space for biodiversity.

There are a couple of programs in place for biodiversity monitoring including a collaborative project called Calgary Captured. This program partners the City of Calgary with the Miistakis Institute for the Rockies, Friends of Fish Creek Park, Weaselhead / Glenmore Park Preservation Society to learn more about the biodiversity in Calgary's natural areas through camera monitoring.

Birds are monitored in the city by the Calgary Bird Banding Society and changes over time are documented.

The Municipal Development Plan also has goal of supporting biodiversity and maintaining habitat connectivity which can be found with the recent inclusion of the ecological network in the plan.

- Our Biodivercity Calgary's 10-year Biodiversity Strategic Plan (p. 33)
- Muncipal Development Plan (section 2.6.4)
- Calgary Captured
- Calgary Captured (Zooniverse)
- Calgary Bird Banding Society

Max Points Available	3
Points Submitted	3
<b>Points Awarded</b> (for completion by Nature Canada)	
### 2.3 CLIMATE CHANGE ADAPTATION STRATEGY

### DESCRIPTION

Municipality has a climate change adaptation stratedy that includes specific measures including nature-based climate solutions. Examples of this include wetland creation to absorb and retain flood water, or planting trees to create shade and lower the surface air temperature

#### **SCORING INDICATORS**

Provide proof of the stratedy and its implementation. One point if the City has an official strategy. Additional points are awarded based on evidence of ongoing measures and actions.

### **HOW CRITERIA IS MET**

The City of Calgary currently has a Climate Resilience Strategy that is essentially a broad administrative umbrella providing strategic oversight for and direction for climate related activities at The City and climate resiliency in Calgary. Alignment and integration with existing business planning processes was started in 2017. In the spirit of One Calgary (the name of Calgary's newest budget plan), each business unit is intended to deliver on their clearly defined roles in the Mitigation and Adaptation Action Plans to support the Strategy with the initiation of all activities occurring between 2018 and 2022.

Ongoing Measure and Actions specifically related to Climate Resiliency include:

- 1. The Climate Mitigation Action Plan this identifies the role and actions of The City to ensure services, and enabling activities. It also provides regulations and operations to reduce emissions and enable the low carbon economy.
- 2. The Climate Adaptation Action Plan identifies the risks and vulnerabilities from severe weather events and involves an iterative process of risk assessment.

Other ongoing measures and actions that support the goals indirectly:

- A. *Branching Out Tree Program* The City is working to increase urban tree canopy. Trees are provided at no cost by the City of Calgary. 500 trees are provided to Citizens annually.
- B. Calgary Wetland Conservation Plan Contains the "No Net Loss" principle (see s. 2.2, p. 12)
- C. Natural Area Management Plan this Plan has established a process for identifying and ensuring the long-term viability of Calgary's natural environments. It contains management guidelines and puts forward a landscape ecology approach to protecting and evaluating Calgary's natural systems.

- City of Calgary Climate Resilience Strategy Action Plans
- Climate Adaptation Action Plan Branching Out Tree Program
- Calgary Wetland Conservation Plan (see supporting documents folder for PDF)

Max Points Available	3
Points Submitted	3
<b>Points Awarded</b> (for completion by Nature Canada)	

### 2.4 (A) HABITAT MANAGEMENT STRATEGY

#### DESCRIPTION

Municipality has a habitat management strategy based on ecological and climate considerations. These include: (A) increasing the number of trees and area of the urban forest canopy;

#### **SCORING INDICATORS**

Provide proof of implementation of the strategy and each action. One point per action. Evidence for a. includes inventories of trees and plans for increasing the numbers.

### **HOW CRITERIA IS MET**

The City of Calgary's tree canopy is currently at 8.25% (including public and private trees), and the city is trying to increase that to 16%. The city has an inventory of all public trees, and a management plan for these trees.

- Branching Out Tree Program for the statement about the current tree canopy and goal for increasing this canopy.
- Click here for a map and information on Calgary trees (publicly-available information about Calgary's tree canopy).
- See also Urban Forestry Strategic Plan PDF in supporting document folder for a detailed plan regarding the management of Calgary's urban forest.

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 2.4 (B) SNAG PROTECTION

#### DESCRIPTION

(B) leaving snags standing in cases where public safety is not jeopardized;

#### **SCORING INDICATORS**

One point is based on evidence such as a policy statements or evidence within management plans for natural areas.

### **HOW CRITERIA IS MET**

Calgary promotes leaving snags or portions of trees after tree removals in certain areas (and where public safety is not jeopardized). For example, City contractors removing unsafe trees from Bowness Park were required to leave tree branches at the site for beaver use. Guidance for the protection of standing and fallen dead trees can be found in the Natural Area Management Plan p. 71, 72.

### **EVIDENCE AND DOCUMENTATION**

See Natural Area Management Plan PDF pg. 71 and 72 in supporting document folder for policies regarding fallen trees in the City.

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 2.4 (C) PROTECTION OF TREES

#### DESCRIPTION

(C) protecting trees on private and public lands;

#### **SCORING INDICATORS**

Refers to a tree bylaws that protects trees as a public value from private land owners cutting them down without permits.

### **HOW CRITERIA IS MET**

Calgary has tree bylaws that protect city-owned (public) trees. They also have programs to promote protection of private trees in the city.

### **EVIDENCE AND DOCUMENTATION**

- Tree Protection Bylaw
- Tree and Shrub care in private yards

Also see Urban Forest Strategic Plan PDF in supporting document folder.



Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 2.4 (D) RESPONSIBLE VEGETATION MANAGEMENT

### DESCRIPTION

(D) Prohibiting active vegetation management during breeding season on municipal lands, including forests, storm-water management facilities, and easements.

#### **SCORING INDICATORS**

A point is accorded if a city can demonstrate that its employees involved in active habitat management do not harm breeding birds or their habitat.

### **HOW CRITERIA IS MET**

City of Calgary has an *Urban Forestry Pruning Plan* where City and contractor crews are engaged to prune/remove trees. City crews operate year round while contractors are brought in on an as needed basis, primarily for large tree removals that the City lacks equipment for. Both contractors and City crews are expected to adhere to Federal and Provinical regulations regarding to birds. For instance, compliance with the federal Migratory Birds Convention Act and the provincial Wildlife Act is mandatory. City crews have a protocol which must be followed; if single trees are being removed they are examined for an active nest. If a nest is present, the tree remains and is checked in 30 days to see if the nest is empty. If the trees are in a natural area, a biologist does a nest check to determine any nests in the area. If nests are found again it is left and checked again after 30 days to see if it is fledged. If there is a near miss, a biologist is contacted to determine the impact, and self report to the appropriate authorities if necessary (April 2020, Julie Guimond, Urban Forestry Lead, *Personal Communication*).

- City of Calgary Urban Forestry Pruning Plan
- Migratory Bird Convention Act
- Alberta Wildlife Act
- City of Calgary Environmental Policy

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 2.5 IMPORTANT BIRD AND BIODIVERSITY AREA (IBA)

#### DESCRIPTION

Municipality has an Important Bird and Biodiversity Area (IBA) within or adjacent to its boundaries. A local partnership promotes the protection and stewardship of this area.

