Please provide the following details on the origin of this report

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Please provide summary information on the process by which this report has been prepared, including information on the types of stakeholders who have been actively involved in its preparation and on material which was used as a basis for the report

Preparation of this report was coordinated by the Biodiversity Convention Office (BCO) of Environment Canada. The report was developed in three phases.

Phase 1 - involved the provision of input by federal subject matter leads who could bring a national perspective to their particular area of interest (eg. Agriculture, forestry, marine & coastal). Each federal lead was invited to consult as appropriate within their constituency on proposed responses.

A literature and web search were also used to provide examples and illustrations as well as to substantiate responses. A bibliography of relevant publications is attached to this report. Some internet references are also provided in relevant sections.

A first draft of the report was then circulated to the federal Interdepartmental Committee on Biodiversity in order to seek comments, suggested revisions or additions from the broader federal community.

Phase 2 - involved soliciting comments/input from provincial and territorial governments.

Phase 3 - involved soliciting comments/input from non-government stakeholders (eg. private sector, non-government organisations, etc).

The final report will be posted on the Biodiversity Convention Office (BCO) web site and will also be available in hard copy from the BCO.

A list of material that was used as the basis for the report is provided at the end of this document. Please note that this list represents only a sample of references, and not a comprehensive list.

Please provide information on any particular circumstances in your country that are relevant to understanding the answers to the questions in this report

An understanding of Canada's political complexity and geography is critical to understanding the answers to the questions in this report.

In Canada, responsibility for the environment and biodiversity is shared by the federal government, ten provincial governments, three territorial governments, and local governments. Aboriginal communities have a great interest in the environment and biodiversity issues, and in some instances aboriginal governments may exercise jurisdiction or authority over aspects of these matters pursuant to self-government arrangements. Private citizens and industry also have a large interest in biodiversity issues, with about 10% of Canada's land-base being privately owned.

The size of the country, including extreme regional variations, also makes it difficult to access information on all biodiversity related programs, policies and initiatives across Canada.

These circumstances create a challenge when asked to answer questions from a comprehensive "national" perspective. Therefore, responses are sometimes weighted towards a federal perspective. However, the input and activities of other levels of government and other interested stakeholders have also been incorporated as much as possible, to provide the most complete picture of Canada's progress on implementing the Convention on Biodiversity.

The COP has established programmes of work that respond to a number of Articles. Please identify the relative priority accorded to each theme and the adequacy of resources. This will allow subsequent information on implementation of each Article to be put into context. There are other questions on implementation of the programmes of work at the end of these guidelines.

Inland water ecosystems

1. What is the relative priority for implementation of this work programme in your country?	
a) High	X
b) Medium	
c) Low	
d) Not relevant	
2. To what extent are the resources available adequate for meeting the obligations and recommendations made?	
a) Good	
b) Adequate	
c) Limiting	X
d) Severely limiting	

Marine and coastal biological diversity

3. What is the relative priority for implementation of this work programme in your country?	
a) High	X
b) Medium	
c) Low	
d) Not relevant	
4. To what extent are the resources available adequate for meeting the obligations and recommendations made?	
a) Good	
b) Adequate	
c) Limiting	X
d) Severely limiting	

Agricultural biological diversity

5. What is the relative priority for implementation of this work programme in your country?	
a) High	X
b) Medium	
c) Low	
d) Not relevant	

6. To what extent are the resources available adequate for meeting the obligations and recommendations made?	
a) Good	
b) Adequate	
c) Limiting	X
d) Severely limiting	

Forest biological diversity

7. What is the relative priority for implementation of this work programme in your country?	
a) High	X
b) Medium	
c) Low	
d) Not relevant	
8. To what extent are the resources available adequate for meeting the obligations and recommendations made?	
a) Good	
b) Adequate	
c) Limiting	X
d) Severely limiting	

Biological diversity of dry and sub-humid lands

9. What is the relative priority for implementation of this work programme in your country?	
a) High	
b) Medium	X
c) Low	
d) Not relevant	
10. To what extent are the resources available adequate for meeting the obligations and recommendations made?	
a) Good	
b) Adequate	X
c) Limiting	
d) Severely limiting	

Further comments on work programmes and priorities

Canada attaches a high priority to the conservation and sustainable use of biodiversity under each of the thematic areas of work (inland water ecosystems, marine and coastal biological diversity, agricultural biological diversity, forest biological diversity) with the possible exception of dry and sub-humid lands, which are a somewhat lower priority for Canada.

Comparatively speaking, Canada may be viewed as having a greater capacity to address each of these thematic areas than other countries. However, it is the view of many that, although much has been accomplished, more could and should be done but we are often be limited by available resources.

Areas where additional investment of resources could greatly enhance national policies and programs include, inter alia, research and inventory, and monitoring and data management. Additional resources would also help accelerate the completion of Canada’s networks of protected areas, including marine protected areas.

Article 5 Cooperation

11. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

12. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Canada shares a number of watersheds with the U.S., its neighbours to the south. Migratory species such as the monarch butterfly and many neo-tropical birds which breed in Canada winter in the U.S. and Mexico, as well as in South America, Central America and Caribbean countries. Co-operation among Canada, the United States and Mexico in particular is important to conservation efforts of species in North America. Canada also places high emphasis on co-operation with arctic nations and is a contracting party to a number of multilateral environmental agreements.

13. Is your country actively cooperating with other Parties in respect of areas beyond national jurisdiction for the conservation and sustainable use of biological diversity?	
a) bilateral cooperation (please give details below)	X
b) international programmes (please give details below)	X
c) international agreements (please give details below)	X

Decision IV/4. Status and trends of the biological diversity of inland water ecosystems and options for conservation and sustainable use

14. Has your country developed effective cooperation for the sustainable management of transboundary watersheds, catchments, river basins and migratory species through bilateral and multilateral agreements?	
a) no	
b) yes - limited extent (please give details below)	
c) yes - significant extent (please give details below)	X
d) not applicable	

Decision IV/15. The relationship of the CBD with the CSD and biodiversity-related conventions, other international agreements, institutions and processes or relevance

15. Has your country developed management practices for transboundary protected areas?	
a) no	
b) yes - limited extent (please give details below)	X
c) yes - significant extent (please give details below)	
d) not relevant	

Decision V/21. Co-operation with other bodies

16. Has your country collaborated with the International Biodiversity Observation Year of DIVERSITAS, and ensured complementarity with the initiative foreseen to be undertaken by the United Nations Educational, Scientific and Cultural Organization and the Secretariat of the Convention on Biological Diversity to increase scientific knowledge and public awareness of the crucial role of biodiversity for sustainable development?	
a) no	
b) to a limited extent	X
c) to a significant extent	

Decision V/27. Contribution of the Convention on Biological Diversity to the ten-year review of progress achieved since the United Nations Conference on Environment and Development

17. *Is your country planning to highlight and emphasize biological diversity considerations in its contribution to the ten-year review of progress since the Earth Summit*?	
a) no	
b) yes	X

Further comments on implementation of this Article

In support of Goal 5 of the Canadian Biodiversity Strategy – to participate in international efforts to coordinate and enhance activities related to the conservation of biodiversity and sustainable use of biological resources – Canada is developing a module on international cooperation on biodiversity. The following are a few examples of initiatives in support of the Convention that are outlined in that module.

Canada is an active participant in a number of international environmental and trade agreements whose goals relate to the conservation and sustainable use of biological resources. In addition, biodiversity considerations are a key element to participating in the development of new protocols or sub-agreements under existing agreements or conventions. These agreements include, but are not limited to: UN Convention to Combat Desertification; Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES); Ramsar Convention on Wetlands of International Importance; Convention on the Protection of Migratory Birds in Canada and the United States; and the soon to be ratified UN Agreement on Straddling Fish Stocks and Highly Migratory Fish Stocks.

Cooperation activities also include regional and international partnerships to improve scientific understanding of regional biodiversity issues and to take action on its conservation. For example, cooperation on understanding regional biodiversity is coordinated through the North American Agreement on Environmental Cooperation (see below), the North American Working Group on Environmental Enforcement, and the North American Waterfowl Management Plan (NAWMP).

Some further examples of specific cooperative initiatives are outlined below.

International Joint Commission (IJC)

The International Joint Commission (www.ijc.org) has been working with the governments of both Canada and the United States since 1909, to assist in managing waters along the border. In addition to the Great Lakes-St. Lawrence River system, the Commission has continuing responsibilities in several areas (Kootenay, Osoyoos, and Columbia rivers in the west; St. Mary, Milk and Souris River across the prairies; and St. Croix River and Rainy Lake system in the east). Work of the IJC includes assisting governments in achieving their goals of improving water quality, including concerns for biodiversity and the recent release of a report on alien invasive species in the Great Lakes basin. The IJC also coordinates the Great Lakes Water Quality Agreement for Canada and the United States.

Great Lakes Water Quality Agreement

The Agreement, first signed in 1972 and renewed in 1978, expresses the commitment of each country to restore and maintain the chemical, physical and biological integrity of the Great Lakes Basin Ecosystem and includes a number of objectives and guidelines to achieve these goals. It reaffirms the rights and obligation of Canada and the United States under the Boundary Waters Treaty and has become a major focus of Commission activity.

North American Commission for Environmental Cooperation (CEC)

The Commission for Environmental Cooperation (www.cec.org) is an international organization created by Canada, Mexico and the United States under the North American Agreement on Environmental Cooperation (NAAEC). The CEC was established to address regional environmental concerns, help prevent potential trade and environmental conflicts, and to promote the effective enforcement of environmental law. CEC supports several projects under the Conservation of Biodiversity program area – activities include assisting in the development and implementation of a Strategic Plan for the Conservation of Biodiversity in North America.

Arctic Council and the Arctic Environmental Protection Strategy (AEPS)

In 1997, the Arctic Council was established as a high-level consensus organization founded on the principles of circumpolar cooperation, coordination and interaction to address the issues of sustainable development, including environmental protection, of common concern to Arctic states and northerners (www.arctic-council.org). The Council has integrated the former programs of the AEPS, the purpose of which was to support the Convention on Biodiversity. The objectives of the Arctic Environmental Protection Strategy were:

- to protect the Arctic ecosystems, including humans;
- to provide for the protection, enhancement and restoration of environmental quality and sustainable utilization of natural resources, including their use by local populations and indigenous peoples in the Arctic;
- to recognize and, to the extent possible, seek to accommodate the traditional and cultural needs, values and practices of indigenous peoples as determined by themselves, related to the protection of the Arctic environment;
- to review regularly the state of the Arctic environment;

- to identify, reduce and, as a final goal, eliminate pollution.

