A Wildlife Policy for Canada:

Government of Canada Report No. 1



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FEDERAL GOVERNMENT'S RESPONSE TO A WILDLIFE POLICY FOR CANADA

INTRODUCTION

A Wildlife Policy for Canada was adopted by the Wildlife Ministers' Council of Canada in September, 1990.

Adoption of the Policy included a commitment by provincial/territorial and federal wildlife or environment Ministers to implement it. This first report by the Government of Canada summarizes the current status of federal wildlife and habitat conservation efforts and provides a window on how wildlife resources are being managed. This review sets the stage for future wildlife and wildlife habitat related activities and points to where future wildlife and habitat efforts should be focused.

The following is the federal submission to A Wildlife Policy for Canada: Report Number 1.

EXPANDING THE SCOPE OF WILDLIFE POLICY

1. Wildlife and Biodiversity

Canadians are increasingly concerned with the loss of biodiversity. Today 232 species are considered at risk by the Committee on the Status of Endangered Wildlife in Canada. The conservation of wildlife and habitat requires the acceptance of a broader definition of wildlife, the assurance that biodiversity is a consideration during policy and legislation development and review, and an understanding that wildlife is not separable from its habitat.

The federal government, in November 1991, announced a National Wildlife Strategy arising from Canada's *Green Plan*. The Strategy flows directly from and is built on the objectives set out in *A Wildlife Policy for Canada*. The Strategy uses the definition of wildlife (i.e., wildlife refers to all wild organisms and their habitats, including wild plants, invertebrates, and microorganisms, as well as fishes, amphibians, reptiles, and the birds and mammals traditionally regarded as wildlife) in the broadest sense of the word, and it has three major components: Protection of Wildlife Diversity, Conservation of Wildlife Habitat, and Safeguarding Healthy Ecosystems, all of which address policy areas in *A Wildlife Policy for Canada*.

The federal government has used a broad definition of wildlife since 1973. The Canada Wildlife Act administered by the Minister of Environment states that wildlife is any non-domestic animal and that the provisions of the Act relating to wildlife include their habitat. The Canada Wildlife Act allows the federal government to undertake wildlife research and, in cooperation with the provinces, to protect endangered species and purchase land for the protection of wildlife species. The federal government's programs, policies, and legislation also demonstrate a strong federal commitment to the preservation of Canadian biodiversity. For example, the mandate provided by the National Parks Act includes the maintenance of national park ecological integrity, including the inherent maintenance of biodiversity in functional and viable ecosystems. Forestry Canada is revising its policies and programs to reflect the growing recognition that forests are a multiple use resource, rather than simply a source of timber products. Forests provide invaluable habitat for flora and fauna, contribute to the maintenance of biodiversity, and act as filters of the air we breathe and the water we drink. The recognition of these non-market resources is reflected in the new national statement on forests, Sustainable Forests: A Canadian Commitment, which was released in March 1992.

The signing of the Convention on Biological Diversity by the Prime Minister at the United Nations Conference on Environment and Development, with the commitment to ratify by January 1993, furthered the federal government's commitment to the conservation of Canadian biodiversity. Federal government departments are now reviewing ways of implementing the Convention. Activities already supporting the Convention include initiatives from Indian and Northern Affairs Canada that supports the use of traditional ecological knowledge of aboriginal peoples and their contribution to understanding the values of biodiversity. Agriculture Canada's Shelterbelts and Permanent Cover programs are focused toward maintaining biodiversity in the landscape.

In 1990, the Canadian Museum of Nature created the Canadian Centre for Biodiversity, which brings together experts from inside and outside the Museum to focus attention on increasing global awareness of the importance of biodiversity so that it is understood and protected in the course of physical development. In 1991, the Museum became the secretariat for the World Conservation Union Canada.

Documenting genetic diversity in Canada is an active undertaking of the federal government. In 1991, the Canadian Museum of Nature opened a DNA lab which will provide information on the origins and relationships of species. The Canadian Museum of Nature by mandate of the *Museums Act* has been collecting samples of Canadian species for over 100 years and has to date documented some 300,000 species of animals, plants and micro-organisms. New species for Canada are still being described and classified. This information on plants, animals and micro-organisms is available to the public and other clients. It is essential to Canadians' understanding of their natural heritage and efforts to conserve wildlife and its associated wildlife habitat. Environment Canada has also established a DNA Repository and initiated research to assess the genetic diversity of various wildlife species and implications for their management and preservation in National Parks. Agriculture Canada is an active contributor to the Food and Agriculture Organization's activities on biodiversity, including the commission on Plant Genetic Resources. Agriculture Canada preserves the country's largest collection of insects, arachnids, fungus cultures, and crop plants and has the largest plant and fungal herbaria.

PROVIDING FOR WILDLIFE IN ECONOMIC AND ENVIRONMENTAL POLICIES

2. Wildlife in Policy and Planning

Wildlife and habitat conservation begins with the recognition that environmental factors must also be included in policies, plans, and projects from their inception just as economic and social factors have traditionally been considered. This requires strong cross-sectoral ties and review mechanisms in policy making and development planning.

The federal government has in place mechanisms for cross-sectoral consultation between departments and agencies. Through the Treasury Board Secretariat, the Environmental Assessment and Review Process, the Interdepartmental Committee on Land, and the Interdepartmental Committee on Water, Environment Canada and the Department of Fisheries and Oceans are able to advise other departments and agencies on how they may minimize impacts to wildlife on federally owned property. These consultation mechanisms allow for the resolution and clarification of contradictory policies and mandates of different Departments and agencies.

The federal environmental assessment process is among the best means of ensuring that wildlife and habitat are taken into consideration in the project planning process. In 1990, the process

was strengthened when the federal government also made it a requirement that all new policies and programs be evaluated. Now the federal government has legislated the assessment process. In June 1992, the *Canadian Environmental Assessment Act* passed third reading in Parliament. Proclamation is expected to take place in January 1993.

