

### Municipalities & Biodiversity: Tools and policies to measure and mitigate biodiversity loss

## **Cam Jefferies**

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"uplifting the whole people"

HENRY MARSHALL TORY, FOUNDING PRESIDENT, 1908



### **UNIVERSITY OF ALBERTA** FACULTY OF LAW



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### **Biodiversity Conservation is Needed at ALL Levels**

- *Biodiversity*: the diversity and variety of life found on Earth, the assemblages they form, and the interactions between living and non-living aspects of the environment
- Can be measured at various scales, from the backyard to an urban park, and beyond
- Biodiversity is in decline globally, and Canada is no exception to this trend; losses are occurring across jurisdictional and political boundaries
- 81% of Albertans currently live and experience nature and the environment in an urban environment. Increasingly, attention is focused on what municipalities can contribute to conservation



### The Importance of Local Biodiversity

- It is no coincidence that human settlement and urbanization occurs in biodiversity-rich areas
- There is no one-size-fits all approach owing to local cultural perceptions on wildlife (e.g., urban, peri-urban, and rural)
- Municipal Biodiversity:
  - Creates more livable environments
  - Helps improves quality of life (physical and mental)
  - Connects people to the (non-human built) world
  - Provides environmental services (air, water, and soil quality, pollination, flood buffering, climate mitigation/adaptation etc.)
  - Helps maintain connectivity to surrounding landscapes and improves the overall resiliency of ecosystems (*see*: climate crisis)
  - Is worth protecting for its intrinsic value and importance



- Various legal questions emerge when considering municipal biodiversity conservation (is there authority to act *and* what does this authority allow?)
- Canadian environmental law invariably engages jurisdictional questions owing to the reality that "the environment" is an area of shared authority (*see*: carbon pricing)
- Municipalities are NOT a constitutionally recognized level of government in Canada; rather, they derive authority from provincial legislation that creates, enables, and authorizes municipal action



- Municipalities are well positioned to assess local ecosystems and the needs of their (human) residents, and to develop an appropriately tailored conservation response
- Principle of Subsidiarity: notion that management and regulation is often best left to the smallest possible political entity capable of addressing the issue at hand (14957 Canada Ltee (Spraytech) v. Hudson [2001])
- When it comes to conserving biodiversity, it is clear that *each* level of government must act consistently and in a complementary manner



### Alberta's *Municipal Government Act (MGA)*

- Environmental protection has not, traditionally, been a focus of this enabling legislation, which was first consolidated in 1967 and then again in 1994
- Modernized through a series of amendments starting in 2015
- One of the purposes of modernization was to provide municipalities with tools to help build and support sustainable communities
- Three amendments are particularly interesting for this discussion: (1) expanded municipal purposes; (2) city charter regulations; and (3) conservation reserves



### **Section 3 Municipal purposes**

- The purposes of a municipality are
- (a) to provide good government,
- (a.1) to foster the well-being of the environment,

(b) to provide services, facilities or other things that, in the opinion of council, are necessary or desirable for all or a part of the municipality,

(c) to develop and maintain safe and viable communities, and

(d) to work collaboratively with neighbouring municipalities to plan, deliver and fund intermunicipal services.



**Part 4.1** – The Creation of City Charters "to address the evolving needs, responsibilities and capabilities of cities in a manner that best meets the needs of their communities"

 Edmonton and Calgary both have City Charter Regulations, which provide the following additional authority

(h.1) the well-being of the environment, including bylaws providing for the <u>creation, implementation and management of programs</u> respecting any or all of the following:

(i) contaminated, vacant, derelict or under-utilized sites;

(ii) climate change adaptation and greenhouse gas emission reduction;

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- (iii) environmental conservation and stewardship;
- (iv) the protection of biodiversity and habitat;
- (v) the conservation and efficient use of energy;
- (vi) waste reduction, diversion, recycling and management;



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Addition of "Conservation Reserves"...

664.2(1)

A subdivision authority may require the owner of a parcel of land that is the subject of a proposed subdivision to provide part of that parcel of land to the municipality as conservation reserve if

- (a) in the opinion of the subdivision authority, the land has <u>environmentally significant features</u>,
- (b) the land is not land that could be required to be provided as environmental reserve,
- (c) the purpose of taking the conservation reserve is to enable the municipality to protect and conserve the land, and
- (d) the taking of the land as conservation reserve is consistent with the municipality's municipal development plan and area structure plan.



### **Other Options for Conserving Biodiversity**

- Statutory Plans
- Intermunicipal Collaboration Frameworks
- Land-use Bylaws
- Environmental Reserves
- Conservation Easements
- Climate Change Adaptation Plans
- Citizen education and outreach initiatives

Woven together, municipal initiatives can make a positive contribution to environmental stewardship and biodiversity conservation

#### **BIODIVERSITY?**

Biodiversity is the variety of life around us. It can refer to genetic diversity, species diversity and ecosystem diversity.

#### WHY IS IT IMPORTANT?

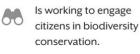
We benefit greatly from nature. Wetlands buffer against floods. Bees help grow food. Trees clean the air. Even in urban areas nature is still critical to our well-being.

#### **URBAN HABITAT**

Your yard is one piece of habitat that is connected to the broader urban ecosystem.

#### URBAN BIODIVERSITY? YOUR LOCAL GOVERNMENT...

Has a legal responsibility to foster the well-being of the environment.



- Understands the importance of trees to health and well-being.
- Is working to maintain and create greenspace through land acquisitions and reserves.

#### YOUR URBAN BACKYARD

- Can provide habitat for animals, birds and insects
- Can be an oasis of native species
- Can be pesticide and fertilizer free
- Can contribute to the urban forest canopy
- Can meaningfully impact urban biodiversity

#### WHAT CAN I DO?

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There are many ways you can help enhance biodiversity in your own backyard and get involved with biodiversity conservation in your community.

#### NATURESCAPING

Embrace naturescaping over landscaping – plant native species and build habitat for birds, insects, reptiles or amphibians.

#### GET INVOLVED

Get involved in a citizen science program (e.g. Naturelynx or an annual bird count).

#### EDUCATE YOURSELF

Learn more about nature through local conservation organizations.

#### GO OUTSIDE

Go on a hike and immerse yourself in nature.

INSPIRE OTHERS Spread the word, tell your friends and write to your local politician.