Four programmes, established under the AEPS and continued under the Arctic Council, support arctic environmental protection an conservation through monitoring and assessment, conservation of flora and fauna, environmental emergency preparedness and marine protection.

International Model Forest Network

The International Model Forest Network (www.idrc.ca/imfn/) was created as an outgrowth of the successful Canadian Model Forest Network, started two years earlier to strengthen the sustainable management of Canadian forests. The Network was launched in 1992 by Canada at UNCED, and now has several international model forests sites, established or under development in Canada, Mexico, Russia, the United States, Chile, Argentina, Japan and Malaysia. The Network's vision is to foster cooperation and collaboration in the advancement of management, conservation and sustainable development of forest resources, through a world-wide network of working model forests.

International Peace Parks (IPP)

The first Canada-US IPP was established on the Canada-US border in 1932, from two previously existing national parks. There are now five IPP being managed by Canada and the US as a shared ecosystem. For example, cooperation within the Waterton/Glacier IPP area is reflected in wildlife and vegetation management, with stewardship efforts being shared between governments.

US-Canada Framework for Cooperation

In 1997, the US and Canadian governments signed the *Framework for Cooperation Between the US and Canada for the Protection and Recovery of Wild Species at Risk.* The goal of the Framework is to prevent populations of wild species shared by the US and Canada from becoming extinct as a consequence of human activity, through the conservation of wild populations and the ecosystems on which they depend.

North American Bird Conservation Initiative (NABCI)

Canada has a long history of cooperation throughout North America for the conservation of migratory bird species (e.g. *Migratory Birds Convention Act*). The recently established NABCI is a coordinated effort among Canada, the US and Mexico with a goal to maintain the diversity and abundance of all North American birds. This goal will be reached through integration of existing initiatives for bird conservation. Important habitat and land-use issues will be addressed through joint venture partnerships in each Bird Conservation Region (BCR), similar to those already undertaken under the North American Waterfowl Management Plan (NAWMP). This initiative should create a significant increase in the level of cooperation across North America. More information on NABCI can be obtained at www.bsc-eoc.org/nabci.html.

Article 6 General measures for conservation and sustainable use

18. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

19. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Before agreeing to ratify the Convention, Ministers wanted to ensure that Canada was positioned to act on that commitment. As such, Ministers of a number of environment and resource councils met in advance of Canada's ratification to agree on a follow-up plan which included development of a Canadian Biodiversity Strategy.

20. What is the status of your national biodiversity strategy (6a)?	
a) none	
b) early stages of development	
c) advanced stages of development	
d) completed1	
e) completed and adopted2	X
f) reports on implementation available	X
21. What is the status of your national biodiversity action plan (6a)?	
a) none	
b) early stages of development	
c) advanced stages of development	X
d) completed2	
e) completed and adopted2	
f) reports on implementation available	X
22. Do your national strategies and action plans cover all articles of the Convention (6a)?	
a) some articles only	
b) most articles	X
c) all articles	

1/ Please provide information requested at the end of these guidelines.

23. Do your national strategies and action plans cover integration of other sectoral activities (6b)?	
a) no	
b) some sectors	
c) all major sectors	X
d) all sectors	

Decision II/7 and Decision III/9 Consideration of Articles 6 and 8

24. Is action being taken to exchange information and share experience on the national action planning process with other Contracting Parties?	
a) little or no action	
b) sharing of strategies, plans and/or case-studies	X
c) regional meetings	
25. Do all of your country's strategies and action plans include an international cooperation component?	
a) no	
b) yes	X
26. Are your country's strategies and action plans coordinated with those of neighbouring countries?	
a) no	
b) bilateral/multilateral discussions under way	
c) coordinated in some areas/themes	X
d) fully coordinated	
e) not applicable	
27. Has your country set measurable targets within its strategies and action plans?	
a) no	
b) early stages of development	X
c) advanced stages of development	
d) programme in place	
e) reports on implementation available	
If a developing country Party or a Party with economy in transition - 28. Has your country received support from the financial mechanism for the preparation of its national strategy and action plan?	
a) no	
b) yes	
If yes, which was the Implementing Agency (UNDP/UNEP/World Bank)?	

Decisions III/21. Relationship of the Convention with the CSD and biodiversity-related conventions

29. Are the national focal points for the CBD and the competent authorities of the Ramsar Convention, Bonn Convention and CITES cooperating in the implementation of these conventions to avoid duplication?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X

Further comments on implementation of this Article

Following ratification of the CBD by Canada, Ministers tasked a Federal-Provincial-Territorial Work Group on Biodiversity with the development of a Canadian Biodiversity Strategy. The Strategy was developed over a three-year period with input from a wide range of stakeholders, including the private sector, indigenous groups, conservation organisations and academia. The Strategy was endorsed by all jurisdictions in April 1996. Each jurisdiction was to report on how it was implementing or planned to implement the Strategy.

To date, the federal government and a number of provincial governments have produced implementation reports and/or action plans. Some resource industries have also developed biodiversity plans or strategies. For example, various strategies and action plans have been developed for protected areas, forestry, wildlife, stewardship, land use, sustainable development, agriculture, fisheries, mining, etc.

At a meeting in September 2001, federal, provincial and territorial Wildlife, Forests, and Fisheries and Aquaculture Ministers agreed to collaborate on four implementation priorities for biodiversity issues of Canada-wide concern outlined in the jointly prepared report, *Working Together: Priorities for Collaborative Action to Implement the Canadian Biodiversity Strategy 2001-2006.* The priorities are: to develop a biodiversity science agenda; enhance capacity to report on status and trends; deal with invasive alien species; and engage Canadians by promoting stewardship. Ministerial endorsement of this report will result in the development of a national business plan for each of these priority areas.

Article 7 Identification and monitoring

30. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

31. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Although Canada considers integrated monitoring and assessment of biodiversity to be important, capacity in this area has eroded over the past decade. Federal, provincial and territorial governments have recognized the need to enhance Canada's capacity to monitor and report on biodiversity status and trends. They are developing a plan for collaborative action which will address a number of science and capacity issues.

32. Does your country have an ongoing inventory programme at species level (7a)?	
a) minimal activity	
b) for key groups (such as threatened or endemic species) or indicators	
c) for a range of major groups	X
d) for a comprehensive range of species	
33. Does your country have an ongoing inventory programme at ecosystem level (7a)?	
a) minimal activity	
b) for ecosystems of particular interest only	
c) for major ecosystems	X
d) for a comprehensive range of ecosystems	
34. Does your country have an ongoing inventory programme at genetic level (7a)?	
a) minimal activity	
b) minor programme in some sectors	
c) major programme in some sectors	X
d) major programme in all relevant sectors	
35. Does your country have ongoing monitoring programmes at species level (7a)?	
a) minimal activity	
b) for key groups (such as threatened or endemic species) or indicators	X
c) for a range of major groups	X
d) for a comprehensive range of species	

36. Does your country have ongoing monitoring programmes at ecosystem level (7b)?	
a) minimal activity	
b) for ecosystems of particular interest only	X
c) for major ecosystems	
d) for a comprehensive range of ecosystems	
37. Does your country have ongoing monitoring programmes at genetic level (7b)?	
a) minimal activity	X
b) minor programme in some sectors	
c) major programme in some sectors	
d) major programme in all relevant sectors	
38. Has your country identified activities with adverse affects on biodiversity (7c)?	
a) limited understanding	
b) threats well known in some areas, not in others	X
c) most threats known, some gaps in knowledge	
d) comprehensive understanding	
e) reports available	
39. Is your country monitoring these activities and their effects (7c)?	
a) no	
b) early stages of programme development	X
c) advanced stages of programme development	
d) programme in place	
e) reports on implementation available	
40. Does your country coordinate information collection and management at the national level (7d)?	
a) no	
b) early stages of programme development	X
c) advanced stages of programme development	
d) programme in place	
e) reports on implementation available	

Decision III/10 Identification, monitoring and assessment

41. Has your country identified national indicators of biodiversity?	
a) no	
b) assessment of potential indicators underway	X
c) indicators identified (if so, please describe below)	

42. Is your country using rapid assessment and remote sensing techniques?	
a) no	
b) assessing opportunities	
c) yes, to a limited extent	X
d) yes, to a major extent	
e) reports on implementation available	
43. Has your country adopted a “step-by-step” approach to implementing Article 7 with initial emphasis on identification of biodiversity components (7a) and activities having adverse effects on them (7c)?	
a) no	
b) not appropriate to national circumstances	
c) yes	X
44. Is your country cooperating with other Contracting Parties on pilot projects to demonstrate the use of assessment and indicator methodologies?	
a) no	
b) yes (if so give details below)	X
45. Has your country prepared any reports of experience with application of assessment methodologies and made these available to other Contracting Parties?	
a) no	
b) yes	X
46. Is your country seeking to make taxonomic information held in its collections more widely available?	
a) no relevant collections	
b) no action	
c) yes (if so, please give details below)	X

Decision V/7. Identification, monitoring and assessment, and indicators

47. Is your country actively involved in co-operating with other countries in your region in the field of indicators, monitoring and assessment?	
a) no	
b) limited co-operation	X
c) extensive co-operation on some issues	
d) extensive co-operation on a wide range of issues	
48. Has your country made available case studies concerning the development and implementation of assessment, monitoring and indicator programmes?	
a) no	X
b) yes - sent to the Secretariat	
c) yes – through the national CHM	
d) yes – other means (please specify)	

49. Is your country assisting other Parties to increase their capacity to develop indicator and monitoring programmes?	
a) no	
b) providing training	
c) providing direct support	
d) sharing experience	
e) other (please describe)	X

Further comments on implementation of this Article

38. Threats are well known in some areas, but not in others. Certain emerging issues such as genetically modified organisms are not yet very well understood. A better understanding exists for other issues, such as habitat loss and fragmentation, but a complete national understanding of the situation is still in development.

44. There are a number of initiatives where Canada co-operates on developing indicator methodologies. The State of the Great Lakes Conference (SOLEC) held biennially between Canada and the United States is focussed on developing a set of core indicators to represent the state of the major ecosystem components of the Great Lakes. The SOLEC 2000 conference included pilot reporting on more than 25 of the 80 indicators.