The federal government's natural resource departments and agencies such as Forestry Canada, Indian and Northern Affairs Canada, Environment Canada, Fisheries and Oceans, and Agriculture Canada and the departments and agencies such as National Capital Commission, Industry, Science and Technology Canada, Transport Canada, Department of National Defence, and Energy, Mines and Resources, whose activities impact on wildlife, have worked cooperatively to ensure that Canadian wildlife and its associated habitat are conserved. For example, Environment Canada, Department of Fisheries and Oceans, and Agriculture Canada collaborate on such programs as:

- . the North American Waterfowl Management Plan,
- . the St. Lawrence Action Plan,
- . the Great Lakes Action Plan, and
- . the Fraser River Action Plan.

Each of these programs is designed to rehabilitate degraded habitats or conserve and/or enhance existing habitats in partnership with other federal departments, provinces/territories, non-government organizations and the private sector. These partnerships recognize the importance of the sustainability of the resource.

Agriculture Canada implements programs to conserve the diversity of the biological resources upon which the agriculture is based, e.g., Plant Gene Resources of Canada for crop plants and their wild relatives, the Animal Germplasm Conservation Program for domesticated animals, and the Canadian Culture Collection for economic fungi. Also, Agriculture Canada has recently expanded the Soil and Water Accords to incorporate a wider range of environmental initiatives. The expanded version of Environmental Sustainability Accords will encompass all the environmental initiatives that are linked with the eight issues identified in the 1990 report to the Ministers of Agriculture by the Federal/Provincial Committee on Environmental Sustainability. Wildlife habitat is one of the issues identified in the report. Other wildlife-related activities within Agriculture Canada are:

- the National Soil Conservation Program, which seeks to retire marginal and environmentally sensitive lands from agriculture,
- the Prairie Farm Rehabilitation Administration (PFRA) Community Pastures integrated range management, and
- the Permanent Cover Programs I and II.

In the fall of 1989, the Minister of Forestry and his provincial colleagues adopted a new forest development policy, *Towards Sustainable Forestry Development*. Included among the policy

principles was the need to improve forest resources data, including data on wildlife resources, and the need to promote integrated resource management. The *Green Plan* introduced the network of "Model Forests" that will be established in partnership with interest groups to develop new and improved forestry practices.

The Department of National Defence has a long-standing record of partnerships and inter-agency consultations to ensure wildlife conservation is considered in natural resource policies and programs. For example, National Defence and Forestry Canada have had a Memorandum of Understanding since 1979 for management of forested lands on National Defence properties. The Department of National Defence is presently preparing a sustainable forest management policy that will include wildlife concerns in all forestry development decision processes. Consultation through agency representation on advisory committees such as Shilo Environmental Advisory Committee and Suffield Environmental Advisory Committee has contributed to responsible wildlife management.

The Canadian Museum of Nature supports wildlife activities by providing expertise to agencies responsible for wildlife management and assists in the development of new legislation and the resolution of wildlife resource, conservation and management issues.

The federal government prepares state of the environment reports that summarize the status of wildlife and habitat in Canada. Environment Canada, with the cooperation of other departments, is in the process of developing environmental indicators equivalent to economic indicators. In 1991 the Indicators Task Force and State of Environment Reporting of Environment Canada published A Report on Canada's Progress Towards a National Set of Environmental Indicators, which included wildlife indicators. Also, SOE Reporting published in 1992 The State of Canada's Environment, a comprehensive review of the status of Canada's environment.

Public input into the development of policy and legislation is an important element in wildlife policy and planning. Recent examples include public input was sought for the development of the Green Plan and the Federal Policy on Wetland Conservation, and currently Canadians are being consulted in the revision of the National Parks Policy. For successful implementation of conservation initiatives, increased public involvement through partnerships is recognized as a priority. Existing legislation and policies that provide for conservation of wildlife and its habitats include the Migratory Birds Convention Act, Canada Wildlife Act, Canadian Environmental Protection Act, National Parks Act, Fisheries Act, Policy for the Management of Fish Habitat, and Federal Policy on Wetland Conservation.

3. Evaluating and Increasing the Sustainable Benefits from Wildlife

Activities related to the use and appreciation of wildlife and other wild resources contributes significantly to the Canadian economy. Wildlife and wild resources make major economic contributions. Approximately \$11.5 billion is contributed to the Canadian gross domestic product annually through fish- and wildlife-related recreational activities alone. Current

estimates for commercial fisheries and the fur trade together are approximately \$3.5 billion per year and for commercial forests \$20 billion per year. The federal government has recognized the need for better information on the value of wildlife to assist in decision-making, particularly in multiple-use resource sectors. The following is a list of some of the initiatives underway with regard to the evaluation of resource use and how it affects wildlife:

- Environment Canada and Statistics Canada are jointly involved in determining the value of wildlife and habitat (e.g., wetlands) in cooperation with the provinces. They are developing a conceptual framework for placing values on stocks of wildlife and habitat as well as related flows of goods and services to more closely integrate resources, environment and the System of National Accounts. They are also determining the economic impact of habitat loss and pollution on wildlife. Already, the territorial governments and the federal government through Indian and Northern Affairs Canada, and organizations such as the James Bay Cree have recognized the value of wildlife as economically significant compared to expensive food and related material.
- Industry, Science and Technology Canada and Environment Canada are studying the links between tourism and the environment, including determining the marketable features of the environment that attract tourists.
- Federal departments and agencies such as Environment Canada, Canadian Museum of Nature and the National Capital Commission all promote activities which stress appreciation of wildlife and exploration of its natural habitat. The Department of Fisheries and Oceans has established guidelines for whale watching to protect them from harassment.
- The cooperative development of hunting and trapping regulations with provincial and territorial agencies, aboriginal groups and other stakeholders helps to ensure fair access to migratory game birds and other animals by the hunting and trapping public.
- In *The State of Canada's Forests 1991*, Forestry Canada presents a series of forest health indicators. These indicators, addressing environmental, economic and social values, will serve as a basis upon which to monitor change to Canada's forest heritage. Indicators of the diversity of Canada's forests and the preservation of wilderness will track changes in habitat on a national scale and serve as a early warning system for adverse trends.

4. <u>Canada's International Responsibilities</u>

Canada has become involved in international wildlife and habitat conservation for social, economic, and environmental reasons. First, Canada shares species with other nations. The conservation of such species is dependent on the protection of these populations and habitats in both Canada and the other nations. Second, Canada, as a member of the international

community, has a responsibility to contribute to the conservation and protection of all wildlife and habitat. The federal government supports wildlife conservation and protection efforts through formal mechanisms such as conventions, agreements and treaties, and through technical and scientific assistance and cooperation.

