



## CALGARY: City of Animals

Edited by Jim Ellis

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excerpt from **our bio**

## our vision<sup>52</sup>

Calgarians value our city's diversity and richness in wildlife, vegetation and landscapes; The City of Calgary and citizens work to integrate our actions and the built environment with an ecological network that is healthy, connected and well managed.

## our principles

As natural systems are dynamic, we recognize the indefinite time horizon for achieving biodiversity conservation in Calgary. A principled approach—rather than a goal-based approach—enables us to be dynamic in our actions as we move towards our vision. We have established four central principles to guide our decision-making. They act as a foundation for our behaviours and actions towards biodiversity conservation.

**Ecological literacy:** The City of Calgary supports the conservation and appreciation of biodiversity by cultivating knowledge and understanding about ecological processes, personal stewardship actions and Calgary's natural heritage.

**Ecological resilience:** The City of Calgary plans, protects, manages and restores open space in Calgary for productive, diverse, healthy ecosystems with the capacity to recover from disturbance and adapt to change.

**Collaboration:** The City of Calgary works jointly and shares responsibility with individuals and groups to advance biodiversity and ecological resilience locally, regionally and globally.

**Integration:** The City of Calgary works with communities and businesses to build neighbourhoods that support local biodiversity conservation, healthy ecological processes and provide equitable access to nature.

# divercity

*calgary's 10-year biodiversity strategic plan*

## our commitments

Our commitments outline how we are dedicated to supporting our vision of biodiversity.

### *ecological literacy*

- a) Develop volunteer initiatives and education programs to support environmental stewardship and biodiversity conservation in collaboration with schools, communities and citizens.
- b) Ensure appropriate City of Calgary staff, Council, businesses and communities have access to training and information to advance the goals of biodiversity conservation, through procurement practices; building and site design; open space planning and management, as well as awareness of invasive species, habitat fragmentation and loss, indirect pressures on biodiversity and how they disrupt ecological processes.
- c) Set objectives and targets for biodiversity conservation across appropriate literacy initiatives.
- d) Make biodiversity conservation a common element in municipal decision-making.

### *ecological resilience*

- a) Monitor the city's natural areas and water bodies to develop an approach that ensures they are more resilient to disturbance while retaining healthy function, structure, feedback loops and integrity.
- b) Retain, acquire and maintain large contiguous or connected natural areas, with supportive built environments, providing connections with the greater region.

## 68 calgary city of animals

c) Reduce direct pressures on biodiversity through managing appropriate access and use in areas rich in biodiversity and natural heritage.

d) Reduce invasive species through identifying threats, implementing measures to prevent their establishment while monitoring and controlling these species where necessary.

e) Conserve habitat function by supporting native and non-invasive locally adapted species.

f) Maintain significant ecological processes such as fire and flood in appropriate natural areas.

### *collaboration*

a) Recognize the financial, social and environmental cost of removing or modifying natural systems in developing Calgary and include consideration of these costs in municipal decision-making.

b) Recognize biodiversity and healthy natural systems as an aspect of good economic development in Calgary.

c) Partner with researchers, government and institutions to advance research and innovation in biodiversity conservation.

d) Remove knowledge and institutional barriers to protecting biodiversity.

### *integration*

a) Increase habitat diversity in private, public and institutional open space to support ecologically healthy neighbourhoods and aid appropriate access to and use of nature for citizens.

b) Develop a database that integrates land use and biodiversity data to support strategic management of Calgary's ecosystems.

c) Plan and manage Calgary parks and open space as a connected network of habitats and wildlife movement corridors, with the aim of reducing roadway collision threats and related human-urban wildlife conflict.

d) Develop infrastructure that mimics and incorporates ecological processes.

e) Manage open space to positively respond to both sudden and gradual environmental changes, such as extreme weather events and climate change.

f) Preserve rare landscape features and critical habitats within and between neighbourhoods.

## our procedures

Meeting our commitments will require specific actions. We have established four procedures, each with multiple initiatives in support of the procedure. With the launch of each project, the City will develop roles and responsibilities, budgets, stakeholder engagement plans and specific performance measures to ensure and monitor successful execution.

### *procedure 1* **foster ecological literacy**

Increase public understanding of biodiversity and ecological processes to encourage positive actions that support environmental conservation.