#### **SCORING INDICATORS**

One point if there is one or more nearby IBAs and the Bird Team can provide the names of the IBAs and at least one IBA caretaker group or individual.

### **HOW CRITERIA IS MET**

The City of Calgary has over 551 designated Natural Area Parks, including over 10,000 hectares of parkland and natural areas (found here). Important Bird and Biodiversity Areas (IBA) within close proximity to Calgary include Eagle, Namaka and Stobart Lakes (AB078), located 50 km east of Calgary, and Frank Lake (AB079), located 50 km south of Calgary. Frank Lake is managed /taken care of by Ducks Unlimited along with Namaka, Stobart and Ballina wetlands.

- City of Calgary Parks
- Natural Area Management

Max Points Available	1
Points Submitted	1
<b>Points Awarded</b> (for completion by Nature Canada)	

### 2.6 NATIVE FLORA - MUNICIPAL LANDS

### DESCRIPTION

Municipality promotes the importance of planting native local flora on municipal lands, especially where new development is occurring through development and landscaping guidelines and standards in areas near natural features. Subdivision permits should include conditions protecting existing natural habitat and promote use of native vegetation and include measures to discourage illegal disposal of yard waste (a source of invasive exotic plants) in natural areas.

#### **SCORING INDICATORS**

One point for evidence that the municipality promotes the use of site-appropriate native flora in landscaping for its own properties and for development landscaping standards for subdivision permits.

### **HOW CRITERIA IS MET**

Through the development process, any area that is designated as an Environmental Reserve (ER) is required to remain natural, or if disturbed returned to natural using the Corporate Habitat Restoration Guidelines. Municpal Reserve lands adjacent to an ER are required to have native species and no invasive species are allowed in any reserve lands. Developers are required to provide Habitat Restoration Plans (HRP) for any disturbed Environmental Reserve lands. These plans are approved by City Parks Ecologists in Calgary Parks, Urban Conservation. Developers have access to The City of Calgary Plant Lists and City of Calgary Seed Mix guidelines that provide guidence on appropriate plants and seed mixes for Calgary's diverse habitats.

These documents also include information regarding methods for successful propagation. Additional information is also found in the most current Calgary Parks Development Guidelines and Standard Specifications: Landscape Construction (which is updated annual). The City also requires that these plans include site prep, meaningful targets and monitoring (including weed management). Sites are inspected by City Development Inspectors and must past a final inspection prior to the lands being signed over to The City.

- Habitat Restoration Plan Framework
- Calgary Seed Mix Guidelines
- City of Calgary Plant Lists
- Soil Handling Recomendations
- Calgary Parks (current addition) Development Guidelines and Standard Specification: Landscape Construction

Max Points Available	1
Points Submitted	1
<b>Points Awarded</b> (for completion by Nature Canada)	

### 2.7 NATIVE FLORA - PRIVATE PROPERTY

#### DESCRIPTION

Demonstrate widespread community participation in initiatives to encourage native plant habitat that supports native birds and pollinators on private property, to increase the urban tree canopy on private land, and to support other "green infrastructure" initiatives to address climate change.

#### **SCORING INDICATORS**

One point if you provide evidence supporting "widespread community participation" in at least one national or international initiatives or local program that encourages increasing wildlife habitat on private land. This could include membership in a program like Bee City for example.

### **HOW CRITERIA IS MET**

Ecoschools Canada is an environmental certification program that provides teachers with a framework to engage their students and entire school community in environmental and climate action projects. 50 schools in Calgary have signed up for this program. In addition, the City of Calgary participates in the Butterfly Flyway Project. Thanks to the efforts of concerned citizens, this project has helped to establish Alberta's first official butterflyway: the Beddington Butterflyway. The City of Calgary is a certified 'Bee-City' and provides resources to encourage pollinator-friendly practices Through this, two "Bee Boulevards" have been established. Belvedere Parkway became Calgary's first Bee City School (2019); and University of Calgary and SAIT (Southern Alberta Institute of Technology) are Bee Campuses.

There are also a number of naturalization programs in place in addition to riparian restoration and invasive plant removal programs. See evidence box for examples.

Finally, the City of Calgary has developed resources to help citizens naturalize their yards.

- Ecoschools
- Butterfly Flyway Project
- Bee-City (also here, and here)
- Tree Management
- School Yard Naturalization Project
- Riparian Action Program (Example 1, Example 2, Example 3, Example 4)
- Invasive Plant Programs: Weaselhead/Glenmore Park Preservation Society
- Friends of Fish Creek
- City of Calgary
- City resources for naturalizing yards

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 2.8 STOPOVER & NESTING HABITAT

### DESCRIPTION

Bird City partner groups implement stewardship to increase or improve breeding or stopover habitat for bird conservation priority species from your Bird Conservation Region Plan. Example species include Species at Risk (e.g. Chimney Swift) and other aerial insectivores, Eastern Meadowlark and other grassland birds and shorebirds. Example actions including providing housing (e.g., maintained Purple Martin condos), and maintaining bird-friendly hay production.

#### **SCORING INDICATORS**

A point is awarded to cities in which there are active stewardship recover projects such as those suggested in the criterion description.

### **HOW CRITERIA IS MET**

The City of Calgary's focus for supporting birds is on habitat creation. This is done through restoration projects and the use of appropriate native vegetation. Parks have been prioritized for restoration based on their potential for supporting biodiversity and habitat connectivity. As can be seen in the Biodiversity Strategic Plan, the expansion of habitat and habitat connectivity is a key part of supporting biodiversity, including birds in the City. Whether at risk species will use Calgary for stopover or nesting may not be dictated by the availability of any habitat but rather habitat size and disturbance. Bylaws preventing off leash dogs and encouraging people to stay on designated paths can lessen disturbance and increase the likelihood that at risk or sensitive species will stop in the City. One of our partners, the Weaselhead/Glenmore Park Preservation Society works to educate people about the impact of our footprints and strongly encourages limited areas of use by domestic dogs in the park. Outside of the City, the Ann and Sandy Cross Conservation Area has a birdbox program which is currently being updated.

- Natural Area Management Plan
- Bylaws and education relating to dogs in the City

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### SCORING

### ENTRY

8 points from at least 3 categories.

### INTERMEDIATE

11 points from at least 4 categories.

#### HIGH

14 points from at least 6 categories including at least 1 point from categories 2.1, 2.2, 2.3 and 2.4.

### **HIGH SCORING**

Points from 8 of the 8 possible categories are submitted as having achieved consideration.

Max Points Available	17
Points Submitted	<mark>17</mark>
<b>Points Awarded</b> (for completion by Nature Canada)	

# SECTION 3: COMMUNITY OUTREACH/ EDUCATION

### 3.1 WORLD MIGRATORY BIRD DAY

### DESCRIPTION

Hold (and officially proclaim) a World Migratory Bird Day event annually to celebrate birds in your municipality.

#### **SCORING INDICATORS**

This is a mandatory action for this program. Cities must hold a Bird Day event to apply. To receive all 4 points, you must provide proof of the event and Mayor's or Council proclamation in support of Bird Day.

