

## The Calgary Biodiversity Report

Over 50 per cent of Calgary's parks are classified as natural environment, which range from disturbed, non-native habitats to native prairie, parkland and wetland environments of provincial or federal significance. Natural environment parks are some of the most prominent and best-used parks in the city, however, maintaining them in a healthy condition can be challenging given pressures such as fragmentation, development, invasive species and heavy use that come from being in a large city.

To address this issue, park management has focused on habitat restoration, trail management and the development of park management plans to address habitat loss and degradation. However, the long-term effectiveness of these efforts is hampered by the lack of a system-wide approach to ecosystem conservation. Calgary's natural areas need to be planned and managed cohesively as an integral part of the urban fabric with more emphasis on re-establishing connectivity between key natural areas.

Conducting a comprehensive assessment and prioritization of key habitats and parks is an important step in allocating resources to where they are most effective. This would ensure available Parks funding for site management is used where it will have its greatest effect.

### Stakeholder Engagement, Research and Communication

Calgarians have shown strong support for the protection of natural environments throughout the development of key policies such as the *imagineCALGARY*, the *Municipal Development Plan* and Parks plans such as the *Open Space Plan* and the *Wetland Conservation Plan*.

Public Engagement will be a key element of the Biodiversity Strategic Initiative and will include the following elements:

- Information and awareness (Biodiversity Strategic Plan, consultation on strategic plan)
- Education and volunteerism (citizen-led monitoring and citizen science in biodiversity)
- Citizen surveys and opinion polling
- Review and input on status reports

Performance Measures and Monitoring

The Calgary Biodiversity report will document the state of Calgary's biodiversity in terms of describing our natural heritage of species and habitats as well as threats and influences in the past and the present. The report will draw from expert knowledge, species and habitat data from Parks, local experts in Calgary's natural history, and provincial and federal governments.

This document will be updated as required and serve as a baseline for monitoring of change and benchmarking against outcomes. An "ecological integrity index" will be completed for all parks in fall 2011. This index will provide an evaluation of each park's health in terms of its contribution to protection of biodiversity and is based on measures of size, condition and connection to other open space. This index can be used to establish condition benchmarks for new and existing parks and to monitor change over time as areas are developed or redeveloped.

An inventory update of existing natural environment parks will be completed in fall 2011. This information will be used to set priorities for natural area management. Over 200 permanent monitoring stations will be established throughout the parks system to monitor long-term changes in biodiversity. City Parks is evaluating the feasibility of making this initiative a volunteer "citizen-science" initiative in which Calgarians can participate.

This report recommends that The City of Calgary joins 43 municipalities world-wide who have signed the Durban Commitment on Biodiversity. Doing so will be a clear demonstration of Calgary's continuing commitment to conserve urban biodiversity and to integrate biodiversity considerations into governance and planning. This Biodiversity Strategic Initiative provides a robust framework for implementing previous Council direction to conserve Calgary's biodiversity and environmentally significant areas.

**Community Services & Protective Services Department Report to The SPC on Utilities and Environment September 21, 2011 BIODIVERSITY STRATEGIC INITIATIVE UNRESTRICTED UE2011-19 6 pp.**