The federal government has long-standing agreements and treaties with other countries, particularly the United States, for the conservation of wildlife and its habitat. In 1916, Canada signed a treaty known as the Migratory Birds Convention (which is administered under the Migratory Birds Convention Act in Canada) with the United States for the conservation and protection of migratory birds. The Canadian government is also a signatory to: the Convention on International Trade in Endangered Species of Flora and Fauna which allows the federal government to regulate the commercial trade in species threatened with extinction; the Convention on Wetlands of International Importance especially as Waterfowl Habitat (Ramsar); and the World Heritage Convention. The latter Convention recognizes eight of Canada's national parks as World Heritage sites. Canada is also a member of the International Union for Conservation and Nature and the United Nations Environmental Programme. In the Green Plan's International Strategy, the federal government substantially increased its contributions to the International Union for Conservation and Nature.

Canada and other nations worked on the development of an International Convention on Biodiversity and an International Convention or Protocol on Forestry for the June 1992 United Nations Conference on Environment and Development. The Canadian government was a leading contributor and among the first signatories to the International Convention on Biological Diversity. Canada will be seeking to ratify the Convention before the end of 1992. Thirty countries need to ratify the Convention before it comes into force. Also adopted was a non-legally binding authoritative statement of principles for a global consensus on the management, conservation sustainable development of all types of forests.

Canada has treaties or Memoranda of Understanding with countries with whom it shares species. Agreements of note include the Canada-Mexico-United States Tripartite Agreement, the Pacific Fur Seal Convention, the Canada-Greenland Agreement on Narwhal and Beluga Whales, the Agreement on the Conservation of Polar Bears, the Canada-Russia Accord for Environmental Cooperation, and the Agreement between Canada and the United States for the Conservation of the Porcupine Caribou Herd. The new Circumpolar Agreement on the Conservation of Arctic Flora and Fauna, adopted in the summer of 1991, is a broad-based environmental agreement among the eight circumpolar countries.

The federal government, through Environment Canada and the Canadian Museum of Nature, is assisting countries with inventories of their "natural resource capital" through provision of scientific expertise and technical or financial aid. The information gained will allow countries to move towards economic and cultural development while ensuring the protection and management of their biodiversity. One example of our cooperation is the Country Study for Costa Rica. The federal government also has funded restoration or protection of migratory bird habitat in South and Central America.

INVOLVEMENT OF ABORIGINAL PEOPLES IN WILDLIFE MANAGEMENT

5. Aboriginal Peoples in Wildlife Management

The Canadian constitution recognizes and affirms the existing aboriginal and treaty rights of aboriginal peoples. Some of these rights relate to wildlife. A new feature of wildlife management in Canada is the emergence of cooperative management regimes between aboriginal people and federal, provincial, and territorial governments. This practice has been provided for in some jurisdictions through comprehensive land claim agreements and other means such as government/First Nations co-management agreements, resource management partnerships, or provincial issuance of private harvesting rights to aboriginal groups (e.g., tree farm licences). The development by aboriginal peoples and governments of effective cooperation in wildlife management is essential to conservation throughout Canada.

The settlement of comprehensive land claims has involved the establishment of wildlife management boards under settlement legislation. In most cases, settlement legislation empowers these aboriginal management boards with the responsibility of dealing with the full range of wildlife species in each settlement region. In addition to wildlife boards, an environmental assessment process has been established that ensures that aboriginal people have a role in decisions affecting wildlife and economic development. These negotiations may also include provisions for new National Parks, National Marine Parks, National Historic Sites, National Wildlife Areas, or Migratory Bird Sanctuaries. The establishment of the Northern Yukon National Park, under the Western Arctic Settlement Act (Inuvialuit) marked the launch of this cooperative conservation process.

Forestry Canada, through its Indian lands forestry programs under federal-provincial agreements, provides direct assistance to First Nations to develop forest resources on reservation lands. This includes the development of resource management plans that chart the course of forest development.

Agriculture Canada, through the Prairie Farm Rehabilitation Administration Branch, is working with the Blood Tribe in Alberta on a \$60 million irrigation project. In 1992, Agriculture Canada and the Blood Tribe will be working on possible wildlife habitat enhancement and agroforestry options. In addition, the aboriginal community is involved in soil and water conservation initiatives under the Prairie Land Claim Agreements.

The Department of Fisheries and Oceans, through its Aboriginal Fisheries Strategy, intends to involve aboriginal people in all aspects of cooperative fisheries management. Projects on a wide variety of fisheries issues, such as habitat restoration and enhancement, will be undertaken as part of the strategy. Training to participate in these projects and assume more responsibility for fisheries management is another major component of the strategy.

Aboriginal peoples are being employed and trained as wildlife officers and managers through affirmative action programs. Training facilities have also been established. These facilities designed by, and for, aboriginal people across Canada (e.g., Arctic College in Yellowknife, NWT; Nicola Valley Institute of Technology in Merritt, B.C.) specialize in traditional as well as conventional wildlife and forest management techniques. Environment Canada also strives to recruit local and aboriginal peoples for national park wildlife management and other positions. Environment Canada continues to build traditional environmental knowledge into national park management and interpretation.

Extensive consultations with aboriginal groups on the protocol to amend the Migratory Birds Convention are also underway. These amendments will allow fair access to the migratory bird resource by aboriginal peoples.

IMPROVING WILDLIFE CONSERVATION

6. Conservation of Wildlife Habitat

The extent and quality of wildlife habitat in Canada are declining. Today, less than 1% of original tall-grass prairie remains, 85% of Canada's wetlands have disappeared, and a full 10% of Canada's productive forest once logged remains barren or insufficiently replanted. Habitat conservation requires four mutually supportive approaches: comprehensive systems of protected areas, integration of habitat conservation in the management of public lands, habitat conservation on private lands, and habitat conservation on aboriginal lands.

Numerous mechanisms for the conservation of wildlife habitat sites have been established. Included among these are

- . National Parks, National Marine Parks, National Historical Sites
- . National Wildlife Areas.
- . Migratory Bird Sanctuaries,
- . Man and the Biosphere sites,
- . World Heritage Sites,
- . International Biological Program sites,
- . Ramsar Convention wetlands, and
- . Western Hemisphere Shorebird Reserve Network.

