Wildlife

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Historical Context

For thousands of years prior to European settlement, aboriginal people played a prominent role in shaping Alberta's prairie grassland ecosystem. They shared this region with abundant wildlife populations of species such as bison, bears, and wolves, all within a landscape shaped by grazing, fire, and the climatic conditions of the time. European exploration of the region began in the 1700's prompted by the potential for undiscovered resources. This was followed by large scale immigration in the late 1800's with issuances of substantial grazing leases throughout southern Alberta. By 1880, bison were extirpated from the Alberta grasslands, largely as a result of unregulated market hunting. In 1905, Alberta became a province and hunting was then regulated by law. Rapid settlement of land by farmers of European decent began in the early 1900's, with the first of many landscape level changes on the prairies occurring through the early part of that century. Additional laws regarding wildlife came in 1930, with the Natural Resources Transfer Act, which transferred ownership of most resources, including most wildlife species, to the province.









In the early 1960's, the Alberta Government created a new department called Alberta Fish and Wildlife and the first biologists were hired. During these early years, the

emphasis was on enforcement of wildlife regulations; however, as time went on, land use issues in the 70's and 80's prompted an increased emphasis on habitat protection and management of land use. By the 1990's, a shift towards management of species at risk and biodiversity was evident. This has been followed by an increased emphasis on management and planning at the landscape level and a serious attempt to wrestle with cumulative effects on wildlife.

Current Status

In Alberta, the status of most species is healthy, although there exists a growing number of species at risk, many of which are located in the prairie grasslands. Habitat loss and fragmentation are clearly seen as two of the most important issues of our time. Other current wildlife issues include loss of natural processes (e.g., fire and decreased occurrence of flooding due to dams), the introduction of wildlife diseases, impacts of exotic species, increasing wildlife-human interactions, and



high public expectations for conservation. At the same time, there are numerous human pressures such as the expansion of industrial development (e.g., oil and gas extraction, timber harvesting) combined with increased agricultural expansion and intensification. As the human population grows, urban areas continue to sprawl and water demands continue to increase.

Cumulative effects on wildlife also need to be considered, where factors such as climate change, predation, hunting, poaching, and disease, in combination with land use change, produce cumulative effects on landscapes, many of which negatively impact our indigenous wildlife species.

Issues and Future Challenges

If the past is any indication of the future, continued pressure on wildlife from all land use sectors will continue. This will





result in more species requiring management while at the same time there will be increasing societal expectations and support for a healthy environment. Species at risk and biodiversity conservation will continue to be major issues for the foreseeable future. Both may require the retention of substantial blocks of undisturbed habitat in

addition to creative management interventions. Management of wildlife in urban and semi-urban settings will demand more attention as human populations grow and cover more habitat lands. A trend towards warmer winters in recent decades has resulted in greater reproductive success of ungulates. In the prairie areas, this means that wildlife managers and stakeholders, in the absence of major predators, have greater challenges in keeping wildlife population levels at acceptable limits.

To achieve these goals, partnerships between government agencies and non-government agencies will become more and more prevalent as groups strive to increase efficiencies with limited resources. We are already seeing such partnerships, as organizations like the Nature Conservancy of Canada and North American Waterfowl Management Plan Partnership now use information gathered by government and non-government conservation agencies to prioritize lands targeted for conservation. Likewise, organizations like Ducks Unlimited Canada have expanded their mandate to include biodiversity conservation in their annual program delivery. Many of these expanded programs have involved partnerships with academia, governments, and non-government conservation organizations. Also, large amounts of funding from federal species at risk programs, like the Habitat Stewardship Program, ultimately help to deliver programs designed and run by a number of partnered, non-government conservation organizations, like Operation Grassland Community and the Alberta Multisar (Multiple Species at Risk) program.

The future of wildlife conservation will depend on how successful we are at integrating the needs of wildlife with other activities on the landscape. A particularly encouraging example of this exists with the Multisar program in the grassland region of Alberta. The Alberta Fish and Wildlife Division and the Public Lands Division, in partnership with the Alberta Conservation Association are seeking to deliver species at risk conservation programs for a suite of endangered and threatened species over a number of managed private and public lands. By making these groups of species at risk an asset instead of a liability for private landowners, the best practices encouraged by Multisar will continue to support a sustainable agro-economy and the long-term viability of wildlife populations in southern Alberta.

References and Links

Alberta Species at Risk Website

Alberta Sustainable Resource Development, Fish & Wildlife Website

Canadian Wildlife Service Website

The Nature Conservancy

North American Waterfowl Management Plan Website

Ducks Unlimited Canada Website

Southern Alberta Land Trust Society Website

<u>Alberta Conservation Association Website</u>

<u>Grassland Naturalists (FAN) – Website</u>