Canada also co-operates with other members of the OECD to develop environmental indicators that will allow countries to track biodiversity. For example, Canada is currently engaged with other OECD countries in developing a set of agri-environmental indicators that will monitor (among other things) domestic and native agricultural biodiversity.

46. c) Metadata and inventory initiatives

49. e) A variety of initiatives in development under ILTER and the CEC (see below)

Biodiversity remains both a cross-cutting issue and an indicator of ecosystem change which is most often a reflection of cumulative effects. It therefore challenges existing agencies and jurisdictions who are focused on sub-areas of the ecosystem (forestry, fish, water, Region, Province, whatever) and specific stressors. They do not have resources to take on additional activities which are “outside the box” even when they may wish to do so. Initiatives such as EMAN (Environmental Monitoring and Assessment Network) which try to bridge such limitations must be resourced against existing priorities. Sound strategies for meeting Article 7 and other obligations suffer in their implementation as a result. On the bright side, biodiversity is a good attribute to monitor and use in driving adaptive management mechanisms in working landscapes (eg. benthic invertebrate diversity in the EEM program) and EMAN is making progress in engaging communities, Parks and the voluntary sector in the coordinated monitoring of biodiversity using such a mechanism.

Ecological Monitoring and Assessment Network (EMAN)

The Ecological Monitoring and Assessment Network (EMAN) is a national network of monitoring and research sites characterized by long term, multi-disciplinary studies (www.cciw.ca/eman-temp/intro.html). Sites within a single ecozone are loosely linked in an ecological framework. Research and monitoring activities within the Ecological Science Cooperatives of EMAN conduct studies related to (among other things) the cause and ecological consequences of environmental change, including species inventory, population dynamics and biodiversity change. Partners in the network include all levels of government, international agencies, non-government organizations, academic institutions, aboriginal and local groups. EMAN is also supported by several volunteer organizations that enlist concerned Canadians for the collection of scientifically reliable information.

International Long-Term Ecological Research Network (ILTER)

EMAN also represents Canada's node on the International Long-Term Ecological Research Network (ILTER). This network currently represents a collaboration of 21 countries, working together to promote and enhance ecological monitoring across national and regional borders. Under ILTER, Canada is also in the process of developing a wide variety of initiatives for assisting other Parties to increase their capacity to develop indicator and monitoring programs.

Committee on the Status of Endangered Wildlife in Canada (COSEWIC)

COSEWIC (www.cosewic.gc.ca) is a committee of representatives from federal, provincial, territorial and private agencies, as well as independent experts, that assigns national status to species at risk in Canada. COSEWIC has been operating since 1978 to identify and designate the official, Canada-wide list of species at risk. There are currently more than 380 species on the official list. If the proposed federal *Species at Risk Act* (SARA) passes, the law will give COSEWIC the mandated responsibility for identifying and assessing Canadian species list and producing a list for those that are at risk. This list will become the basis for legal wildlife protection and recovery measures as outlined by the bill.

Wild Species Report 2000: The General Status of Species in Canada

The 1996 *Accord for the Protection of Species at Risk* commits federal, provincial and territorial Ministers responsible for wildlife to "monitor, assess and report regularly on the status of all wild species". In response to this commitment, the Wild Species Report 2000 was produced, providing a general status assessment for a broad cross-section of over 1,600 Canadian species. However, this only captures approximately 2% of the over 70,000 described species in Canada. The next Wild Species Report, anticipated for 2005, will expand on the current level of knowledge.

State of the Environment Reporting

Identification and monitoring activities are often reported through - and conducted in support of – state of the environment reports. The federal government and several provinces have now produced state of the environment reports that track progress on a variety of indicators, including biodiversity. The majority of these reports use an ecosystem approach to organizing information, and are built on providing answers to five basic questions:

- *What is happening to Canada's environment? (environmental conditions and trends)*

- *Why is it happening? (link to human activities)*
- *Why is it significant? (environmental, social and economic consequences)*
- *What are Canadians doing about it? (management responses to environmental change)*
- *Is this sustainable? (are human actions depleting natural capital?)*

Other sector or ecosystem based state of the environment reports have also been produced, such as the State of the Forest, the State of the Parks, State of the Oceans, Northern River Basins Study and the State of the Great Lakes reports. The Environment Canada National Indicators Program is developing reports on a variety of indicators related to selected biodiversity issues, such as forest biodiversity. More information is available from the State of Canada's Environment Infobase: www.ec.gc.ca/soer-ree/english/default.cfm.

Provincial Identification and Monitoring Initiatives

Provincial and territorial governments maintain a variety of identification and monitoring initiatives. Some examples of these initiatives include the Alberta Forest Biodiversity Monitoring Program, Northwest Territories Species 2000, the Manitoba Big Game, Species at Risk, Birds, Amphibians and Reptiles, and Invertebrates Monitoring Program and the Saskatchewan Biodiversity Action Plan, of which monitoring is a major component. Information collected through these initiatives is used to support national species status reports.

Public Participation in Environmental Monitoring Programs

Several ecosystem and species monitoring programs enlist the help of Canadians for the collection of information, often from a local or provincial perspective. National citizen monitoring programs include Wormwatch, Frogwatch, and Roadwatch (a road kill monitoring program). Other environmental monitoring programs include Nova Scotia Plantwatch, the University of Alberta Devonian Botanical Garden's Plantwatch, and the Headwater Coalition's "Green Wave Ontario". More information on these initiatives is available through EMAN: www.cciw.ca/eman-temp/intro.html.

Canadian Amphibian and Reptile Conservation Network (CARCNET)

CARCNET (eqb-dqe.cciw.ca/partners/carcnet/) represents one of several Canadian initiatives conducted by non-government organizations and academic institutions to inventory and monitor species in Canada. CARCNET is a network of Canadian biologists that monitor amphibian and reptile populations, working proactively to reverse the trends in habitat loss. CARCNET also helps to co-ordinate public involvement in frog and toad monitoring programs across Canada.

Canadian Landbird Monitoring Strategy (CLMS)

The CLMS was prepared as part of the Partners in Flight-Canada program to provide a strategic framework for the long-term monitoring of Canada's landbirds and selected waterbirds. The goals of the partnership program are to monitor the status of all Canadian landbirds and to ensure that monitoring information is used for research and conservation. Migratory species will be monitored through international co-ordination of monitoring programs.

Biological Survey of Canada (Terrestrial Arthropods)

The Biological Survey of Canada helps coordinate scientific research among specialists on the Canadian fauna of insects, mites, and their relatives. The Survey supports identification and monitoring initiatives through programs such as the Sustainable Arid Grassland Ecosystems (SAGE) Project, the goal of which is to acquire a biodiversity database on arthropods in

Canadian grassland ecosystems (western and arctic regions). This biodiversity benchmark will function as a reference point against which ecosystem change can be assessed from a biotic standpoint.

Decisions on Taxonomy

Decision IV/1 Report and recommendations of the third meeting of SBSTTA [part]

50. Has your country carried out a national taxonomic needs assessment, and/or held workshops to determine national taxonomic priorities?	
a) no	
b) early stages of assessment	X
c) advanced stages of assessment	
d) assessment completed	
51. Has your country developed a national taxonomic action plan?	
a) no	
b) early stages of development	X
c) advanced stages of development	
d) action plan in place	
e) reports on implementation available	
52. Is your country making available appropriate resources to enhance the availability of taxonomic information?	
a) no	X
b) yes, but this does not cover all known needs adequately	
c) yes, covering all known needs	
53. Is your country encouraging bilateral and multilateral training and employment opportunities for taxonomists, particularly those dealing with poorly known organisms?	
a) no	X
b) some opportunities	
c) significant opportunities	
54. Is your country investing on a long-term basis in the development of appropriate infrastructure for your national taxonomic collections?	
a) no	
b) some investment	X
c) significant investment	
55. Is your country encouraging partnerships between taxonomic institutions in developed and developing countries?	
a) no	
b) yes – stated policy	X
c) yes – systematic national programme	
56. Has your country adopted any international agreed levels of collection housing?	
a) no	
b) under review	
c) being implemented by some collections	X

d) being implemented by all major collections	
57. Has your country provided training programmes in taxonomy?	
a) no	
b) some	X
c) many	
58. Has your country reported on measures adopted to strengthen national capacity in taxonomy, to designate national reference centres, and to make information housed in collections available to countries of origin?	
a) no	
b) yes – in the previous national report	
c) yes – via the clearing-house mechanism	
d) yes - other means (please give details below)	X
59. Has your country taken steps to ensure that institutions responsible for biological diversity inventories and taxonomic activities are financially and administratively stable?	
a) no	
b) under review	X
c) yes for some institutions	
d) yes for all major institutions	
60. Has your country assisted taxonomic institutions to establish consortia to conduct regional projects?	
a) no	
b) under review	X
c) yes – limited extent	
d) yes – significant extent	
61. Has your country given special attention to international funding of fellowships for specialist training abroad or for attracting international experts to national or regional courses?	
a) no	
b) under review	
c) yes – limited extent	X
c) yes – significant extent	
62. Has your country provided programmes for re-training of qualified professionals moving into taxonomy-related fields?	
a) no	X
b) some	
c) many	

Decision V/9. Global Taxonomy Initiative: Implementation and further advance of the Suggestions for Action

63. Has your country identified its information requirements in the area of taxonomy, and assessed its national capacity to meet these requirements?	
a) no	
b) basic assessment	X
c) thorough assessment	
64. Has your country established or consolidated taxonomic reference centres?	
a) no	X
b) yes	
65. Has your country worked to increase its capacity in the area of taxonomic research?	
a) no	X
b) yes	
66. Has your country communicated information on programmes, projects and initiatives for consideration as pilot projects under the Global Taxonomy Initiative to the Executive Secretary?	
a) no	X
b) yes	
67. Has your country designated a national Global Taxonomy Initiative focal point linked to other national focal points?	
a) no	
b) yes	X
68. Has your country participated in the development of regional networks to facilitate information-sharing for the Global Taxonomy Initiative?	
a) no	
b) yes	X
If a developing country Party or Party with economy in transition -	
69. Has your country sought resources through the financial mechanism for the priority actions identified in the decision?	
a) no	
b) applied for unsuccessfully	
c) applied for successfully	

Further comments on implementation of these decisions

50.Needs assessment is being carried out by key federal sectors that are also the members of the Federal Biosystematics Partnership.