Specifically in the northern third of Canada, the *Territorial Lands Act*, which governs the disposition of land in Yukon and the Northwest Territories, can provide for the withdrawal of land from development when necessary to protect the ecological balance. The area north of the Porcupine River and the Beaufort Sea coast of the northern Yukon and the Thelon Game Sanctuary are two such areas that have been withdrawn for this purpose.

The development of policy initiatives such as the Federal Policy on Wetland Conservation

ensures that wildlife habitat is considered in the decision-making process. Integrated wildlife management as in the North American Waterfowl Management Plan is another mechanism of conserving wildlife habitat. Under the North American Waterfowl Management Plan, agricultural and conservation partners work together to conserve and enhance wetland areas on farms. In the National Wildlife Strategy, Environment Canada is developing research programs to gain information that will help identify and protect threatened ecosystems. The Arctic Environmental Strategy of Indian and Northern Affairs Canada addresses arctic pollution and its effects on the arctic food chain. Indian and Northern Affairs Canada with the territorial governments and aboriginal organizations has been instrumental in developing northern land use plans that address wildlife habitat management and use since sustained wildlife harvesting remains an integral part of the lifestyle in most northern communities. Regional plans have been prepared for Lancaster Sound, the Keewatin in the east, and Greater Kluane in Yukon.

The Department of Fisheries and Oceans, through its Policy for the Management of Fish Habitat, has set an objective of net gain for the productive capacity of fish habitat. This is to be achieved through fish habitat restoration, development, and enhancement, and by applying the guiding principle of "no net loss" on a project-by-project basis.

Transport Canada's Canadian Coast Guard is working closely with various departments to protect and enhance habitat for fish and other forms of coastal and marine life. In particular, port development activities ensure that wetlands within the port are either enhanced or compensated for through wetland creation. Also Transport Canada's Airports Group recently supported the concept of no net loss of wildlife habitat by establishing the Sea Island Conservation Area as part of a complete habitat compensation package, which includes other habitat purchases, for the expansion of the Vancouver International Airport.

Agriculture Canada has identified and is promoting management practices that are compatible with wildlife needs, including planning and maintaining shelterbelts, rotational grazing systems, retention of farm woodlots, and retention of margins around sloughs, marshes, and bordering waterways. Forestry Canada's mission is to encourage sustainable forest development, including the maintenance of biodiversity and wildlife populations and habitat.

In March 1992, the Department of National Defence and Environment Canada signed a Memorandum of Understanding for the designation of the Canadian Forces Base Suffield National Wildlife area. This agreement provides for the cooperative management and preservation of this ecologically significant area and contributes to the *Green Plan* goal of preserving 12% of Canada's area.

Various federal government departments and agencies incorporate wildlife and habitat information into their computerized geographic information systems. This information is important to research, monitoring and management purposes. Indian and Northern Affairs Canada supports the application of traditional ecological knowledge by aboriginal people as a tool to increase the effectiveness of wildlife habitat and ecosystem management. Several aboriginal groups, such as the Manitoba Keewatinowi Okimakanak and the Inuit Circumpolar

Conference, and institutions across Canada are pursuing traditional ecological knowledge as the basis for innovative wildlife management.

7. <u>Conservation of Wildlife Populations</u>

Extinctions are natural and inevitable. However, the impact of human activities on wildlife species and its habitat has accelerated declines and extinctions with the resulting loss of genetic diversity. Genetic diversity, both within each species and in the number of different species, is crucial to the maintenance of viable ecosystems. Loss of genetic diversity is, however, carefully balanced against the need to control against wild species that cause unacceptable risk to people, damage to agricultural products, aquaculture, or livestock, or pressure on habitats or other wildlife populations.

The federal government's role in wildlife management has been defined by legislation such as the Constitution Act (1867; 1982), Migratory Birds Convention Act (1917), and the Canada Wildlife Act (1973). The federal role has also been defined by judicial interpretation of federal legislation. These interpretations have strengthened the requirement to involve aboriginal people in wildlife management decisions e.g., Sparrow, Sioui. This means the federal government has focused its wildlife efforts on migratory birds, fish, marine mammals, forests, transboundary species, endangered species and all wildlife on federal lands. The federal government has enhanced its wildlife conservation efforts by working in partnership with other wildlife jurisdictions and agencies for the purpose of wildlife population conservation.

Environment Canada has the mandate to conserve migratory bird populations. Through cooperative work with other departments and agencies, the provinces and territories, non-government organizations, aboriginal groups, and the general public, yearly waterfowl bag limits and hunting regulations are established, annual national surveys of non-game birds and waterfowl are completed, and awareness of legislation and regulations is promoted. Reports are published annually on the status of selected game and non-game birds.

Environment Canada works to reduce the conflict between people and wild animals. A crop damage compensation program has been in place for years to compensate farmers for the damage caused by migratory birds. Transport Canada, Department of National Defence, and Environment Canada work cooperatively to reduce the risk of bird strikes around airports to ensure the safety of the travelling public. The Department of Fisheries and Oceans through regulations under the Fisheries Act protects cetaceans from harassment. Through land claim agreements, the federal government has augmented wildlife research to ensure that future use of wildlife is sustainable. The Northern Oil and Gas Action Program of Indian and Northern Affairs Canada has funded research in order to provide information necessary to protect wildlife and its habitat during northern hydrocarbon exploration and development.

The federal government is involved in programs to protect endangered species. The Canadian Museum of Nature, Environment Canada, and Fisheries and Oceans actively participate through

the Committee on the Status of Endangered Wildlife in Canada, which produces the official list of Canadian wildlife species at risk. Environment Canada represents the federal government on the Recovery of Nationally Endangered Wildlife (RENEW) committee. The RENEW program brings together relevant Canadian agencies in an effort to rehabilitate species once their endangered status has been established. Recovery programs are already underway for endangered species such as the Peregrine Falcon, Wood Bison, Swift Fox and Piping Plover. The Endangered Species Recovery Fund, a joint effort between Environment Canada and World Wildlife Fund, has been extended to 1997. The Endangered Species Recovery Fund is a source of funding for individuals or organizations that undertake research or recovery activities for endangered species.