### **HOW CRITERIA IS MET**

Calgary first celebrated World Migratory Bird Day in 2000. Celebrations have been hosted by the City for 18 years and plans are already underway for 2021 with consideration for COVID safety protocols. The events are hosted by Calgary Parks Environmental Education Team at the Inglewood Bird Sanctuary, with attendance of approximately 1500 visitors each year. The annual celebrations are advertised throughout the community and in the media. Activities include guided walks, exhibitions, games, crafts, viewing birds through spotting scopes and education touch tables with biofacts.

### **EVIDENCE AND DOCUMENTATION**

See the following documents published by the City to support the events that take place:

- 2013
- 2014
- 2019
- Letter from Mayor Nenshi

Max Points Available	4
Points Submitted	4
Points Awarded (for completion by Nature Canada)	

### 3.2 SCHOOLS, GROUPS & COMMUNITIES

### DESCRIPTION

A significant percentage of local schools and other educational organizations (e.g. Scouts Canada, Earth Rangers, 4-H) provide students with opportunities to connect with nature, enjoy birds and learn how to help them. Local school boards, conservation authority, or municipality, has facilities/staffing to support outdoor/environmental education, including opportunities to observe birds. At least one school does a specific bird-related program such as Christmas bird count for kids or curriculum from Keep cats safe and save bird lives. Educational program must include specific elements designed to engage members of the public who could be considered underprivileged families and groups, racialized youth and recent arrivals to Canada.

### **SCORING INDICATORS**

Provide evidence in support of this level of outreach and engagement of children, youth and other target audiences. One point is awarded if there are local education facilities and institutions that include activities for children to observe and appreciate birds both in school and outside through an educational organization that offers nature programing to the public. Two points if there are specific bird-related nature programs for recent arrivals to Canada, underprivileged or racialized families. Three points if there is at least one school or organization that offers programming from the Keep cats safe and save bird lives curriculum. (https://catsandbirds.ca/ educational-resources/)

### **HOW CRITERIA IS MET**

There are currently several independent organizations that work to educate youth with regards to birds in a variety of contexts. Alberta's largest school board, The Calgary Board of Education incorporates responsible stewardship of the environment into the core principals of its curriculum and the Calgary Catholic School district includes environmental courses. As part of these programs, often schools with engage with non-profit organizations to collaborate on presentations or learning events and many of those involve discussions of birds. The Alberta Institute for Wildlife Conservation goes out to schools for presentations and incorporates keeping cats indoors, keeping birds safe into their discussions. The Calgary Wildlife Rehabilitation Society also holds presentations in schools and adult presentations with three programs specifically geared towards birds, injuries that occur and how individuals can make a difference.

The Ann and Sandy Cross Conservation Area and Rothney Astrophyscial Observatory provide educational programs for youth throughout the year including their dark sky presentations which discuss the dangers of light pollution to birds. The Cochrane Ecological Institute provides similar educational opportunities. The Canadian Parks and Wilderness Society (CPAWS) visits schools and hosts educational programs for youth and adults. They also have a program directly targeting new immigrants to Canada. While none of those programs are specifically about birds, they do include environmental stewardship messaging. The Weaselhead holds annual Christmas Bird Counts and hosts educational programs for youth which include information about birds. The Inglewood Bird Sanctuary holds a number of educational programs geared towards birds for schools, youth and adults. Additionally, the "Keep cats safe and save bird lives" curriculum is featured in programs at the AIWC, Weaselhead Preservation Society and Cochrane Ecological Institute.

(Continued on next page)

### 3.2 SCHOOLS, GROUPS & COMMUNITIES (CONTINUED)

#### DESCRIPTION

A significant percentage of local schools and other educational organizations (e.g. Scouts Canada, Earth Rangers, 4-H) provide students with opportunities to connect with nature, enjoy birds and learn how to help them. Local school boards, conservation authority, or municipality, has facilities/staffing to support outdoor/environmental education, including opportunities to observe birds. At least one school does a specific bird-related program such as Christmas bird count for kids or curriculum from Keep cats safe and save bird lives. Educational program must include specific elements designed to engage members of the public who could be considered underprivileged families and groups, racialized youth and recent arrivals to Canada.

#### **SCORING INDICATORS**

Provide evidence in support of this level of outreach and engagement of children, youth and other target audiences. One point is awarded if there are local education facilities and institutions that include activities for children to observe and appreciate birds both in school and outside through an educational organization that offers nature programing to the public. Two points if there are specific bird-related nature programs for recent arrivals to Canada, underprivileged or racialized families. Three points if there is at least one school or organization that offers programming from the Keep cats safe and save bird lives curriculum. (https://catsandbirds.ca/ educational-resources/)

### **HOW CRITERIA IS MET (CONTINUED)**

The City also has numerous school/youth programs, including: Group nature programs for children and youth, Bird Studies, Guided walks, Birdwatching course, and "BioBlitz" school programs.

### **EVIDENCE AND DOCUMENTATION**

- Calgary Board of Education
- Alberta Institute for Wildlife Conservation
- Ann and Sandy Cross Conservation Area
- Calgary Wildlife Rehabilitation Society
- Cochrane Ecological Institute
- CPAWS: Register Action Challenge
- City of Calgary
- Rothney Astrophysical Observatory: School Groups | Faculty of Science | University of Calgary
- The Weaselhead/Glenmore Park Preservation Society

#### School/Youth Programs from City of Calgary:

- City of Calgary Group nature programs for children and youth
- Birdwatching courses can be all ages or age-restricted
- School Program BioBlitz

Max Points Available	3
Points Submitted	2
Points Awarded (for completion by Nature Canada)	

### 3.3 COLLEGE AND UNIVERSITY CAMPUSES

### DESCRIPTION

College and University campuses have adopted practices that actively reduce threats to birds or establish habitat that benefits birds. Implementation of practices should include or be driven by student committees or groups.

#### **SCORING INDICATORS**

One point is awarded based on evidence that institutions that have policies and practices to benefit birds including names of institutions, the programs that they participate in (e.g BirdSafe, Bee City), as well as an example of a recent action and evidence of student involvement.

### **HOW CRITERIA IS MET**

The University of Calgary and SAIT (Southern Alberta Institute of Technology) are Bee Campuses which provides habitat and mitigates threats to bees which also benefits birds. Mount Royal University campus contains several wetland areas which provide habitat and nesting areas for waterfowl.

### **EVIDENCE AND DOCUMENTATION**

UofC's Bee Campus

SAIT's Bee Campus

Max Points Available	1
Points Submitted	1
<b>Points Awarded</b> (for completion by Nature Canada)	

### 3.4 PUBLIC ACCESS TO RESOURCES

#### DESCRIPTION

Bird Team partners (including Municipality) provide public access to resources (web links, brochures etc.) that encourage and inform the public of the benefit to birds from native plant gardening or establishment of natural habitat patches on their property in support of birds and/or pollinators (e.g. backyard habitat program).