51.The Taxonomic Action Plan will be incorporated within the strategic planning that is taking place following a national conference (March 2001) entitled, *The Canadian Biodiversity Network Conference*.

52. Appropriate resources to enhance the availability of taxonomic information are not available in Canada, but some efforts are still in progress. The Birds of Canada Project under the Biota of Canada Information Network has demonstrated that a relatively small amount of funding ($100K) can mobilize the natural history museum community to work with government agencies and the non-government sector to make taxonomic information available. Another example is the work of Agriculture and Agri-Food Canada in developing a Canadian node for the Integrated Taxonomic Information System.

54.The note for question 51 is relevant to this area of long term collection care. Also, in Canada there is a study being conducted by Canadian Heritage, the federal department responsible for museums, to investigate the level of research and funding available to federal facilities. Further, a recent report has come from the Natural Sciences and Engineering Research Council (NSERC) regarding the long term care and storage of research collections and points to the need for better levels of funding in this area. Any additional support will add to the current maintenance level of funds to the museum infrastructure in Canada.

55.Partnerships between taxonomic institutions are primarily done on a facility by facility basis. However, Canada is taking an active role in the Global Biodiversity Information Facility (GBIF), and that may be considered as a working relationship between many different kinds of taxonomic institutions.

57.These are done at facilities or within university departments. Within the university environment there is a strong trend toward molecular research techniques, with less emphasis on taxonomy and certainly less offerings of whole organism taxonomy.

58. See item 51. Also, Canada is developing the Biota of Canada Information Network and will fulfill its obligations as a voting member of the Global Biodiversity Information Facility.

59.See item 51.

60.See item 51.

61.On a facility by facility basis.

63.See item 51.

64.See item 51.

65.See item 51.

66.However, Canada is a member of the GTI Co-ordinating Mechanism for a one-year term (2000-2001).

67.The Federal Biosystematics Partnership, and specifically the Canadian Museum of Nature, is the Canadian focal point for the GTI.

68.As part of the Co-ordinating Mechanism, Canada was present at the first meeting in Montreal in November 2000. More direct involvement of Canada in regional network development is still required.

Taxonomic Collection Housing

Canada maintains a variety of taxonomic collections that meet or exceed the international standards for collection housing. The majority of these collections are maintained in partnership between a variety of organizations, including Agriculture and Agri-Food Canada, Canadian Forest Service, Parks Canada Agency, Environment Canada, Health Canada, Department of National Defence, and the Canadian Museum of Nature. Collections include:

- Collection of Insects and Arachnids – collection of species of national significance used in support of regional and national biodiversity initiatives.
- Collection of Fungal Cultures and Mycological Herbarium – the largest living collection of fungal isolates, with focus on native species and species of economic importance.
- Collections of Bacteria and Viruses – numerous collections maintained by individual research scientists and study groups.
- Farm Animal Conservation – government support provided to Rare Breeds Canada for grass-roots level conservation of domestic species.
- Plant Genetic Resources Network/Plant Genetic Resources of Canada – Canada-wide collection of plant genetic resources for crops and wild plants of economic importance. Collection includes the Seed Genebank and Clonal Genebank.
- Native Plant Collection and Propagation – AAFC Shelterbelt Centre collects native shrub and fruit seed for wildlife and human food product potential. Focus is on collecting germplasm from native plant populations in the prairie region.
- National and Provincial Natural History Museums – natural history museums across Canada house a large variety of taxonomic collections (e.g. Canadian Museum of Nature).

Collections are regularly used by government, university and private sector scientists to support research, technology transfer, and information management activities. Please note: Several of the collections listed are used primarily for the purposes of ex-situ conservation rather than taxonomic collection housing. The list also does not describe a number of other important collections that exist in Canada (vertebrates, aquatic organisms, plants).

Agriculture and Agri-Food Canada (AAFC) is responsible for the majority of the above noted collections. AAFC follows the general principles of Article 15 of the Convention on Biological Diversity. Samples of plant genetic resources for food and agriculture are available without restriction for purposes of breeding, research and education. Animal genetic resources are available mainly by contract. A fee schedule was implemented for access to the Canadian Collection of Fungal Cultures. Biological specimens are freely exchanged on the basis of reciprocal treatment. AAFC promotes national and international consensus on access to genetic resources for food and agriculture.

More information on taxonomic collections in Canada is available from Agriculture and Agri-Food Canada (www.agr.ca), the Canadian Museum of Nature (www.nature.ca) and Natural Resources Canada (www.pfc.cfs.nrcan.gc.ca/biodiversity/herbarium/index_e.html).

Article 8 In situ conservation [excluding Articles 8h and 8j]

70. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

71. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
In Goal 1, the Canadian Biodiversity Strategy sets out eight strategic directions related to the establishment and management of protected areas. Despite this commitment, the relative priority and resource availability for in situ conservation varies greatly between jurisdictions. The federal government supports in situ conservation through a variety of budget mechanisms. However, the establishment of new marine and terrestrial parks and maintenance of Canada's existing National Parks is limited by lack of sufficient human and financial resources.

72. Has your country established a system of protected areas which aims to conserve biological diversity (8a)?	
a) system under development	
b) national review of protected areas coverage available	
c) national protected area systems plan in place	X
d) relatively complete system in place	
73. Are there nationally adopted guidelines for the selection, establishment and management of protected areas (8b)?	
a) no	
b) no, under development	
c) yes	X
d) yes, undergoing review and extension	
74. Does your country regulate or manage biological resources important for the conservation of biological diversity with a view to ensuring their conservation and sustainable use (8c)?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) programme or policy in place	
e) reports on implementation available	

75. Has your country undertaken measures that promote the protection of ecosystems, natural habitats and the maintenance of viable populations of species in natural surroundings (8d)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) reasonably comprehensive measures in place	X
76. Has your country undertaken measures that promote environmentally sound and sustainable development in areas adjacent to protected areas (8e)?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) reasonably comprehensive measures in place	
77. Has your country undertaken measures to rehabilitate and restore degraded ecosystems (8f)?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
78. Has your country undertaken measures to promote the recovery of threatened species (8f)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) comprehensive measures in place	X
79. Has your country undertaken measures to regulate, manage or control the risks associated with the use and release of living modified organisms resulting from biotechnology (8g)?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
80. Has your country made attempts to provide the conditions needed for compatibility between present uses and the conservation of biological diversity and sustainable use of its components (8i)?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) programme or policy in place	
e) reports on implementation available	

81. Has your country developed and maintained the necessary legislation and/or other regulatory provisions for the protection of threatened species and populations (8k)?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) legislation or other measures in place	X
82. Does your country regulate or manage processes and categories of activities identified under Article 7 as having significant adverse effects on biological diversity (8l)?	
a) no	
b) under review	
c) yes, to a limited extent	
d) yes, to a significant extent	X
If a developed country Party - 83. Does your country cooperate in providing financial and other support for *in- situ* conservation particularly to developing countries (8m)? ***If a developing country Party or Party with economy in transition -*** 84. Does your country receive financial and other support for *in situ* conservation (8m)?	
a) no	
b) yes (if so, please give details below)	X

Decision II/7 Consideration of Articles 6 and 8 of the Convention

85. Is action being taken to share information and experience on implementation of this Article with other Contracting Parties?	
a) little or no action	
b) sharing of written materials and/or case-studies	X
c) regional meetings	

Further comments on implementation of this Article

72. Canada has several systems of protected areas developed and managed by various levels of government. Systems plans are in place and guide the development of the systems of national parks and national marine conservation areas – programs that are the responsibility of the federal government. Most systems of provincial protected areas are also guided by systems plans. The status and completion of the various systems varies greatly amongst the different jurisdictions.

In 1992, the Canadian Parks Ministers' Council formed a joint commitment to complete Canada's network of protected areas representative of Canada's land-based natural regions by the year 2000 by signing *A Statement of Commitment to Complete Canada's Network of Protected Areas.*

Initiatives such as British Columbia's *Protected Areas Strategy* (1992), Alberta's *Special Places Program*, Saskatchewan's *Representative Areas Network Initiative*, Manitoba's *An Action Plan for Manitoba's Network of Protected Areas 1996-1998*, Ontario's *Living Legacy Land Use Strategy*, Quebec's *Plan d'action sur les parcs : La nature en heritage* (1992), the Northwest Territories *Protected Areas Strategy*, the Yukon's *"Wild Spaces, Protected Places": A Protected Areas Strategy for the Yukon* (1998), and Nova Scotia's *Protected Areas Strategy* have all translated into the creation of new protected areas under the *Statement of Commitment.* Canadian industry, non-government organizations, aboriginal groups, and private citizens have also contributed to the establishment of new protected areas.

Canada is also at a very early stage in its efforts to establish marine protected areas, with a promising start made through emerging legislation and policy. The *Oceans Act* now provides a mechanism for establishing protected areas in the marine environment. In 1998, the governments of Quebec and Canada jointly created the Saguenay-St. Lawrence Marine Park, and studies are currently underway for other potential marine conservation areas. Finally, a *Marine Protected Areas Strategy* for the Pacific Coast is in preparation as a joint initiative of the federal and B.C. governments.

The Canadian Heritage Rivers System (CHRS) was established in 1984 by the federal, provincial and territorial governments to conserve and protect the best examples of Canada's river heritage, to give them national recognition, and to encourage the public to enjoy and appreciate them. It is a cooperative program of the governments of Canada, all 10 provinces, and the three territories. Today, there are 38 Heritage Rivers across Canada and more are being added to the system every year.

In total, Canada's parks agencies have added approximately +24 million hectares to the various systems of protected areas since 1992. Despite noteworthy success across the country, most of Canada's networks of protected areas have yet to be completed. In 2000, the Canadian Parks Ministers' Council renewed the commitment to complete the Canadian network of protected areas and more protected areas will continue to be established.

72. There are legislative and policy guidelines related to the selection, establishment and management of national parks and national marine

conservation areas. These guidelines are longstanding and well defined. Provincial and territorial governments have different guidelines.

There are no "national" guidelines for protected areas in Canada. The determination of what constitutes a protected area has been left to each jurisdiction to define in light of its own particular legislative mandate, policies and systems plan. For instance, federal guidelines for the selection, establishment and management of protected areas are provided through the *National Parks Systems Plan*, the *National Parks Policy*, management plans specific to the situation of each national park, and other relevant strategies and legislation.