The federal government is actively involved with wildlife population conservation internationally and domestically. For example, Environment Canada represents Canada on international and domestic management boards that have been established to ensure the well-being of the Porcupine Caribou Herd by providing expertise in research and conservation. The North American Waterfowl Management Plan was created as a joint Canada/U.S. initiative designed to protect and enhance wetland habitat throughout North America. Various flyway councils provide a forum for addressing issues affecting waterfowl. The protection of wetlands will help conserve populations dependent on them for existence. Finally, humane trapping is a national and international issue in which Environment Canada is a major player in the Canadian effort to develop more humane trapping systems. Environment Canada chairs a Technical Committee of the International Organization for Standardization (ISO) to develop international humane trapping standards. Indian and Northern Affairs Canada is supporting the training of aboriginal trappers in these new trapping systems.

8. Control of introduced and genetically engineered species

Many ecosystems have been severely damaged by the introduction of non-indigenous species of plants and animals. The federal government has limited legislative capability to prevent introductions of non-indigenous and genetically engineered species. Agriculture Canada attempts to prevent the introduction and spread within Canada of diseases, parasites, and pests through its Health of Animals Act and Plant Protection Act, although most of its effort is for the protection of domestic rather than wild species. Little is done federally to prevent the introduction of species which could be harmful for other reasons such as predation, competition, or hybridization. The proposed Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act is designed to redress this situation. With respect to genetically engineered or altered species, the proposed legislation or existing Acts, such as the Canadian Environmental Protection Act, could control the importation of such species.

The Department of Fisheries and Oceans is further developing security guidelines to prevent the escape of aquaculture stocks. Scientific research to develop techniques for the sterilization of captive fish is ongoing. This will prevent interbreeding of captive and wild stocks, should escape occur. The Department has also funded research on the impacts of escaped Atlantic salmon on

wild stocks.

9. An improved basis for wildlife conservation

Effective conservation depends on scientific and traditional knowledge of species, their populations, habitats and ecological relationships, and on uses of wildlife. Only about half of Canada's estimated 150,000 species have been described or recorded. Many, like plants, invertebrates and microorganisms, have not been adequately recorded even though they play an essential role in ecological processes. Baseline studies on the taxonomy, distribution, and ecology of Canada's species are essential.

The federal government renewed its commitment to wildlife research programs in the *Green Plan*. The National Wildlife Strategy outlines a plan to develop a Network of Cooperative Wildlife Ecology Research Centres and a Network of Wildlife Health Laboratories at Canadian universities and veterinary colleges. The Wildlife Ecology Research Centres will result in more effective management and conservation of ecosystems and their wildlife by enhancing the knowledge and tools for integrated resource management. The Health Laboratories will improve Canada's capacity to detect and monitor wildlife diseases and the impact of toxic chemicals. The Wildlife Toxicology Fund has been renewed in partnership with the World Wildlife Fund to 1997. The Fund provides resources to determine the damage caused by specific toxic substances. Environment Canada undertakes its own wildlife toxicology research. The Great Lakes and Fraser River Valley are focal points for much of this research. Environment Canada is also advancing information and knowledge concerning the socio-economic aspects of physical development and how it relates to wildlife.

The Green Plan commits the Department of Fisheries and Oceans to a three-part strategy to ensure a sustainable fisheries policy and action plan, protect fish and fish habitat, and promote sustainable fisheries practices. To this end, the Fisheries Act was amended in 1991 to significantly increase fines and penalties for fisheries and habitat offenses to a maximum of \$1 million and 3 years imprisonment. The Department also conducts research on the relationship between fish, fish habitat, and effects of disturbances to fish habitat.

Transport Canada's Airports Group also manages a program which controls release and disposal of potentially toxic effluents, emissions and chemicals, thus ensuring a clean and healthy environment around Transport Canada administered airports.

The Arctic Environmental Strategy for northern Canada is a major environmental initiative. It addresses elimination of contaminants in the food chain, waste clean-up and water management, all of which contribute to healthier wildlife habitat. The Strategy promotes sustainable resource use and economic activity by helping northern communities develop and implement local resource management plans, including a major role for wildlife. Projects funded in the Northwest Territories during the first year (1991/92) of this six-year program include: Clyde River (wildlife management projects), Baffin Island (Isabella Bay Bowhead Whale Conservation

Plan), Fort Resolution (Hook Lake Wood Bison Management Plan), and Lancaster Sound (Polar Bear Management Plan).

INVOLVING THE PUBLIC

10. <u>Involving the public</u>

Canada's wildlife is the heritage and responsibility of all Canadians. Wildlife agencies, interest groups, and educators must therefore take and active role in promoting wise stewardship of wildlife and wildlife habitat.

Public consultation is an integral part of developing wildlife-related policies and legislation. The consultations undertaken for the *Green Plan*, the *Wild Animal and Plant Protection and Regulations of International and Interprovincial Trade Act*, development of migratory bird hunting regulations, and national parks policy and management plans and northern land use plans are all part of the federal commitment to ensure that Canadians' wishes are taken into consideration in the development of policies and legislation.

Public involvement is also an important component of Forestry Canada's network of 'Model Forests'. Participants in the Model Forests program will join in network-wide activities promoting the program and identifying areas as Model Forests. These activities will be coordinated by Forestry Canada. In addition, participants in the Model Forests program are expected to undertake local programs to enhance public awareness of integrated forest management.

The federal government is involved in increasing awareness of wildlife and wildlife habitat. It sponsors numerous wildlife-related programs in partnership with other stakeholders promoting wildlife awareness and education, through such as initiatives as:

- "Who's Who" brochures and public service announcements,
- o Habitat 2000,
- BirdOuest,
- National Wildlife Week and Environment Week,
- o North American Waterfowl Management Plan,
- Great Lakes Action Plan, and
- St-Lawrence Action Plan.

The Canadian Museum of Nature plays an important role in providing information and education programs on wildlife species through its scientific and popular publications, including books, periodicals (e.g., Canadian Biodiversity, Syllogeus, BIOME), brochures, and articles; its permanent, temporary, and travelling exhibits, and its public program. The preparation and distribution of materials on wildlife and habitat conservation are also undertaken by other

departments. For example, both the Department of Fisheries and Oceans and Environment Canada provide material on conservation and protection of habitat.