#### **SCORING INDICATORS**

One point if you can provide evidence of the digital or paper resources, as well as evidence of public interest and knowledge of them (e.g. social media activity).

### **HOW CRITERIA IS MET**

The City of Calgary has several programs geared towards education regarding the use of native plants for biodiversity incluidng resources related to Calgary's Bee City designation, yard smart program for homeowners and the backyard naturalization program. Other organizations that provide information regarding the benefit of native plants to biodiversity include: The Calgary Horticultural Club, the University of Calgary, Silver Springs Horticultural Club, Alberta Native Plant Council and Grow Wild YYC.

These events and programs are very successful in garnering public engagement and participation. See social and traditional media links below for just a few examples.

- City of Calgary (also here)
- It has established two 'Bee Boulevards'. See Facebook page for evidence of public engagement
- City of Calgary Yardsmart
- City of Calgary Backyard Naturalization
- Calgary Horticultural Society. See Facebook page for evidence of public engagement
- University of Calgary
- Silver Springs Botanical Gardens
- Alberta Native Plant Council
- Grow Wild YYC

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 3.5 PUBLIC INSTALLATIONS FOR EDUCATION

### DESCRIPTION

Municipality and Bird City partners install demonstrations or displays in public areas that educate citizens on the benefits of bird friendly actions and encourage engagement (benefits of dark sky lighting, window modifications etc.)

#### **SCORING INDICATORS**

One point based on proof of installations (e.g. photographic evidence, or news stories.)

### **HOW CRITERIA IS MET**

As one example, the Calgary Migratory Species Response Team focuses their work on reducing window strikes for birds and bats. In Fall of 2019, we held a public event graciously hosted by St. Mary's University wherein we had several presentations and had a demonstration of a "layout" of the deceased birds collected during our Fall 2019 Survey. This was covered by several news agencies.

In March of 2020, just before Covid shutdown, the Wild Bird Store of Calgary kindly hosted Dr. Scott Lovell (Co-Founder of Calgary Migratory Species Response Team) who gave a presentation on our preliminary research on Window Strikes. To support this effort of educating the public on Window Strike abatement, artist and volunteer, TJ Timonera, was hosted at The Wild Bird Store with a public education display. Since Covid, we have not had public displays but did host a series of online Facebook live events to educate the public safely through virtual means. These educational programs will be restarting in May 2021 with the Calgary Public Library hosting.

The City of Calgary (World Migratory Bird Day), Royal Astonomical Society of Canada - Calgary Centre, Calgary Wildlife Rehabiliation Society and other partner groups also provide displays and events with the intent of educating the public on hazard reduction for birds and other wildlife.

(Continued on next page)



### 3.5 PUBLIC INSTALLATIONS FOR EDUCATION (CONTINUED)

### DESCRIPTION

Municipality and Bird City partners install demonstrations or displays in public areas that educate citizens on the benefits of bird friendly actions and encourage engagement (benefits of dark sky lighting, window modifications etc.)

### **SCORING INDICATORS**

One point based on proof of installations (e.g. photographic evidence, or news stories.)

- September 2, 2019: The shocking numbers of bird fatalities in Calgary by window strike
- October 30, 2019: Calgary volunteers track building strikes by migrating birds
- November 25, 2019: Calgary skyscrapers are killing birds so volunteers are studying how to make downtown safer (CBC - SARAH RIEGER)
- November 25, 2019: Le centre-ville de Calgary : un environnement dangereux pour les oiseaux migrateurs (CBC RADIO-CANADA – ÉMILIE VAST)
- December 25, 2019: Volunteers count dead, injured birds and bats in downtown Calgary
  (GLOBAL CAROLYN KURY DE CASTILLO)
- February 13, 2020: The terrible toll of bird collisions with modern buildings
  (IRISH TIMES AMY LEWIS)
- TJ and Monique's Display at Dr. Lovell's talk



Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 3.6 ACCESSIBLE BIRD-WATCHING LOCATION(S)

### DESCRIPTION

There is at least one birding location within your city or town that has infrastructure to facilitate the observation and appreciation of birds (e.g. signs, panels, observation tower, and trails). This facility is publicly accessible for people without a car (serviced by public transit and/or bicycle and pedestrian trails). Digital information on birding areas should be easily available.

### **SCORING INDICATORS**

One point based on evidence of a local birding area that is publicly accessible, a brief description of the infrastructures (e.g. trails, observation tower), and how the area can be accessed by someone without a car.

### **HOW CRITERIA IS MET**

The City of Calgary has several areas designed for Bird Watching including the Inglewood Bird Sanctuary which can be accessed by car, bike or walking (though, no cycling is permitted within the sanctuary). There are observation areas along the water and trails for people to follow throughout the Sanctuary that provide ample opportunity to observe a variety of bird species. Ralph Klein Park is also designed to be birdwatching destination. It is accessible by bike or car and has walkways available for people to walk through. There is extensive wetland coverage in the area and the building constructed in the Park is designed for people to birdwatch. The Weaselhead Natural Area and the connected Glenmore Park are accessible by transit, biking, walking or car. They are connected by a paved path that goes around the Glenmore reservoir.

There are also extensive trail networks in both parks for people to enjoy and birdwatch. People can also connect from there to nearby Fish Creek Provincial Park which is also accessible by transit, bike, walking or car. Bowmont and Nose Hill Parks are accessible by transit, car, bike or walking and provide both paved paths and more rugged trails for people to bird watch. These areas also include picnic sites so people can sit and observe as well. Calgary has over 551 natural area parks, many accessible by walking in a community (see map). All of these areas provide a diversity of habitat for birds and offer opportunity for birders to observe many species. Educational signs regarding birds are posted in the Weaselhead Natural Area, Glenmore Park and Fish Creek Park.

- Inglewood Bird Sanctuary
- Ralph Klein Park
- Weaselhead / Glenmore Park
- Fish Creek Provincial Park
- Bowmont Park
- Nose Hill Park

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 3.7 LOCAL SPECIES REFERENCE LIST

### DESCRIPTION

A Bird Team partner periodically publishes a "Bird checklist" for your city or town. This checklist should be easily available in digital form on the Internet. Alternatively, there are eBird hotspots in your City.

#### **SCORING INDICATORS**

One point based on proof that a local bird checklist exists in a published form or there are eBird hotspots in your city.

### **HOW CRITERIA IS MET**

There are local bird checklists published by Nature Calgary. See documentation for evidence. Birds are also frequently documented by citizen scientists on e-bird.

- Calgary and area bird checklist (also see "CalgaryRegionChecklist.pdf" in resources folder)
- Calgary eBird



Max Points Available	1
Points Submitted	1
<b>Points Awarded</b> (for completion by Nature Canada)	

### 3.8 LOCAL BIRD FRIENDLY BUSINESSES

### DESCRIPTION

Businesses in your area promote bird friendly practices (e.g. sell or offer bird friendly coffee, no single use plastics, treat their windows with feather-friendly markers, etc.). These businesses should be recognized on partner websites.

### **SCORING INDICATORS**

To receive a point, you must provide proof that at least two businesses in your area have bird friendly practices. You must name the businesses and describe what bird-friendly practices they have.