The following are possible practices and projects that would support the procedure:

a) Deliver a city-wide ecological literacy program.

b) Work with key partners to promote community engagement with broader ecological stewardship initiatives, such as building pollinator-friendly and biologically diverse community gardens, developing wildlife habitat conservation initiatives and establishing neighbourhood greening programs.

c) Develop and implement a framework to integrate knowledge of Calgary's natural heritage into conservation and education opportunities.

d) Develop and implement a strategy to inspire citizens to take positive stewardship actions through volunteer, school, corporate and community environmental education programs and initiatives.

e) Provide a range of programs and tools that encourage Calgarians to engage with biodiversity in the city's built and natural environments.

## **70 calgary** city of animals

f) Continue the biodiversity oral history project to showcase Calgarians' personal connections to biodiversity.

g) Establish an artist-in-residence program to advance biodiversity literacy.

### ***procedure 2***

#### **improve the city of calgary's ecological functions**

Restore degraded habitats and manage biodiversity to increase the overall health, function and resilience of Calgary's open space and neighbourhoods.

The following are possible practices and projects that would support the procedure:

a) Implementing habitat restoration projects in critical areas for local ecosystem function, structure, quality and resilience.

b) Develop and implement management plans for all status species in Calgary parks and open space.

c) Restore underused manicured park space to increase plant diversity and habitat complexity and function.

d) Encourage the restoration of private, community, business and institutional lands.

e) Develop and implement landscaping design guidelines to establish appropriate soil fertility, volume and management that support the land use goals of new or redeveloped open space.

f) Develop and implement a list of preferred planting species for developers and The City of Calgary.

g) Implement strategies to reduce invasive species and their spread in Calgary.

h) Develop and implement alternative open space management practices including grazing, prescribed burns and restoration, as well as educational messages and opportunities for public understanding.

## **procedure 3**

### **instill biodiversity values across the city of calgary**

Collaborate to establish conservation values and practices into planning, managing and operating The City of Calgary and living in Calgary neighbourhoods.

The following are possible practices and projects that would support the procedure:

- a) Encourage champions within The City of Calgary to help ensure biodiversity principles are adhered to throughout City planning, managing and implementing initiatives.
- b) Develop and implement a biodiversity communications strategy.
- c) Initiate a biodiversity steering committee with representatives from The City, Council, local businesses, environmental non-governmental organizations, academia and citizens at large to advance the commitments of *Our BiodiverCity*.
- d) Continue to identify and align with other City plans, strategies and programs that have biodiversity-related components.
- e) Develop and implement a biodiversity project recognition program for community, private business and City projects.
- f) Ensure biodiversity goals are captured in appropriate city planning frameworks, for example the *Corporate Project Management Framework*.
- g) Develop policies and guidelines to ensure people are allowed equitable access to areas of biodiversity.

## **procedure 4**

### **integrate with wildlife, plants and natural heritage**

Conserve lands and waters that are critical in retaining essential local ecosystem function, structure, quality and resilience, while ensuring appropriate access and use.

The following are possible practices and projects that would support the procedure:

## 72 calgary city of animals

a) Develop and implement an assessment of existing Calgary parks that would aid in setting conservation priorities and monitoring health to create and sustain functional habitat.

b) Develop and implement policies and guidelines to conserve and connect ecological cores and corridors through a city-wide review of existing and proposed open space. These may include design requirements of green roofs and living walls; protection of ecological cores and corridors; design of wildlife crossings for urban barriers; park design; regulation of topsoil conservation; salvage/relocation of vegetation and habitats; bylaws; and design development guidelines.

c) Map and implement a framework to acquire lands of high ecological and cultural value that can't be otherwise protected through the subdivision process.

d) Establish data-sharing agreements and strategic collaborations with government, industry, research organizations, other municipalities and the public.

e) Develop and implement a municipal wildlife management strategy.

f) Work collaboratively with neighbouring and regional municipalities to identify opportunities to increase biodiversity across the region.

g) Develop and implement an incentive program to promote the use of ecological easements.



## measuring success: *3 biodiversity targets*

Under the section “Pressures on biodiversity,” we noted three common challenges in cities that directly affect biodiversity conservation and ecological processes: habitat fragmentation, habitat loss and invasive species. We’ve developed three broad-scale targets to monitor these pressures and therefore to measure the successful trajectory of our strategic plan.

By 2025, we will address three pressures on biodiversity in the following ways:

### *habitat fragmentation*

Evaluate landscapes in Calgary and set targets for conservation measures to identify, protect and manage ecological cores and corridors.

### *habitat loss*

Restore 20 per cent of Calgary’s current open space to support the conservation of biodiversity.

### *invasive species*

Identify invasive species in Calgary’s open space and complete strategies for their management.