In the National Capital Region, the federal government takes a direct interest in protecting wildlife and its habitat interests through the National Capital Commission (NCC). Gatineau Park and the conservation areas of the Greenbelt bring wildlife and wildlife habitat into close contact with the residents of the National Capital Region.

CONCLUSION

The federal government has initiatives in place that link with many of the policy statements in A Wildlife Policy for Canada (see Appendix A). The federal government has in place legislation, policies and programs that protect wildlife and habitat, both nationally and internationally; encourage the consideration of wildlife and habitat, and mitigation for impact, in planning before irreversible commitments are made; determine the value of wildlife and habitat; acknowledge the role of aboriginal peoples in wildlife and habitat management; and broadcast the benefits of wildlife and habitat and encourage participation and education of resource users and the general public. The Green Plan initiatives have certainly strengthened the federal government's hand in implementing this policy.

While the federal government has made considerable progress in responding to the needs of wildlife and habitat conservation in Canada, the response is by no means complete. As stated in the Preface of A Wildlife Policy for Canada, this document is only a framework for governments. No measures or indicators have been attached to the policy statements to indicate when the statement has been satisfied in full. A full evaluation of the progress concerning implementation of the policy is desirable and a requirement to determine how well we are doing in terms of the various policy statements. An independent audit of implementation of the policy will have to be completed before 1995.

APPENDIX A

STATUS OF THE WILDLIFE POLICY FOR CANADA 1990-1992 FEDERAL SUMMARY

POLICY SECTION	POLICY STATEMENT	FEDERAL ACTIONS TAKEN TO DATE
WILDLIFE AND BIODIVERSITY	Broader definition of wildlife to include any species of wild organism	Adopted Wildlife Policy definition for the National Wildlife Strategy
	Conservation of biodiversity highlighted in policies and legislation on resources and the environment	National Parks Act promotes the maintenance of biodiversity in functional and viable ecosystems DNA repository
		Sustainable Forests: A Canadian Commitment
		Biodiversity data bank Multi-use management of prairie pasture
		Convention on Biological Diversity
	Concepts of wildlife in all policies and legislation, includes wildlife habitat	Canada Wildlife Act provides for wildlife and their habitat
		The Canadian Council of Forest Ministers' statement - Sustainable Forests: A Canadian Commitment integrated wildlife habitat in its recognition of non-market resources
·		Territorial Lands Act provides for the protection of wildlife habitat

WILDLIFE IN POLICY AND PLANNING Policy Making	Review, strengthen and adopt comprehensive cross-sectoral conservation policies and strategies in consultation with the public	North American Waterfowl Management Plan St. Lawrence Action Plan Great Lakes Action Plan Partners in Flight Model Forests
		. Fraser River Action Plan
	Corporations and all resource users should adopt policies and strategies for sustainability	. Towards Sustainable Forestry Development
	,	. Integrated resource management on prairie pasture lands
		. National Wildlife Strategy
		. Federal Policy on Wetland Conservation
		. Federal Policy on Land Use
	·	. Porcupine Caribou Management Plan, Beverly-Qamanirjuaq Management Plan, community conservation strategies under the Inuvialuit Final Agreement
	The objectives and mandates of all sectors and agencies should require them to co-ordinate and	. Environmental Assessment and Review Process
	consult with the agencies or organizations responsible for wildlife on decisions with	. Inter-departmental committee on land
	potential impact on wildlife populations or habitat	. Inter-departmental committee on water
	The objectives and mandates of agencies responsible for renewable resources should	. Towards Sustainable Forestry Development
	renewable resources should require them to conserve the biodiversity of the resources and ecosystems concerned	. Network of Model Forests
		. North American Waterfowl Management Plan
		. Plant Gene Resource of Canada
		. Animal Germplasm Conservation Program
		. Canadian Culture Collection

	Wildlife agencies and organizations should consult with the responsible agencies concerning any impacts their management may have on other resources	Environment Canada consults with other federal departments and agencies when it develops its legislation, policies and programs
	Permanent mechanisms for interagency consultation should be established to provide for effective cross-sectoral definition of policies and management of programs for the conservation of soil, water, air and wildlife	Treasury Board Secretariat The Environmental Assessment Review Process Interdepartmental Committee on Land Interdepartmental Committee on Water Interdepartmental Committee on Climate Change Marine Environmental Quality Steering Committee Interdepartmental Committee on
	Preparation and publication of "State of the Environment" Reports	Long Range of Air Pollutants The State of Canada's Environment
Economic and Development Planning and Assessment	Assessment of potential effects on wildlife populations and habitats should be part of the environmental assessment process. All new projects should be subject to the environmental assessment process at the pre-feasibility and feasibility stages and throughout the development planning process	The Environmental Assessment and Review Process requires the assessment of projects by federal departments and agencies before financial commitment is made. The Canadian Environmental Assessment Act has legislated the assessment process and has made the assessment of projects mandatory where projects are not on the proposed exclusion list
	Development projects should include a plan to: protect ecological processes and the ecosystems that sustain them; maintain wildlife populations and their habitats; consider the needs of wildlife users; and compensate for any habitat that may be destroyed	Development projects include mitigation options that maintain wildlife and habitat; consider the resource user; and where possible compensate for destroyed habitat. Protection of ecological process and the ecosystems that sustain them is just in its infancy
	Existing monetary and fiscal policies should be examined for their impacts on wildlife	The federal government, however, is examining how economic instruments could promote environmental conservation

	Regional assessments are needed where a number of development activities may have potential cumulative impacts	The Canadian Environment Assessment Act requires assessment of cumulative impact. Research activities have begun for the Hudson Bay Basin and Mackenzie Basin
	Approval and any public financial support should be provided only to those policies and projects that, on the basis of the assessment, are found to have an acceptable impact on wildlife populations and habitats	The federal government is beginning to systematically apply the assessment process to new policy decisions. The Environmental Assessment and Review Process requires assessment of projects where federal money is involved
EVALUATING AND INCREASING THE SUSTAINABLE BENEFITS FROM WILDLIFE	Governments and NGO's should determine regularly the values of wildlife	Surveys: The Importance of Wildlife to Canadians; Recreational Fisheries in Canada
	In order to provide information suitable for "state of the environment" reporting, governments should conduct a series of economic evaluations of the sustainable net product of the various resource sectors grouped by ecosystems	Canada biodiversity country study Wetland evaluation
	The private sector and wildlife management agencies should aim to maintain and increase the sustainable benefits from wildlife; stress appreciation of wildlife and its natural habitat and explore ways of increasing the benefits from wildlife obtained by aboriginal and other rural communities	Ecotourism Towards Sustainable Forestry Development North American Waterfowl Management Plan Hunting regulations/non-toxic shot zones Humane trapping/Fur program Arctic Environmental Strategy's community resource management plans
	Wildlife programs should be reviewed, developed or modified to ensure that wildlife is enjoyed fairly by as many people as possible	Fair access to migratory birds is ensured through co-operative development of hunting regulations with provincial and territorial agencies Canadian Parks Policy