### **HOW CRITERIA IS MET**

Our team was able to find three examples of businesses that incorporate or are working towards bird friendly practices: 1. The Wild Bird Store sells products related to birds including specific bird seed mixes for Calgary's birds, made in-house suet, birdhouses and birdbaths. In addition, they sell products to help keep birds safe including cat bibs and UV markers for windows. They collaborate with groups including the Calgary Migratory Species Response Team (CMSRT), Alberta Institute for Wildlife Conservation (AIWC), Calgary Wildlife Rehabilitation Society (CWRS) and Wild About Flowers Native Plant Nursery to support birds in the community. 2. Paradise Mountain Coffee is roasted in Calgary and is a certified bird friendly coffee. 3. Good Earth Cafe is actively working to reduce the use of single use plastic, they have composting programs to reduce their overall waste, they plant trees and sell shade grown coffee which acts to maintain habitat for birds where their coffee is grown.

Additionally, Men in Kilts (the Calgary location of this window cleaning business), is currently conducting Research and Development on the possibility of including the application of "Feather Friendly window treatments" to residential homes as a service. They still have work to do before confirming if this is a viable option for their business plan but they are actively working on it. This could be a real game changer to make this accessible and normalize window treatments.

Bird Friendly Calgary is working with these and other businesses to encourage bird friendly practices, and to promote these businesses within and beyond Calgary.

- Wild Bird Store
- Paradise Mountain Coffee
- Good Earth Cafe

Max Points Available	1
Points Submitted	1
Points Awarded (for completion by Nature Canada)	

### 3.9 CITY BIRD

#### DESCRIPTION

You have a "City Bird" species that was selected through a public engagement process.

#### **SCORING INDICATORS**

To receive a point for this criterion, you must provide the name of the "City Bird" species, proof of its status, and evidence of the process to select it.

### **HOW CRITERIA IS MET**

Bird Friendly Calgary is pleased to submit that a public engagement campaign to select a Bird for Calgary will be undertaken for completion within 1 year (for completion and announcement prior to April 1, 2022). Responsibility for leading the effort is happily taken by the Calgary Migratory Species Response Team, with as much collaboration as possible with Bird Friendly Calgary and stakeholders, as specific assurance of this intention.

### **EVIDENCE AND DOCUMENTATION**

We undertake to provide specific plans before July 30, 2021.

Max Points Available	1
Points Submitted	0
Points Awarded (for completion by Nature Canada)	

### 3.10 INCLUSIVE COMMUNITY SCIENCE PROGRAMS

### DESCRIPTION

There are active citizen science programs to monitor birds in your municipality including Christmas Bird Count, Swift Night Out, and Marsh Monitoring, and Global Bird Rescue, which monitor birds on areas that include public land. Public participation in these programs is promoted on local media. Demonstrate efforts to engage members of the public could be considered underprivileged, racialized or recent arrivals to Canada.

### **SCORING INDICATORS**

To receive one point, provide a list of bird-related citizen science programs in your city and describe the level of public interest and engagement of target audiences.

### **HOW CRITERIA IS MET**

Calgary has several community science programs in place including the Christmas Bird Count which has been ongoing for 65 years. In 2020 it attracted over 250 participants. In May there is the Calgary May Species Bird Count which has been ongoing for 41 years. In 2020 there were 109 participants. The City Nature Challenge takes place in Calgary each year and encourages people to document all nature around them on iNaturalist including birds. Finally, the Calgary Migratory Species Response Team is run by volunteer community scientists who go out and record window strikes during migration in downtown Calgary.

Bird Friendly Calgary is currently working on ways to ensure that these events are welcoming and accessible to underrepresented Calgarians, including underprivileged, racialized, and recent arrivals to Canada.

- Calgary Christmas Bird Count 65 years, 250+ participants in 2020
- Calgary May Species Bird Count 41 years, 109 participants in 2020 (also in "Calgary-May-Species-Count-for-Birds-2020.pdf" in supporting documents folder)
- Calgary Bird Banding Society: Calgary Bird Banding Society
- Calgary Nature Challenge: City Nature Challenge 2021 Nature Calgary
- Calgary Migratory Species Response Team
- Global Bird Rescue: 2019 & 2020 Calgary Migratory Species Response Team participated with community

Max Points Available	1
Points Submitted	1
<b>Points Awarded</b> (for completion by Nature Canada)	

### SCORING

### ALL LEVELS MUST DO 3.1

### ENTRY

7 points from at least 3 categories.

### INTERMEDIATE

9 points from at least 5 categories.

### HIGH

12 points from at least 7 categories.

### **HIGH SCORING**

Points from 9 of the 10 available categories are submitted as having achieved consideration. Criteria 3.1 (mandatory) achieved.

Max Points Available	15
Points Submitted	<mark>13</mark>
Points Awarded (for completion by Nature Canada)	

# MANDATORY CRITERIA

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	SUBMISSION COMPLETE?	CONFIRMED AS COMPLETE?
Mandatory	Establish a Bird Team (standing committee) to drive the project forward. Try to ensure that your team represents different perspectives and has a liaison with the municipality	Provide a list of the Bird Team members, affiliations and contact information.	Yes	
Mandatory	Provide evidence you have determined in which indigenous traditional territory (ies) your municipality occurs and that you are encouraging the participation and perspective of the local Indigenous community in the initiative.	Provide the name of the relevant Indigenous Nation (s) and report on the outcome of an invitation to participate in the initiative.	Yes	
Mandatory	Pass a council resolution nominating or supporting your municipality's efforts to be a Bird Friendly City OR a letter of support from a high-ranking city official.	Willingness to pass council resolution within the first year of certification OR a letter of support for the certification program from a high-ranking city official (mayor, CEO, etc).	Yes	
Mandatory	Once your municipality has been accorded Bird Friendly City status, the Bird Team must provide an annual report card on activities related to your Bird Friendly City status.	Provide Annual Report card by (calendar year) by February 1.	Undertaken to complete for February 1, 2022 and thereafter.	
Mandatory	Include information about Bird Friendly City on the City website somewhere it can be easily found.	Provide a link and proof of posting.	Undertaken to complete prior to February 1, 2022.	
Mandatory	Complete a renewal application as required every 2 years to keep your status as "active."	Renewals are up to date. There will be a one-year grace period for a renewal to occur.	Undertaken to complete prior to February 1, 2022.	

Generally, all of the points are awarded contingent on evidence in support of the action. However, points can be rewarded even if the action has not been completed, as long as there is strong evidence that a process to implement or complete the action is underway.