73. See comments under Article 10 – Sustainable Use.

76. There are both formal approaches and less formal mechanisms that are used to promote sustainable development adjacent to protected areas. Formal mechanisms include the creation of biosphere reserves to protect the "core area" resources, and model forests. Less formal mechanisms include collaboration in regional planning exercises, joint research, and participation by protected area staff in the environmental review of projects proposed in the greater ecosystem.

77. Canadians have been undertaking restorative actions for decades. The most directed efforts for restoring ecosystems are the six Ecosystem Initiatives undertaken by Environment Canada (Great Lakes 2020, St. Lawrence Vision 2000, Atlantic Coastal Action Program, Northern Ecosystem Initiative, Northern Rivers Ecosystem Initiative, and Georgia Basin Ecosystem Initiative). The St. Lawrence and Great Lakes Action plans were the first "large action plans" designed to clean up, restore, and protect ecosystems.

Other federal, provincial and territorial initiatives also exist to restore ecosystems in newly established and existing protected areas in Canada (see note on Ecological Integrity below). Local communities are also actively involved in regional restoration on a municipal or volunteer basis.

78. The Recovery of Nationally Endangered Wildlife (RENEW) is a national initiative designed to co-ordinate recovery efforts of endangered species in Canada. Recovery plans are primarily focussed on terrestrial species, and do not yet cover all species at risk. The 11th RENEW annual report, released September 2001, highlights the dedication and commitment of recovery teams, which include government and non-government organizations, communities and dedicated volunteers across the country, to recover species at risk. Over 200 organizations made financial contributions to support recovery actions, and more than $26 million was invested on recovery measures in 2000-2001, almost double the expenditures in 1999-2000.

The 1996 National Accord for the Protection of Species at Risk (see below) has also led to the introduction of various federal, provincial and territorial legislation and funding mechanisms for species recovery and protection (e.g. Endangered Species Recovery Fund, Habitat Stewardship Fund, etc).

79. Measures related to the control of living modified organisms resulting from biotechnology are in place through the Plant Biosafety Office of the

Canadian Food Inspection Agency. Initiatives are still largely restricted to an understanding of potential threats at the local level.

80. Several sectoral plans link the present use of biological resources and the conservation of these resources. Tools for the implementation of these plans and implementation methodology are still lacking in several areas. Efforts to develop an ecological management module for the implementation of the Canadian Biodiversity Strategy are currently underway.

81. Federal, provincial and territorial Ministers responsible for wildlife have committed to a national approach to the protection of species at risk through the *National Accord for the Protection of Species at Risk* (1996). The accord commits governments to complementary legislation and programs to ensure that endangered species are protected throughout Canada and establishes a Council of Ministers that will provide direction, report on results, and settle disputes.

Proposed federal legislation pertaining to the protection of threatened species, the Canadian *Species at Risk Act* (SARA), is currently before Parliament. In addition, a number of provinces have legislation in place to protect endangered species and their habitat (ex. Quebec Endangered and Vulnerable Species Act, New Brunswick Endangered Species Act, Ontario Endangered Species Act, British Columbia Ecological Reserves Act, Saskatchewan Wildlife Act, etc.).

Monitoring initiatives under the *Accord* have recently resulted in the publication of the *Wild Species 2000 Report: The General Status of Species in Canada.* The report provides detailed information on a broad selection of more than 1,600 Canadian species (see comments to Article 7 for details).

In addition, a *Status of Wildlife Habitat in Canada Report* has been completed by Wildlife Habitat Canada (WHC) as a companion to the *Wild Species 2000 Report*, and was released in November 2001. WHC, a Canadian NGO, had previously released a wildlife habitat status report in 1991, as a means for setting forth a strategy for wildlife habitat conservation.

Other federal laws and regulations have also been developed with either the direct or indirect goal of maintaining and enhancing the health and diversity of Canada's wildlife. Related legislation includes:

- Canada Wildlife Act
- National Parks Act
- Migratory Birds Convention Act and Regulations
- Department of Fisheries and Oceans Act
- Department of the Environment Act
- Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA)
- Convention on International Trade in Endangered Species (CITES)
- Oceans Act
- Canada Environmental Assessment Act

Finally, Canada has several federal departments and agencies whose legal or historical mandate includes measures for the in situ conservation of biodiversity. These include the Canadian Wildlife Service (Environment Canada), Parks Canada Agency, Department of Fisheries and Oceans, Natural

Resources Canada and Agriculture and Agri-Food Canada. Provinces also maintain their own natural resource and/or wildlife management agencies.

Canada-Wide Stewardship Action Plan

Federal, provincial and territorial governments are currently collaborating in the development of a Canada-Wide Stewardship Action Plan aimed at engaging Canadians in conservation and sustainable use of biodiversity on private lands. Several stewardship initiatives are already being promoted by all levels of government, natural resource industries and other organizations across Canada.

NRTEE's Conservation of Nature Program

The Conservation of Nature Program of the National Round Table on the Environment and the Economy (NRTEE) was recently developed to encourage the conservation, maintenance and restoration of ecological integrity of ecosystems through the creation of regional-scale networks of core protected areas, buffers and corridors in Canada and North America. The program aims to develop a suite of policy instruments that will encourage progress towards specific conservation and restoration goals. This initiative represents a partnership of a wide variety of government and non-government organizations from across Canada. More information on NRTEE: www.nrtee-trnee.ca.

Panel on the Ecological Integrity of Canada's National Parks

The expert Panel on the Ecological Integrity of Canada's National Parks presented its landmark report in March 2000. The Panel confirmed that Canada's national parks have been progressively losing important natural components which Parks Canada was dedicated to protect. The Panel made 127 recommendations. The Minister of Canadian Heritage responded positively, indicating that the report would be implemented. Significant progress has been quickly made in several areas, and these are fully described in a report released by Parks Canada in March 2001 (*First Priority, Progress Report on Implementation of the Recommendations of the Panel on the Ecological Integrity of Canada's National Parks*). As highlights, the Canada National Parks Act now reflects ecological integrity as the first priority in making decisions; an ecological integrity orientation and training program is being taken by all Parks Canada staff; the Parks Canada Guide to Management Planning has been revised to reinforce the primacy of ecological integrity in the preparation and implementation of national park plans; and Parks Canada is working closely with the tourism and travel industry to influence travel industry marketing and the use of national parks. Finally, Parks Canada has taken steps to secure funds for implementing the full range of recommendations put forward by the Panel.

Reports and information on Canada's national parks can be accessed on-line from the Parks Canada Agency: parkscanada.pch.gc.ca/parks/main_e.htm.

North American Bird Conservation Initiative (NABCI)

NABCI (www.bsc-eoc.org/nabci/html) is a tri-national North American agreement to increase the effectiveness of existing and new initiatives for bird conservation, through enhanced co-ordination at both the national and regional level and increased international co-operation. It builds on existing bird conservation programs such as the North American Waterfowl Management Plan (NAWMP), Partners in Flight, and Shorebird Conservation Plans, with a goal to cause the combined effectiveness of these programs to far exceed the total of their parts. The NABCI working group is currently facilitated by the CEC (see comments to Article 5). Initiatives include the

establishment of Important Bird Areas (IBA), which are then targeted for conservation planning.

National Wildlife Areas (NWA) and Migratory Bird Sanctuaries (MBS)

NWA and MBS are established under the authority of the Migratory Birds Convention and the Canada Wildlife Act as protected areas primarily for migratory bird species, and are administered by the Canadian Wildlife Service (CWS). With the agreement of the province or territory, an NWA may also be created to protect other species under provincial or territorial jurisdiction. Together these sites protect more than 11.8 million hectares. More information on these areas is available through the Canadian Wildlife Service: www.cws-scf.ec.gc.ca.

The Role of Non-Government Organizations

In addition to efforts by all levels of government for species and habitat conservation, there are several other non-government organizations with a mandate for in-situ conservation. By working with government and the public, the initiatives undertaken by these organizations have made a substantial contribution to the goals of the Convention. For instance, between 1987 and 1996, NGOs were responsible for creating over 70% of the protected sites in the Atlantic provinces. While too numerous to provide a complete list, the efforts of many of these organizations has already been recognized elsewhere in this report (e.g. Wildlife Habitat Canada, Canadian Parks and Wilderness Society, Canadian Wildlife Federation, Canadian Nature Federation, World Wildife Fund, Nature Conservancy of Canada, Ducks Unlimited Canada, Sierra Club, Bird Studies Canada, etc.)

Progress Report on Protected Areas

Federal/Provincial Parks Council Ministers met in Iqaluit in August 2000. They released a joint progress report - *Working Together: Parks and Protected Areas in Canada* - highlighting what each government had done to meet a 1992 Statement of Commitment to complete Canada's networks of parks and protected areas by 2000. The report highlighted the fact that since 1992 Canada's governments have made tremendous progress towards protecting Canada's natural legacy. More than 24,000,000 hectares have been added to Canada's parks and protected areas networks. The ministers recognized that more work needs to be done and committed to continue their efforts to complete their parks and protected areas networks.

Article 8h Alien species

86. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

87. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Harmful alien organisms are listed as one of Canada's strategic priorities under the Canadian Biodiversity Strategy. Signatories to the Strategy have agreed to take all necessary steps to prevent the introduction of harmful alien organisms and to ensure adequate resources for monitoring, eradication, public education and research. Federal, provincial and territorial governments have agreed that the development of a Canadian strategy to address alien invasive species is a national priority. A national workshop was held in the fall of 2001 to begin developing a program of work.