CANADA'S INTERNATIONAL RESPONSIBILITY	With respect to species that Canada shares with other countries, Canada should participate in international programs to assess wildlife populations, conserve habitat and negotiate and regulate use	Convention on International Trade in Endangered Species The Convention on Wetlands of International Importance especially as waterfowl habitat (Ramsar Convention) Western Hemisphere Shorebird Reserve Network Latin American Program Circumpolar Agreement on Arctic Flora and Fauna UNCED Agenda 21 Convention on Biological Diversity FAO Commission on Plant Genetic Resources International Convention on Polar Bear Management
		. International Agreement for the Conservation of the Porcupine Caribou Herd
÷	Canadian governments should assess the impacts of development projects in Canada on the wildlife in other countries, and the federal government should request other countries to assess the impacts of their development initiatives on wildlife in Canada	The federal government does undertake assessments of its development projects. The federal government is kept informed of development initiatives in the United States which may impact on Canada. The federal government does request that the development projects be assessed
	Canada should support the establishment and enforcement of international conventions to conserve wildlife and make a strong commitment to fulfilling its international obligations, ensuring that they support the interests of aboriginal and other users of wildlife	Convention on the International Trade in Endangered Species Ramsar Convention Convention on Biological Diversity Agreement on the Conservation of Polar Bears International Agreement for the Conservation of the Porcupine

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	Canada should support and participate in the exchange of technical assistance with other countries to conserve wildlife and ecosystems and to incorporate conservation principles in development planning and projects	Latin American Program Western Hemisphere Shorebird Reserve Network Canada-Russia Accord for Environmental Cooperation Canada-Mexico-United States Tripartite Agreement Country Studies on Biological Diversity
		. Cooperation in the development of international humane trapping standards
	All Canadian development assistance - both bilateral and multilateral - should be directed to helping recipient countries achieve ecological and economic sustainability	Canada does provide development assistance for ecological and economic stability to recipient countries
INVOLVEMENT OF ABORIGINAL PEOPLES IN WILDLIFE MANAGEMENT	Governments should undertake to establish co-operative wildlife management programs with aboriginal peoples for the purposes of wildlife conservation	Porcupine Caribou Management Board Comprehensive Land Claims and Wildlife Management Boards Indian Lands Forestry funding agreements The Prairie Farm Rehabilitation Administration Beverly-Qamanirjuaq Caribou Management Agreement Fisheries Joint Management Committee (IFA) Wildlife Management Advisory Council (IFA)
	Governments should involve aboriginal peoples in planning and implementing co-ordinated wildlife research, management and enforcement	Ongoing, in part, through regional co-operative wildlife management agreements and Comprehensive Land Claims e.g., Porcupine Caribou Management Agreement

	Governments and aboriginal peoples should work co- operatively to ensure that the special knowledge and understanding of wildlife that aboriginal peoples have is reflected in management and education programs	Integration of Traditional Ecological Knowledge and aboriginal people research and program development National Parks management and interpretation Cooperative Management Boards under claims Humane trapping/Fur program
	Governments should encourage aboriginal peoples to assume leading roles as wildlife management professionals and enforcement officers through university, college and on-the-job training programs	Training facilities in British Columbia and Northwest Territories Hiring of aboriginal peoples to staff national parks Trapper Education training program
CONSERVATION OF WILDLIFE HABITAT	Governments, NGO's and aboriginal peoples should work co-operatively to plan and implement comprehensive programs that will maintain the diversity and distribution of wildlife habitats within major Canadian ecosystems. Program planning should classify and evaluate wildlife habitat	The federal government works cooperatively with other wildlife agencies, aboriginal peoples and NGOs to implement programs to maintain habitat diversity
	Governments, NGO's and aboriginal peoples should monitor and assess ecosystems and their wildlife populations in a way that is compatible with "state of the environment" reporting	The federal government monitors and assesses habitats and populations on an ongoing basis. Assessment of ecosystems is a Green Plan goal. Departments are working cooperatively with the State of the Environment Reporting group to make reporting compatible with SOE requirements
	Governments and other organizations should provide financial and other incentives and remove disincentives, to mitigate impacts and encourage activities that enhance wildlife habitat	North American Waterfowl Management Plan Federal Policy on Wetland Conservation

	The discharge of pollutants or the accumulation of unacceptable levels of pollutants in wildlife habitat should be prevented. Where such contamination presents a significant risk to consumers, access to the resource must be closed or the consumers must be advised of the risks	Environment Canada studies the impact of pollutants on wildlife Canadian Environmental Protection Act
	All laws that protect wildlife habitat should be strictly enforced, and where necessary, new legislation with adequate penalties will be passed to protect wildlife habitat	Environmental Assessment and Review Process Canadian Environmental Protection Act Canada Wildlife Act National Parks Act Fisheries Act
	Governments will complete and maintain comprehensive systems of protected areas through legislation and/or policy that include representative ecological types and give priority to the protection to endangered of limited habitats	The federal government has numerous mechanisms to protect areas (e.g., National Wildlife Areas, Migratory Bird Sanctuaries, National Parks). The federal government is also involved with the Endangered Spaces Campaign to protected 12% of Canada's land and water
	Governments should include conservation of wildlife habitat as a management objective for all sectors using public lands and also provide for conservation of the full range of wildlife habitats in land use planning, setting regional goals for this purpose	. Federal Policy on Land Use . Environmental Assessment and Review Process
·	Landowners and land users should adopt a land ethic of sound conservation practices and stewardship of resources	. Federal Policy on Land Use
	Governments should encourage conservation of wildlife habitats on privately-owned lands by providing tax credits, reduced property taxes, subsidies or other benefits for the establishment of nature reserves or other protected areas, or other measures to conserve habitats	North American Waterfowl Management Plan Environment Canada is working with non-government organizations on tax credits and conservancy bonds for habitat protection