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED	
1.1 Threat Reduction – Cats						
1.1 (A) Threat Reduction – Owned Cats	Regulatory and educational measures taken to help control and reduce populations of cats roaming at large: (A) Coordinated efforts directed at cat owners to reduce the number of owned cats outside such as educational campaigns, licensing and no-roam bylaws. (2)	Proof of each action required. Two points per action. Generally, if you can demonstrate some level of progress for each action, you will be awarded one point. Two points will be limited to comprehensive efforts to address that one issue. For example, for (A) to get 2 points, you need to have a no- roam bylaw AND demonstrate both enforcement of the bylaw and an educational campaign to make cat owners aware of the bylaw.	2 Points	2 Points		
1.1 (B) Threat Reduction – Unowned Cats	(B) Within the municipality there is an active strategy to reduce populations of unowned (feral) cats and mitigate their threat to birds (e.g. removing feral colonies from areas of high bird importance). (2)	Evidence of an active program to humanely reduce the number of unowned outdoor cats. 2 points will be awarded for broad, municipal-wide strategies and actions that can demonstrate progress on the goal.	2 Points	2 Points		
1.1 (C) Threat Reduction – Monitoring of Roaming Cats	(C) The Bird Team and/ municipality either has or is a partner in programs/ projects to estimate the number and/or distribution of cats outdoors so that progress on reducing the populations of outdoor cats can be tracked over time. (2)	Proof of implementation of a cat counting/ estimating protocol to establish baseline numbers or to compare with baseline numbers will be awarded 2 points. Proof of intent to implement such a protocol gets one point.	2 Points	0 Points		

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED	
1.2 Threat Reduction - Window Collisions						
1.2 (A) Threat Reduction – Window Collisions – New Construction	Demonstrate that your municipality is taking measures to reduce window collisions by: (A) Developing and implementing bird friendly design standards/CSA Bird Friendly Building Design standard for new construction (2)	Proof of each action required. Two points for (A); and one point for (B), (C) and (D). (A) refers to the municipality developing or adopting bird friendly or bird safe standards for new construction. One point is awarded if the standard is a guideline, two points if the standard is a requirement.	2 Points	1 Point		
1.2 (B) Threat Reduction - Window Collisions – Existing and Proposed Municipal Buildings	(B) Assessing and mitigating risk to birds from existing and proposed municipal buildings (1)	One point if individuals or a group monitors window collision, and/or assess risk by using BirdSafe, or a similar program.	1 Point	1 Point		
1.2 (C) Threat Reduction – Windows Collisions - Education of property owners	(C) Informing and educating property owners and tenants of existing buildings (including homeowners) of measures they can take to mitigate bird collision risk (1)	One point is awarded with evidence of educational campaigns focused on the broad public or specific neighbourhoods.	1 Point	1 Point		
1.2 (D) Threat Reduction – Treated Windows - Baseline Data	(D) Establishing a baseline and maintaining a database of the number of residences or buildings with treated windows in the city to demonstrate progress over time. (1)	Evidence of the database is provided.	1 Point	0 Points		

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED
1.3 Threat Reduc	tion – Light Pollution				
1.3 (A) Threat Reduction – Light Pollution – Reduction Strategy (Migratory)	(A) Municipality has a light pollution reduction strategy and supports actions to reduce light pollution, particularly during migratory seasons.	One point is given upon evidence of a strategy to reduce light pollution.	1 Point	1 Point	
1.3 (B) Threat Reduction – Light Pollution – New Developments /Retrofit	(B) Light pollution mitigation standards for all new developments and/or retrofit program to replace streetlamps with energy- efficient shielded fixtures	One point given for either proof of mitigation standards (e.g., bylaw or guidance), and/ or proof of a retrofit program (e.g., retrofitting standard streetlights with downward directional street lighting). To attain "high level" certification, there must be evidence of both standards for new development and a retrofit program.	1 Point	1 Point	
1.3 (A) Threat Reduction – Light Pollution - Outreach campaign	(C) Outreach campaign for residents and businesses to promote responsible light control practices within the municipality.	One point for educational and outreach campaigns to reduce light attraction during migration periods such as the "lights out Toronto" campaigns of the past.	1 Point	0 Points	

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED
1.4 Threat Red	duction – Pesticides				
1.4 Threat Reduction – Pesticide Use	Municipality has a policy to reduce or eliminate non- essential pesticide use that directly or indirectly harms birds, on public and private land that is implemented through local bylaws. This policy should include restrictions on pesticides used to control nuisance insects such as mosquitos (such as BTI) unless there is a demonstrated health risk (such as proof of West Nile in larvae).	Proof of the policy is provided. Examples of such policies would include a ban on cosmetic use of pesticides or the use of rodenticides when harm to bird populations has been demonstrated. The use of BTI to control mosquitoes and blackflies is controversial, in that it is increasingly used by municipalities to kill mosquitoes and fly larva in wetlands in response to neighbourhood pressure. There is strong evidence that this reduces the available food for aerial insectivores like swallows and has a negative impact on their populations.	1 Point	1 Point	
1.5 Threat Red	duction – Plastics				
1.5 Threat Reduction – Plastics	Municipality takes regulatory measures and encourages voluntary measures to reduce the amount of plastic waste generated (e.g., banning of single use plastics).	Provide proof of regulatory (e.g. a municipal bylaw) and voluntary measures (e.g. a local business) such as a ban on single use plastics, shopping bags, plastic straws, etc.	1 Point	0 Points	

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
1.6 Threat Red	1.6 Threat Reduction – Vehicle Collisions								
1.6 Threat Reduction – Vehicle Collisions	Measures in place to reduce bird collisions with vehicles such as lower speed limits when passing through important bird habitat, and measures to reduce the number of vehicles on the roads (such as a good public transit system and cycling infrastructure).	Provide proof of measures to protect birds from vehicle collisions. For example, at locations where a busy road cuts through a wildlife corridor, evidence of mitigation would include lower speed limits, signage about wildlife crossing, or proof of engineered solutions such as wildlife underpasses or overpasses.	1 Point	0 Points					
1.7 Threat Red	uction – Habitat Disturbance								
1.7 Threat Reduction - Habitat Disturbance	Municipality has policy and practices to prohibit or mitigate disturbance of birds from humans or their pets at natural areas or important bird habitat (e.g., leash bylaw, no-go zones certain times of year).	Provide proof of policy and examples of implementation such as signage at important bird habitat (e.g., a natural area, wetland or known migratory stopover site) or evidence of a bylaw in place. Provide evidence that important bird habitats/ biodiversity hotspots are recognized within an official policy document.	1 Point	1 Point					
SCORING	Entry – 9 points from at least 3 Intermediate – 12 points from at least 1 category worth 2 or High – 14 points or more. Must categories 1 and 2.	at least 5 categories including more.	18 points	11 Points					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED					
2.1 Habitat Pro	2.1 Habitat Protection, Restoration, and Climate Resiliency – Natural Areas									
2.1 Habitat Protection, Restoration, and Climate Resiliency – Natural Areas	Natural areas within the municipal boundaries are protected within the Municipal Plan and there is a commitment to increase this area. Plan distinguishes between natural areas and other types of municipal space such as recreational parks.	Provide proof of the policy. To maintain this criterion, the city must document the size of the area protected and demonstrate a commitment to increase in this area over time. Any municipal plan that includes protection of natural area spaces will receive one point. Additional points are based on the evidence of implementation and whether there are ambitious targets	3 Points	3 Points						
2.2 Habitat Pro	tection, Restoration, and Clir	nate Resiliency – Biological Diversit	Y							
2.2 Habitat Protection, Restoration, and Climate Resiliency - Biological Diversity	Municipality has an official strategy to protect the biological diversity in its parks and natural areas. The strategy includes measures such as promoting connectivity between natural areas, buffering core biodiversity hotspots from harmful human activities, increasing the number of protected areas, and periodically monitoring birds on some city parks to assess the success of the strategy.	Provide proof of the strategy and its implementation. The strategy to protect biological diversity can be part of the protected areas plan, or vice versa, but must specifically identify protection of biological diversity as a goal. One point is awarded for having an official strategy (adopted by Council). Two points if the strategy has targets and metrics for success and there is evidence of implementation. Three points for cities that meet the previous two tests as well as using monitoring to track changes to biodiversity and use results for adaptive management (e.g. bird monitoring in city owned natural areas).	3 Points	3 Points						