88. Has your country identified alien species introduced?	
a) no	
b) only major species of concern	X
c) only new or recent introductions	
d) a comprehensive system tracks new introductions	
e) a comprehensive system tracks all known introductions	
89. Has your country assessed the risks posed to ecosystems, habitats or species by the introduction of these alien species?	
a) no	
b) only some alien species of concern have been assessed	X
c) most alien species have been assessed	
90. Has your country undertaken measures to prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats or species?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	

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91. Is your country collaborating in the development of projects at national, regional, sub-regional and international levels to address the issue of alien species?	
a) little or no action	
b) discussion on potential projects under way	X
c) active development of new projects	

92. Does your national strategy and action plan address the issue of alien species?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X

Decision V/8. Alien species that threaten ecosystems, habitats or species

93. Is your country applying the interim guiding principles for prevention, introduction and mitigation of impacts of alien species in the context of activities aimed at implementing article 8(h) of the Convention, and in the various sectors?	
a) no	
b) under consideration	X
c) limited implementation in some sectors	
d) extensive implementation in some sectors	
e) extensive implementation in most sectors	
94. Has your country submitted case-studies to the Executive Secretary focusing on thematic assessments?	
a) no	X
b) in preparation	
c) yes	
95. Has your country submitted written comments on the interim guiding principles to the Executive Secretary?	
a) no	X
b) yes	
96. Has your country given priority to the development and implementation of alien invasive species strategies and action plans?	
a) no	
b) yes	X
97. In dealing with the issue of invasive species, has your country developed or involved itself in mechanisms for international co-operation, including the exchange of best practices?	
a) no	
b) trans-boundary co-operation	X
c) regional co-operation	X
d) multilateral co-operation	
98. Is your country giving priority attention to geographically and evolutionarily isolated ecosystems in its work on alien invasive species?	
a) no	X
b) yes	

99. Is your country using the ecosystem approach and precautionary and bio-geographical approaches as appropriate in its work on alien invasive species?	
a) no	
b) yes	X
100. Has your country developed effective education, training and public-awareness measures concerning the issue of alien species?	
a) no	
b) some initiatives	X
c) many initiatives	
101. Is your country making available the information which it holds on alien species through the CHM?	
a) no	
b) some information	X
c) all available information	
d) information available through other channels (please specify)	
102. Is your country providing support to enable the Global Invasive Species Programme to fulfil the tasks outlined in the decision and its annexes?	
a) no	X
b) limited support	
c) substantial support	

Further comments on implementation of this Article

Canada's natural resources are central to its economic, environmental and social well-being. As such, Canadian resource managers are particularly concerned with the potential impacts of invasive species on agricultural, forestry and fisheries production. While resource management is largely the role of provincial and territorial governments, the federal government and other academic and non-government organizations also play a large role in the understanding and control of invasive species.

Regulatory and Quarantine Programs

Under the authority of the *Seeds Act, Feeds Act, Fertilizers Act, Health of Animals Act and Plants Protection Act*, the Canadian Food Inspection Agency (CFIA) regulates animals, plants and other products that may influence both wildlife and domesticated biodiversity through competitive displacement, gene dilution and disease transmission. Regulated plants, animals and products are subject to safety reviews and certification requirements, which include an environmental assessment.

Diagnostics of Insects, Mites and Fungi

Agriculture and Agri-Food Canada (AAFC) identifies insects, arachnids and fungi to differentiate indigenous from non-indigenous species when they are intercepted at Canadian borders. Such assessments reduce the risk of economic losses and ecological degradation from the introduction of non-

indigenous pest species, particularly in the agriculture and forestry sectors.

Science Programs for Invasive Species

All of the federal natural resource based science departments have now developed scientific programs geared towards the understanding of alien species, as well as the development of eradication and control technologies. These departments work in co-operation and share information with other government and non-government agencies.

Pest Management Regulatory Agency (PMRA)

PMRA (www.hc-sc.gc.ca/pmra-arla/) is responsible for providing safe access to pest management tools, while minimizing risks to environmental or human health. This includes products used to control alien species.

Canadian Forest Service (CFS), Natural Resources Canada

The CFS (Natural Resources Canada) is the principal federal forest research organization in Canada (www.nrcan.gc.ca/cfs-scf/index_e.html). It addresses the issue of alien forest pests by providing provincial and territorial forest agencies, private sector forest managers, other federal departments and agencies, Aboriginal forest organizations, non-governmental organizations, and the interested public with:

- Compilations and syntheses of fundamental ecological information on potential alien forest pests and methods for detection, identification and monitoring;
- Assessments of the potential for the establishment and spread of alien forest pests in Canadian forests and of their impact on Canada's forest ecosystems, economy, and opportunities;
- Systems for predicting the establishing and spread of alien forest pests; and
- Mitigative and preventative measures, including silvicultural options, and decision support systems.

National Botanical Services Canada and Invasive Plants

National Botanical Services Canada (with partners) has been active in monitoring invasive plant species in Canada. They have conducted several surveys on species of concern in several areas and on what is being done to curtail the spread of exotics, most recently through the *Invasive Plants of Canada: Survey 2000.* They are also responsible for administering the Invasive Plants of Canada Project and for the publication of guides for concerned citizens such as the *Guide to Monitoring Exotic and Invasive Species* (1997).

Invasive Species in the Great Lakes Ecosystem

A substantial amount of effort has been directed at the control and eradication of alien invasive species in the Great Lakes Basin ecosystem. This is an issue of international concern, with efforts conducted by all levels of government and other organizations with an interest in the Great Lakes in both Canada and the US.

In 2001, the International Joint Commission (www.ijc.org) released a report entitled *Alien Invasive Species and Biological Pollution of the Great Lakes Basin Ecosystem* which reviewed the problem of alien invasive species in the Great Lakes and provided recommendations for fundamental actions to be taken to address the problems, including regulation of key vectors (e.g. ballast water, aquaculture).

The Great Lakes Information Network (GLIN – www.great-lakes.net), which receives major contributions from agencies from both Canada and the US, provides detailed information on more than 13 major invasive species in the Great Lakes Basin ecosystem. Information provided includes an overview of the species and updates on progress for control, as well as links to general resources.

Provincial and Territorial Programs

In February 2001, the Canadian Institute of Resource Law produced *An Overview of Provincial and Territorial Regulation of Alien Invasive Species* for the Canadian Wildlife Service.

Several provinces and territories now have their own policies, legislation and strategies in place for the control of invasive species. Other provinces, such as Newfoundland, are still currently developing or improving their system for dealing with alien invasives. For example, the Alberta Wildlife Act allows the province to evaluate and forbid the importation and release of exotic species. In addition to regulations, Manitoba has adopted a risk assessment protocol for the introduction of non-native species of fish. Manitoba is also working with the other prairie provinces and the federal government to prevent the inappropriate introduction of harmful fish into the region.

Education and Awareness

Invasive species concerns are being addressed by agriculture, natural resource and wildlife agencies at all levels of government and other interested organizations in Canada. Partnerships are often formed for the delivery of community education, habitat restoration campaigns, mapping and monitoring initiatives, and sustainable management strategies.

Initiatives are currently focused on invasive species that have been recognized as major concerns in Canada (e.g. purple loosestrife, zebra mussels, scotch broom, etc.), and on developing a better understanding of those that have yet to be identified. Examples of such initiatives include the Manitoba Purple Loosestrife Initiative (Government of Manitoba) and the

Invasive Plants of Canada Project (National Botanical Services Canada).

The Ontario Ministry of Natural Resources, in partnership with the Ontario Federation of Anglers and Hunters, has developed the Invading Species Awareness Program to encourage public participation in preventing the spread of invading species and to track the distribution of invaders in Ontario's inland waters (www.invadingspecies.com).

A Status and Trends Report on Alien Invasive Species is scheduled to be published in the fall of 2001.

Article 8j Traditional knowledge and related provisions

103. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

104. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources

Canada has committed limited new resources specifically to the implementation of Article 8j. However considerable resources have and continue to be funneled into programmes and projects that would be consistent with the intent of Article 8j. Currently Canada is assessing the number, impact and investments being made into such activities as well as the manner in which Indigenous peoples in Canada participate and/or lead in their implementation. As well, ongoing discussions and negotiations with Indigenous organizations, bands and councils form a key part of any mechanism for implementing activity in Canada that directly impacts upon Indigenous peoples and their traditions.

Protection of some aspects of traditional knowledge is currently available under Canada's intellectual property laws, including copyright, trademarks, and trade secrets laws. In addition to its work under the 8j Working Group and in connection with other CBD fora, Canada is participating in the Intergovernmental Committee on Genetic Resources, Traditional Knowledge and Folklore of the World Intellectual Property Organization (WIPO) which, among other things, will be assessing the benefits and limits of existing intellectual property laws for protection of traditional knowledge. The WIPO Committee work is intended to be complementary to that of the 8j Working Group. The WIPO Committee's mandate will expire in 2003.

105. Has your country undertaken measures to ensure that the knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity are respected, preserved and maintained?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
106. Is your country working to encourage the equitable sharing of benefits arising from the utilization of such knowledge, innovations and practices?	
a) no	
b) early stages of development	X
c) advanced stages of development	
d) programme or policy in place	

Decision III/4 and Decision IV/9. Implementation of Article 8(j)

107. Has your country developed national legislation and corresponding strategies for the implementation of Article 8(j)?	
a) no	X
b) early stages of development	
c) advanced stages of development	
d) legislation or other measures in place	

108. Has your country supplied information on the implementation of Article 8(j) to other Contracting Parties through media such as the national report?	
a) no	
b) yes - previous national report	X
c) yes - CHM	
d) yes - other means (please give details below)	X
109. Has your country submitted case-studies to the Executive Secretary on measures taken to develop and implement the Convention's provisions relating to indigenous and local communities?	
a) no	
b) yes	X
110. Is your country participating in appropriate working groups and meetings?	
a) none	
b) some	
c) all	X
111. Is your country facilitating the active participation of representatives of indigenous and local communities in these working groups and meetings?	
a) no	
b) yes	X

Decision V/16. Article 8(j) and related provisions

112. Has your country reviewed the programme of work specified in the annex to the decision, and identified how to implement those tasks appropriate to national circumstances?	
a) no	
b) under review	X
c) yes (please provide details)	
113. Is your country integrating such tasks into its ongoing programmes, taking into account the identified collaboration opportunities?	
a) no	
b) not appropriate to national circumstances	
c) yes – to a limited extent	
d) yes – to a significant extent	X
114. Is your country taking full account of existing instruments, guidelines, codes and other relevant activities in the implementation of the programme of work?	
a) no	
b) not appropriate to national circumstances	
c) yes – to a limited extent	X
d) yes – to a significant extent	