	Aboriginal peoples, governments and NGO's should promote the establishment of protected areas that are managed by aboriginal peoples	. Comprehensive Land Claims
CONSERVATION OF WILDLIFE POPULATIONS Optimum Wildlife Populations	Wildlife should be managed to maintain a diversity of species broadly distributed throughout their range at levels of abundance sufficient to enable them to adapt to environmental changes	Habitat and wildlife protection initiatives within the federal sphere help maintain a diversity of species
	There should be a national program for monitoring the status and trends in biodiversity	Many monitoring programs exist within natural resource departments and agencies. A national monitoring network is being considered
	The status of key wildlife species will be established by baseline surveys and monitored regularly	Monitoring is undertaken. Indicator species are being selected
	Uses of wildlife, including scientific research, should be managed to ensure they are sustainable and humane and in accordance with regional goals	Migratory Bird Convention Act hunting regulations
Species and Ecosystems at Risk	Status reports should be prepared on all species and ecosystems of concern	Species status reports are prepared. Ecosystem reports are proposed under the Green Plan
	Programs should be developed to conserve within-species genetic diversity of key species	Recovery programs for species at risk helps conserve within species genetic diversity
Regulation and Enforcement	Legislation regulating uses of wildlife will be enacted and enforced to conserve wildlife populations and to ensure that uses of wild animals are humane	. Migratory Birds Convention Act . Canada Wildlife Act . Fisheries Act
	Governments, aboriginal peoples and NGO's should undertake co- operative programs to inform the public of the rationale for conservation laws and regulations and to solicit the public's assistance in promoting awareness and compliance	. Whale watching guidelines . Migratory Bird Hunting Regulations

Conflicts Between People and Wild Animals	Wherever possible, human activities should be managed to avoid or minimize conflicts with wild animals	Some restriction in access in National Parks, National Wildlife Areas, and Migratory Bird Sanctuaries minimize conflicts. Fisheries Act regulations protect cetaceans from harassment The environmental assessment process may provide mitigation to avoid or manage conflicts with wild animals
	Wild animals that cause unacceptable risk to people; damage to crops, aquaculture or livestock; or pressure on habitats or other wildlife populations should be controlled only on the basis of long-term, scientifically-sound and economically-justified programs	Crop damage compensation program Bird Strike Programs
Wild Animals in Captivity	Where wild animals are kept in captivity, it must be in humane conditions and under government permits and monitored regularly	Animal Care Committees Captive Breeding Programs Migratory Bird Convention Act regulations
	Captive stocks must be maintained in such a manner that the potential for escape, transmission of disease or transfer of genes poses negligible risk to wildlife populations	Controlled through permits
CONTROL OF INTRODUCED AND GENETICALLY ENGINEERED SPECIES	Introductions of species from outside Canada, as well as from one jurisdiction to another within Canada, should be controlled	. Import and Export Act . Game Export Act
	No non-indigenous or genetically- engineered species should be introduced into a natural ecosystem	Species have been introduced as a control measure for other introduced species
	Non-indigenous species may be introduced into cultivated and built ecosystems, provided that an environmental assessment is made of the potential impacts on nearby modified and natural ecosystems and that there is an effective plan to minimize or eliminate negative impacts	Environmental Assessment Review and Process

	Governments should make every effort to prevent accidental introductions of non-indigenous species	Public information campaigns quarantines
AN IMPROVED BASIS FOR WILDLIFE CONSERVATION Research	Governments should commit themselves to building wildlife research programs and to increasing the scale and scope of research on wildlife and ecosystems. Research programs can be developed with universities, NGO's, zoos, museums, etc.	. Green Plan . Humane trapping research
	Governments should establish a national system of co-operative wildlife research centres	. Co-operative Wildlife Ecology Research Centres are being established through the Green Plan
	Research to provide the information needed to combine social and economic development with conservation of wildlife and wildlife habitat should also be given priority	Survey: The Importance of Wildlife to Canadians Survey: Recreational Fishing in Canada Wetland Evaluation Guide Economic, ecological, and decision theories
	The knowledge of aboriginal peoples and other users of wildlife should be actively sought to complement scientific research	. Traditional Ecological Knowledge . National Parks programming
Professional Development	Governments should provide enhanced training and professional development for wildlife management personnel	Training opportunities can be sought as part of human resources development
	Co-operative wildlife research centres should provide training in wildlife research and management	Training in wildlife research and management is part of mandate for Co-operative Wildlife Ecology Research Centres
	Opportunities for the cross- training of wildlife managers in each other's disciplines should be developed and implemented	Cross disciplinary training of wildlife managers undertaken - especially in wildlife enforcement
	Opportunities for wildlife managers to learn about aboriginal philosophies of wildlife and traditional aboriginal lifestyles should be provided and aboriginal peoples should be employed in wildlife management	Traditional ecological knowledge is being collected and wherever possible aboriginal people are employed in wildlife management

INVOLVING THE PUBLIC Participation and Education	Governments should develop effective and timely consultation processes to provide for the effective involvement of the public, NGO's and local communities in policy development, land use planning and wildlife management	The federal government consulted extensively before developing the Green Plan and the Federal Policy on Wetland Conservation
	Wildlife projects involving private citizens and NGO's should be promoted and assisted	North American Waterfowl Management Plan Endangered Species Recovery Fund Wildlife Toxicology Fund
	Governments, NGO's and aboriginal peoples should provide effective education, information and extension programs on wildlife and wildlife management	. National Wildlife Week . Environment Week
Public Access to Wildlife	Means of access to wildlife close to centres of human population should be developed by wildlife management authorities in cooperation with municipalities, NGO's, aboriginal peoples and private land owners	National Parks National Wildlife Areas Migratory Birds Sanctuary National Capital Commission lands in the National Capital Region
	Reasonable public access to wildlife on private lands should be promoted and facilitated while protecting the rights and interests of landowners; and access to wildlife on public land encouraged, while protecting the rights and interests of lessees and aboriginal peoples	The federal government supports access to private and public lands