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
2.3 Habitat Pro	2.3 Habitat Protection, Restoration, and Climate Resiliency – Climate Change Adaptation								
2.3 Habitat Protection, Restoration, and Climate Resiliency – Climate Change Adaptation	Municipality has a climate change adaptation strategy that includes specific measures including nature- based climate solutions. Examples of this include wetland creation to absorb and retain flood water, or planting trees to create shade and lower the surface air temperature.	Provide proof of the strategy and its implementation. One point if the City has an official strategy. Additional points are awarded based evidence of ongoing measures and actions.	3 Points	3 Points					
2.4 Habitat Pro	otection, Restoration, and Climat	e Resiliency							
2.4 (A) Habitat Protection, Restoration, and Climate Resiliency – Habitat - Trees / Urban Forest Canopy	Municipality has a habitat management strategy based on ecological and climate considerations. These include: (A) increasing the number of trees and area of the urban forest canopy.	Provide proof of implementation of the strategy and each action. One point per action. Evidence for (A) includes inventories of trees and plans for increasing the numbers.	1 Point	1 Point					
2.4 (B) Habitat Protection, Restoration, and Climate Resiliency - Snag protection	(B) leaving snags standing in cases where public safety is not jeopardized.	One point is based on evidence such as policy statements or evidence within management plans for natural areas.	1 Point	1 Point					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
2.4 Habitat Pro	2.4 Habitat Protection, Restoration, and Climate Resiliency (Continued)								
2.4 (C) Habitat Protection, Restoration, and Climate Resiliency – Protection of Trees	(C) protecting trees on private and public lands; and	(C) refers to a tree bylaw that protects trees as a public value from private landowners cutting them down without permits.	1 Point	1 Point					
2.4 (D) Habitat Protection, Restoration, and Climate Resiliency – Responsible Vegetation Management	(D) prohibiting active vegetation management during breeding season on municipal lands, including forests, storm- water management facilities, and easements.	For (D) a point is accorded if a city can demonstrate that its employees involved in active habitat management do not harm breeding birds or their habitat.	1 Point	1 Point					
2.5 Habitat Pro	tection, Restoration, and Clim	ate Resiliency – Important Bird and	Biodiversity A	Area (IBA)					
2.5 Habitat Protection, Restoration, and Climate Resiliency – Important Bird and Biodiversity Area (IBA)	Municipality has an Important Bird and Biodiversity Area (IBA) within or adjacent to its boundaries. A local partnership promotes the protection and stewardship of this area.	One point if there is one or more nearby IBAs and the Bird Team can provide the names of the IBAs and at least one IBA caretaker group or individual.	1 Point	1 Point					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
2.6 Habitat Pro	2.6 Habitat Protection, Restoration, and Climate Resiliency – Native Flora – Municipal								
2.6 Habitat Protection, Restoration, and Climate Resiliency - Native Flora – Municipal lands	Municipality promotes the importance of planting native local flora on municipal lands, especially where new development is occurring through development and landscaping guidelines and standards in areas near natural features. Subdivision permits should include conditions protecting existing natural habitat and promote use of native vegetation and include measures to discourage illegal disposal of yard waste (a source of invasive exotic plants) in natural areas.	One point for evidence that the municipality promotes the use of site-appropriate native flora in landscaping for its own properties and for development landscaping standards for subdivision permits.	1 Point	1 Point					
2.7 Habitat Pro	otection, Restoration, and Climat	e Resiliency – Native flora - Comn	nunity						
2.7 Habitat Protection, Restoration, and Climate Resiliency – Native Flora – Private Property	Demonstrate widespread community participation in initiatives to encourage native plant habitat that supports native birds and pollinators on private property, to increase the urban tree canopy on private land, and to support other "green infrastructure" initiatives to address climate change.	One point if you provide evidence supporting "widespread community participation" in at least one national or international initiative or local program that encourages increasing wildlife habitat on private land. This could include membership in a program like Bee City for example.	1 Point	1 Point					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
2.8 Habitat Protection, Restoration, and Climate Resiliency – Stopover & Nesting Habitat									
2.8 Habitat Protection, Restoration, and Climate Resiliency -Stopover & Nesting Habitat	Bird Friendly City partner groups implement stewardship to increase or improve breeding or stopover habitat for bird conservation priority species from your Bird Conservation Region Plan. Example species include Species at Risk (e.g. Chimney Swift) and other aerial insectivores, Eastern Meadowlark and other grassland birds and shorebirds. Example actions including providing housing (e.g., maintained Purple Martin condos), and maintaining bird-friendly hay production.	A point is awarded to cities in which there are active stewardship recovery projects such as those suggested in the criterion description.	1 Point	1 Point					
SCORING	Entry - 8 points from at least 3 categories Intermediate - 11 points from at least 4 categories High - 14 points from at least 6 categories including at least 1 point from categories 2.1, 2.2, 2.3 and 2.4.		17 points	17 Points					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
3.1 Communit	3.1 Community Outreach/ Education – Word Migratory Bird Day								
3.1 Community Outreach/ Education - World Migratory Bird Day	Hold (and officially proclaim) a World Migratory Bird Day event annually to celebrate birds in your municipality.	This is a mandatory action for this program. Cities must hold a Bird Day event to apply. To receive all 4 points, you must provide proof of the event and Mayor's or Council proclamation in support of Bird Day.	4 Points	4 Points					
3.2 Communit	y Outreach/ Education – Schools	, Groups & Community							
3.2 Community Outreach/ Education - Schools, Groups & Community	A significant percentage of local schools and other educational organizations (e.g. Scouts Canada, Earth Rangers, 4-H) provide students with opportunities to connect with nature, enjoy birds and learn how to help them. Local school boards, conservation authority, or municipality, has facilities/ staffing to support outdoor/ environmental education, including opportunities to observe birds. At least one school does a specific bird-related program such as Christmas bird count for kids or curriculum from Keep cats safe and save bird lives. Educational programs must include specific elements designed to engage members of the public who could be considered underprivileged families and groups, racialized youth and recent arrivals to Canada.	Provide evidence in support of this level of outreach and engagement of children, youth and other target audiences One point is awarded if there are local education facilities and institutions that include activities for children to observe and appreciate birds both in school and outside through an educational organization that offers nature programing to the public. Two points if there are specific bird-related nature programs for recent arrivals to Canada, underprivileged or racialized families. Three points if there is at least one school or organization that offers programming from the Keep cats safe and save bird lives curriculum.	3 Points	2 Points					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED					
3.3 Community C	3.3 Community Outreach/ Education – College and University Campuses									
3.3 Community Outreach/ Education - College and University Campuses	College and University campuses have adopted practices that actively reduce threats to birds or establish habitat that benefits birds. Implementation of practices should include or be driven by student committees or groups.	One point is awarded based on evidence that institutions that have policies and practices to benefit birds including names of institutions, the programs that they participate in (e.g BirdSafe, Bee City), as well as an example of a recent action and evidence of student involvement.	1 Point	1 Point						
3.4 Community C	Outreach/ Education – Public A	Access to Resources								
3.4Community Outreach/ Education – Public Access to Resources	Bird Team partners (including Municipality) provide public access to resources (web links, brochures etc.) that encourage and inform the public of the benefit to birds from native plant gardening or establishment of natural habitat patches on their property in support of birds and/or pollinators (e.g. backyard habitat program).	One point if you can provide evidence of the digital or paper resources, as well as evidence of public interest and knowledge of them (e.g. social media activity).	1 Point	1 Point						