115. Has your country provided appropriate financial support for the implementation of the programme of work?	
a) no	
b) not appropriate to national circumstances	
c) yes – to a limited extent	X
d) yes – to a significant extent	
116. Has your country fully incorporated women and women's organizations in the activities undertaken to implement the programme of work contained in the annex to the decision and other relevant activities under the Convention?	
a) no	
b) yes	X
117. Has your country taken measures to facilitate the full and effective participation of indigenous and local communities in the implementation of the Convention?	
a) no	
b) not appropriate to national circumstances	
c) yes – to a limited extent	
d) yes – to a significant extent	X
118. Has your country provided case studies on methods and approaches concerning the preservation and sharing of traditional knowledge, and the control of that information by indigenous and local communities?	
a) no	
b) not relevant	
c) yes – sent to the Secretariat	X
d) yes – through the national CHM	
e) yes – available through other means (please specify)	X
119. Does your country exchange information and share experiences regarding national legislation and other measures for the protection of the knowledge, innovations and practices of indigenous and local communities?	
a) no	
b) not relevant	
c) yes – through the CHM	
d) yes – with specific countries	
e) yes – available through other means (please specify)	X
120. Has your country taken measures to promote the conservation and maintenance of knowledge, innovations, and practices of indigenous and local communities?	
a) no	
b) not relevant	
c) some measures	
d) extensive measures	X

121. Has your country supported the development of registers of traditional knowledge, innovations and practices of indigenous and local communities, in collaboration with these communities?	
a) no	X
b) not relevant	
c) development in progress	
d) register fully developed	
122. Have representatives of indigenous and local community organizations participated in your official delegation to meetings held under the Convention on Biological Diversity?	
a) not relevant	
b) not appropriate	
c) yes	X
123. Is your country assisting the Secretariat to fully utilize the clearing-house mechanism to co-operate closely with indigenous and local communities to explore ways that enable them to make informed decisions concerning release of their traditional knowledge?	
a) no	
b) awaiting information on how to proceed	
c) yes	X
124. Has your country identified resources for funding the activities identified in the decision?	
a) no	
b) not relevant	
c) partly	X
d) fully	

Further comments on implementation of this Article

108. Canada has been a leading supporter of the Secretariats efforts to build an information base and has actively provided considerable documentation and research reports for general dissemination both at the meetings in Madrid and Seville and upon specific reporting requests. Further, Canada has provided its own documentation on its national web site and has supported the development and implementation of IBIN.

118. Canada makes such reports available through its national web site (www.bco.ec.gc.ca).

Application of Traditional Knowledge in Canada

Canada has done a significant amount of work in the field of traditional knowledge. Among other things, traditional knowledge is used to assist in land claims negotiations, to understand and develop conservation measures for species of significance to the aboriginal population (ex. caribou), and to determine the potential impacts of major development projects on the local population and ecosystems (ex. the impact of large scale hydro development in James Bay). The most significant amount of work has occurred in Canada's Northern Region. The Government of the Northwest Territories has even developed a Policy on Traditional Knowledge, and traditional knowledge was placed at the forefront of the development of government structures in the recently established Nunavut Territory.

Numerous co-management boards have been established as the result of land claims agreement process. These boards have played a major role in shaping and developing traditional knowledge, and also in campaigning for its recognition. Co-management regimes now relate to wildlife, lands, waters, environmental impact assessment and planning. In the absence of land claims agreements progress has been slower, but is still substantial.

The following is a list of only some of the traditional knowledge initiatives that have occurred or are ongoing in Canada. The majority are highly sophisticated long-term initiatives, utilizing computerized data and GIS technologies for a better understanding of traditional environmental and ecological knowledge.

- Nunavik Inuit Land Use and Ecological Knowledge Database
- Nunavut and Inuvaluit Land Use and Occupancy Database
- Nunavut Atlas
- Inuit Knowledge of Bowhead Study
- A Strategy for Future Research on the North Baffin Caribou Population
- Labrador Inuit Land Use and Ecological Database
- Hudson Bay Programme Traditional Knowledge Study
- Dogrib Traditional Knowledge: Relationship Between Caribou Migration Patterns and the State of Caribou Habitat
- Gwich'in Environmental Knowledge Project
- Ashkui Project of the Innu Nation in Labrador
- Traditional Knowledge Projects of the Dene Cultural Institute
- Northern River Basins Study Traditional Knowledge Documentation Project

Indigenous Peoples Biodiversity Information Network (IBIN)

The Indigenous Peoples Biodiversity Information Network (IBIN – www.ibin.org) was created in response to Article 8j as a mechanism to exchange information about experiences and projects and to increase collaboration among indigenous groups working on common causes related to biodiversity use and conservation. While IBIN is currently in a pilot phase, it is being designed to both serve the private internal needs of indigenous groups and to facilitate the sharing information publicly.

COSEWIC Aboriginal Knowledge Specialist Group

The Committee on the Status of Endangered Wildlife in Canada (COSEWIC – www.cosewic.gc.ca) has established an Aboriginal Knowledge Specialist Group to facilitate the incorporation of aboriginal traditional knowledge into the COSEWIC species status assessment process. The Chair of the Aboriginal Knowledge Specialist Group is one of the COSEWIC Committee members, the primary decision making body of COSEWIC.

Under the proposed Canadian *Species at Risk Act* (SARA), aboriginal communities, including wildlife management boards established under land claims agreements, will continue to play an essential role in the conservation of wildlife in Canada. Aboriginal knowledge will be applied to the species assessment process and development of species management plans.

Centre for Traditional Knowledge, Canadian Museum of Nature

The Canadian Museum of Nature (CMN – www.nature.ca) established a Chair of Traditional Knowledge in 1993. The Centre for Traditional Knowledge (CTK), based at the CMN, was incorporated as a not-for-profit non-governmental organization in 1994. The goal of the CTK is to promote and advance the recognition, understanding and use of traditional ecological knowledge around the world in policy and decision making for sustainable development.

Canadian International Development Agency (CIDA) and Traditional Knowledge

CIDA (www.acdi-cida.gc.ca) has developed a booklet to help guide its officers and partners by offering information, guidance, and suggested methodology on how to apply indigenous traditional knowledge systems and involve traditional knowledge and indigenous peoples in CIDA international development projects or programs planning implementation. CIDA has also collaboratively developed the publication *Guidelines: Integrating Traditional Knowledge in Project Planning and Implementation* for use by the international community.

Non-Government Participation

Several non-government organizations also contribute to the sustainable use of traditional knowledge, often with funding assistance from CIDA or IDRC. For example, the Garden Institute of Alberta runs the Building on Biodiversity (BOB) program that working with immigrant communities in Alberta to create links with communities in their countries of origin to document traditional knowledge of plants and their uses for the conservation of biodiversity. The “BOB El-Salvador” project with an association in El Salvador to conserve traditional crop varieties, with a particular focus on women and the environment.

Canada’s Biodiversity Convention Office (BCO) web site provides further information on the topic of indigenous peoples and biodiversity in Canada:

http://www.bco.ec.gc.ca/ProjectsReportsIndig_e.cfm

Article 9 Ex situ conservation

125. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

126. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources

127. Has your country adopted measures for the <u>*ex situ*</u> conservation of components of biological diversity *native* to your country (9a)?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
128. Has your country adopted measures for the <u>*ex situ*</u> conservation of components of biological diversity *originating outside* your country (9a)?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
129. If the answer to the previous question was yes, is this being done in active collaboration with organizations in the other countries (9a)?	
a) no	
b) yes	X
130. Has your country established and maintained facilities for the <u>*ex situ*</u> conservation of and research on plants, animals and micro-organisms that represent genetic resources *native* to your country (9b)?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

131. Has your country established and maintained facilities for the *ex situ* conservation of and research on plants, animals and micro-organisms that represent genetic resources *originating elsewhere* (9b)?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
132. If the answer to the previous question was yes, is this being done in active collaboration with organizations in the other countries (9a)?	
a) no	
b) yes	X
133. Has your country adopted measures for the reintroduction of threatened species into their natural habitats under appropriate conditions (9c)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) comprehensive measures in place	X
134. Has your country taken measures to regulate and manage the collection of biological resources from natural habitats for *ex situ* conservation purposes so as not to threaten ecosystems and *in situ* populations of species (9d)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) comprehensive measures in place	X
If a developed country Party - 135. Has your country cooperated in providing financial and other support for ex situ conservation and in the establishment and maintenance of ex situ conservation facilities in developing countries (9e)? ***If a developing country Party or Party with economy in transition -*** 136. Has your country received financial and other support for ex situ conservation and in the establishment and maintenance of ex situ conservation facilities (9e)?	
a) no	
b) yes	X

Further comments on implementation of this Article

125. Where there are obvious economic benefits, especially in agriculture, there are some very strong programs. The overall coverage of biodiversity, however, is incomplete to say the least.

127. We have no organization that has taken responsibility for a comprehensive approach to the *ex situ* conservation of components of biological diversity in Canada. The closest thing we have is the Plant Gene Resources Centre (PGRC) in Saskatoon, which is excellently run despite being under-resourced. Individual projects are doing great work, such as the tree seed banks at University of Guelph and at Natural Resources Canada in New Brunswick. The botanical gardens of Canada are on the verge of an organized seed gene bank program for rare native plants at this time.

128. Again, there is no organization that has taken responsibility for a comprehensive approach to the ex situ conservation in Canada of components of biological diversity arising elsewhere. For some collections of obvious economic value right now, there are great efforts being made within Agriculture Canada (again, PGRC is a good example).

129. Plant Gene Resources of Canada (a component of AAFC's Saskatoon Research Centre) actively collaborates with other countries including the USA, Germany, Russia and MOU's with PRC, Ukraine, S. Korea, Egypt and others (AAFC).

130. There are many institutions across Canada that have some small piece of the puzzle, and some good research is taking place. However, there is no comprehensive national strategy, and no reliable funding sources.

130. Significant for plants, very limited for micro-organisms, and none for animals (AAFC).

131. Significant for plants, very limited for micro-organisms, and none for animals (AAFC).

133. Yes, but at the "b" level. If Bill C-5, the *Species at Risk Act* passes there will be a great deal more that will have to take place within Canada. Several interesting reintroduction projects are now in progress in Canada for plants. (Also for birds and insects, such as the Loggerhead shrike, karner blue butterfly, etc.).