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED			
3.5 Communit	3.5 Community Outreach/ Education – Public Installations for Education							
3.5 Community Outreach/ Education - Public Installations for Education	Municipality and Bird Friendly City partners install demonstrations or displays in public areas that educate citizens on the benefits of bird friendly actions and encourage engagement (benefits of dark sky lighting, window modifications etc.)	One point based on proof of installations (e.g. photographic evidence, or news stories.)	1 Point	1 Point				
3.6 Communit	y Outreach/ Education – Accessi	ble Bird-Watching Location(s)						
3.6 Community Outreach/ Education  Accessible Bird- Watching Location(s)	There is at least one birding location within your city or town that has infrastructure to facilitate the observation and appreciation of birds (e.g. signs, panels, observation tower, and trails). This facility is publicly accessible for people without a car (serviced by public transit and/or bicycle and pedestrian trails. Digital information on birding areas should be easily available.	One point based on evidence of a local birding area that is publicly accessible, a brief description of the infrastructures (e.g. trails, observation tower), and how the area can be accessed by someone without a car.	1 Point	1 Point				

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED				
3.7 Community O	3.7 Community Outreach/ Education – Local Species Reference List								
3.7 Community Outreach/ Education – Local Species Reference List	A Bird Team partner periodically publishes a "Bird Checklist" for your city or town. This checklist should be easily available in digital form on the Internet. Alternatively, there are eBird hotspots in your City.	One point based on proof that a local bird checklist exists in a published form or there are eBird hotspots in your city.	1 Point	1 Point					
3.8 Community C	Outreach/ Education – Local B	ird Friendly Businesses							
3.8 Community Outreach/ Education -Local Bird Friendly Businesses	Businesses in your area promote bird friendly practices (e.g. sell or offer bird friendly coffee, no single use plastics, treat their windows with feather-friendly markers, etc.). These businesses should be recognized on partner websites.	To receive a point, you must provide proof that at least two businesses in your area have bird friendly practices. You must name the businesses and describe what bird-friendly practices they have.	1 Point	1 Point					

CRITERIA	DESCRIPTION	INDICATORS/EVIDENCE	POINTS AVAILABLE	POINTS SUBMITTED	POINTS CONFIRMED		
3.9 Communit	3.9 Community Outreach/ Education – "City Bird"						
3.9 Community Outreach/ Education – City Bird	You have a "City Bird" species that was selected through a public engagement process.	To receive a point for this criterion, you must provide the name of the "City Bird" species, proof of its status, and evidence of the process to select it.	1 Point	0 Point			
3.10 Communi	3.10 Community Outreach/ Education – Inclusive Community Science Programs						
3.6 Community Outreach/ Education  Accessible Bird- Watching Location(s)	There are active citizen science programs to monitor birds in your municipality including Christmas Bird Count, Swift Night Out, and Marsh Monitoring, and Global Bird Rescue, which monitor birds on areas that include public land. Public participation in these programs is promoted on local media. Demonstrate efforts to engage members of the public could be considered underprivileged, racialized or recent arrivals to Canada.	To receive one point, provide a list of bird-related citizen science programs in your city and describe the level of public interest and engagement of target audiences.	1 Point	1 Point			
SCORING	All levels must do 3.1 Entry - 7 points from at least 3 categories Intermediate - 9 points from at least 5 categories. High – 12 points from at least 7 categories.		15 points	13 Points			
GRAND TOTAL	Minimum scores to attain different levels Entry: 24/50 Points (48%) Intermediate: 32/50 Points (64%) High: 41/50 Points (80%)		50 points	41 Points			

# **BIRD FRIENDLY CALGARY** LIST OF MEMBERS, AFFILIATION AND CONTACT INFORMATION (M-1)

CURRENT AS OF: APRIL 30, 2021

### MAIN CONTACT: BirdFriendlyCalgary@gmail.com

### **CORE COMMITTEE**

NAME	AFFILATION
Ann Boerner	Calgary Migratory Species Response Team
Chris Manderson	The City of Calgary - Retired - Including with gratitude
Jessica Wuest	Community Member
John McFaul	Nature Calgary & Calgary BiodiverCity Advisory Committee
Kathleen Johnson	Calgary Migratory Species Response Team
Laura Griffin	Ann & Sandy Cross Conservation and Mount Royal University
Maureen Luchsinger	Ann & Sandy Cross Conservation
Melanie Whalen	Calgary Wildlife Rehabilitation Society & Calgary Migratory Species Response Team
Roland Dechesne	Royal Astronomical Society of Canada – Calgary Centre
Sara Jordan- MacLachlan	Community Member
Sarah Nevill	Community Member
Tanya Hope	The City of Calgary
Victoria Lukasik	Calgary BiodiverCity Advisory Committee
Zachary Mager	Community Member

# **BIRD FRIENDLY CALGARY** LIST OF MEMBERS, AFFILIATION AND CONTACT INFORMATION (M-1)

### **SUPPORT TEAM**

NAME	AFFILATION
Alex Forsyth	Community Member
Alvin First Rider	Blood Tribe Land Management
Andrew Stafford	Mount Royal University, ASCCA
Bob Cooper	Community Member
Dave Schoepp	The Wild Bird Store
Gary Stedman	Community Member
Kate Ahlf	Calgary Migratory Species Response Team
Ken Sanderson	Miistakis Institute
Kris Brown-Schoepp	The Wild Bird Store
Melanie Violette	Calgary Migratory Species Response Team
Monique Sereneo	Calgary Migratory Species Response Team
Simone Lee	Calgary Climate Hub
Susanne Maidment	Bird Bander
Suzanne Oel	Foothills County Dark Sky Initiative
Tia Ostberg	Calgary Climate Hub

CITY REPRESENTED: CALGARY, ALBERTA, CANADA DATE OF SUBMISSION: FRIDAY, APRIL 30, 2021