134. Comprehensive national and sub-national legislation exist to control the harvest of biological resources.

135. Yes, Canada does provide support to institutes such as IPGRI and others (AAFC).

Taxonomic Collection Housing

Canada maintains a variety of taxonomic collections that meet or exceed the international standards for collection housing. The majority of these collections are maintained in partnership between a variety of organizations, including Agriculture and Agri-Food Canada, Canadian Forest Service, Parks Canada Agency, Environment Canada, Health Canada, Department of National

Defence, and the Canadian Museum of Nature. Collections include:

- Collection of Insects and Arachnids – collection of species of national significance used in support of regional and national biodiversity initiatives.
- Collection of Fungal Cultures and Mycological Herbarium – the largest living collection of fungal isolates, with focus on native species and species of economic importance.
- Collections of Bacteria and Viruses – numerous collections maintained by individual research scientists and study groups.
- Farm Animal Conservation – government support provided to Rare Breeds Canada for grass-roots level conservation of domestic species.
- Plant Genetic Resources Network/Plant Genetic Resources of Canada – Canada-wide collection of plant genetic resources for crops and wild plants of economic importance. Collection includes the Seed Genebank and Clonal Genebank.
- Native Plant Collection and Propagation – AAFC Shelterbelt Centre collects native shrub and fruit seed for wildlife and human food product potential. Focus is on collecting germplasm from native plant populations in the prairie region.
- National and Provincial Natural History Museums – natural history museums across Canada house a large variety of taxonomic collections (e.g. Canadian Museum of Nature).

Collections are regularly used by government, university and private sector scientists to support research, technology transfer, and information management activities. Please note: The list does not describe a number of other important collections that exist in Canada (vertebrates, aquatic organisms, plants).

Zoological and Botanical Associations

A large contribution to the ex situ conservation of biological diversity is made by organizations outside government, such as academic and private institutions. These organizations contribute to the conservation and reintroduction of numerous wildlife species, both native to Canada and other parts of the world.

For example, the Canadian Association of Zoos and Aquariums (CAZA – www.caza.ca) has almost thirty members from seven provinces across Canada. In addition to conservation and research, these organizations are also actively involved in programs such as the Species Survival Plan (SSP), a North American captive breeding program run in collaboration with the American Zoo and Aquarium Association (AZA).

Similarly, the Canadian Botanical Conservation Network (CBCN – www.rbg.ca/cbcn/) is an active participant in ex situ plant conservation programs, having recently produced *A Biodiversity Action Plan for Botanical Gardens and Arboreta in Canada*. CBCN works in collaboration with the American Association of Botanical Gardens and Arboreta (AABGA) and Botanical Gardens Conservation International (BGCI) to achieve its program goals.

These ex situ conservation organizations also promote public education and stewardship through the various programs they provide. For example, the Canadian Museum of Nature and the Royal Botanical Gardens are jointly

developing a “Green Legacy” travelling museum exhibit about Canada’s native plant diversity and the importance of its conservation.

Recovery of Nationally Endangered Wildlife (RENEW)

The RENEW program is a collaboration among federal, provincial and territorial governments for species recovery, with supplementary financial and technical support provided by over 120 outside organizations. This program has been instrumental in (among other things) establishing captive breeding and reintroduction programs for endangered species native to Canada. The majority of these programs are conducted by Canadian zoos. More information on recovery efforts is available at: www.speciesatrisk.gc.ca.

WAPPRIITA and Control of Species Harvest

To prevent the harvesting of species for ex situ conservation from becoming detrimental to in situ conservation efforts is recognized as important in Canada. The Wild Animal and Plant Protection and Regulation of International and Interprovincial Trade Act (WAPPRIITA) was created to control the domestic and international harvest and trade of certain wild species of plants and animals. User’s guides have also been established to clarify the use and interpretation of the legislation.

Regional Partnerships for Ex Situ Conservation and Species Reintroduction

Through the *Framework for Cooperation in the Protection and Recovery of Species at Risk*, Canada and the US are working together to ensure the captive breeding and re-introduction of certain endangered species (ex. whooping cranes, karner blue butterfly, black-footed ferrets, etc.) common to both countries.

Article 10 Sustainable use of components of biological diversity

137. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

138. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate	X	c) Limiting		d) Severely limiting	

Further comments on relative priority and on availability of resources
Given that Canada's economy depends so heavily on its natural resources, the sustainable use of biological resources is a high priority. The federal, provincial and territorial governments, local communities and private sector all play a significant role. This role varies depending on the biological resources in question.

139. Has your country integrated consideration of the conservation and sustainable use of biological resources into national decision making (10a)?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) programme or policy in place	
e) review of implementation available	
140. Has your country adopted measures relating to the use of biological resources that avoid or minimize adverse impacts on biological diversity (10b)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) comprehensive measures in place	X
141. Has your country put in place measures that protect and encourage customary use of biological resources that is compatible with conservation or sustainable use requirements (10c)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) comprehensive measures in place	X

142. Has your country put in place measures that help local populations develop and implement remedial action in degraded areas where biological diversity has been reduced (10d)?	
a) no measures	
b) some measures in place	
c) potential measures under review	
d) comprehensive measures in place	X
143. Does your country actively encourage cooperation between government authorities and the private sector in developing methods for sustainable use of biological diversity (10e)?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) programme or policy in place	
e) review of implementation available	

Decisions IV/15. Relationship of the Convention with the Commission on Sustainable Development and biodiversity-related conventions

144. Has your country submitted to the Secretariat information on tourism and its impacts on biological diversity, and efforts to effectively plan and manage tourism?	
a) no	
b) yes – previous national report	
c) yes – case-studies	X
d) yes – other means (please give details below)	
145. Has your country submitted to the Secretariat information on biodiversity-related activities of the CSD (such as SIDS, oceans, seas and freshwater resources, consumption and production patterns)?	
a) no	
b) yes - previous national report	X
c) yes – correspondence	
d) yes - other means (please give details below)	X

Decision V/24. Sustainable use as a cross-cutting issue

146. Has your country identified indicators and incentive measures for sectors relevant to the conservation and sustainable use of biodiversity?	
a) no	
b) assessment of potential indicators underway	X
c) indicators identified (if so, please describe below)	

147. Has your country assisted other Parties to increase their capacity to implement sustainable-use practices, programmes and policies at regional, national and local levels, especially in pursuit of poverty alleviation?	
a) no	
b) not relevant	
c) to a limited extent	
d) to a significant extent (please provide details)	X
148. Has your country developed mechanisms to involve the private sector and indigenous and local communities in initiatives on sustainable use, and in mechanisms to ensure that indigenous and local communities benefit from such sustainable use?	
a) no	
b) mechanisms under development	
c) mechanisms in place (please describe)	X
149. Has your country identified areas for conservation that would benefit through the sustainable use of biological diversity and communicated this information to the Executive Secretary?	
a) no	X
b) yes	

Decision V/25. Biological diversity and tourism

150. Has your country based its policies, programmes and activities in the field of sustainable tourism on an assessment of the inter-linkages between tourism and biological diversity?	
a) no	
b) to a limited extent	X
c) to a significant extent	
151. *Has your country submitted case-studies on tourism as an example of the sustainable use of biological diversity to the Executive Secretary*?	
a) no	
b) yes	X
152. Has your country undertaken activities relevant to biodiversity and tourism in support of the International Year of Ecotourism?	
a) no	
b) yes	X
153. Has your country undertaken activities relevant to biodiversity and tourism in support of the International Year of Mountains?	
a) no	X
b) yes	
154. Has your country undertaken activities relevant to biodiversity and tourism in support of the International Coral Reef Initiative?	
a) no	X
b) yes	

155. Has your country established enabling policies and legal frameworks to complement voluntary efforts for the effective implementation of sustainable tourism?	
a) no	X
b) to a limited extent	
c) to a significant extent (please describe)	

Further comments on implementation of this Article

Jurisdiction over natural resources and decision making for sustainable use is shared between the federal and provincial governments. Many Aboriginal communities participate actively in decision-making processes involving issues such as sustainable or customary use and regional development. Aboriginal governments may have jurisdiction over natural resources on the lands as set out in a comprehensive land claim agreement or self-government agreement.

Sustainable use is critical to the future of Canada's natural resource based industries. Canada is actively working to develop a system of integrated management for every natural resource sector. Sustainable use is a balance of the environmental, economic and social aspects of biodiversity.

139. Sustainable use of biological resources is the stated policy of all federal, provincial and territorial governments for the control of natural resources in a given jurisdiction. Where jurisdiction for resources is shared (e.g. forestry, agriculture, etc.) a national decision making process is in the advanced stages of development. Progress varies depending on the resource and jurisdictions involved.

140. The enactment of Canadian Environmental Assessment Act has allowed adverse impacts on biodiversity through use of natural resources to be minimized. Promotion of greater resource stewardship, and the development of a Canada-wide Stewardship Action Plan will also contribute to this goal.

141. In 1995, legislation was enacted to strengthen the federal government's performance in protecting the environment and promoting sustainable development by requiring that major federal departments and agencies prepare sustainable development strategies. These strategies outline, among other things, measures by which federal departments intend to ensure the sustainable use of natural resources. Other federal departments, provincial governments, and organizations have also voluntarily prepared a sustainable development strategy.

142. Comprehensive measures are in place in geographical areas of concern, but not for Canada as a whole. Community involvement in remedial action is encouraged by a variety of government and non-government programs. For example, community involvement in remedial action plans has been established or encouraged in association with the six Ecosystem Initiatives led by Environment Canada (e.g. development of Remedial Action Plans (RAPs) for contaminated sites in the Great Lakes Basin under the Great Lakes 2000 Ecosystem Initiative).

Joint Ventures of the North American Wildlife Management Plan (NAWMP) are public-private partnerships of all players in a region that can make wetland conservation happen, and a number of Plan projects work to

restore wetlands that are then managed by the local community, such as the Delkalta estuary project in British Columbia.

143. Federal, provincial and territorial governments work with the private sector for the sustainable management of every natural resource based industry. For example, as the majority of Canada's managed forests are publicly owned, provincial and territorial governments play an active role in setting annual allowable cut levels for the private logging industry. Similarly, the federal government ensures sustainable use of marine resources by limiting access to fisheries and establishing and monitoring quotas. Provincial governments administer hunting and trapping regulations, following established wildlife harvest goals and quotas.

Maximum levels of sustainable resource harvest are established using the best science and information available, taking the needs of the private sector into consideration. In most cases, resource harvesting activities (forestry, fishing, hunting, etc.) can only be undertaken by private industry by permit or licence. Harvest quotas are strictly enforced according to regulations set out in a variety of federal, provincial and territorial legislation.

Recently, the Biodiversity Stewardship in Resource Industries initiative (BSRI) was established to promote cooperation between government, industry and non-government management partners in the sustainable use decision making process.

146. The assessment of potential indicators relevant to the conservation and sustainable use of biodiversity is underway at the local, regional, sectoral, national and international level in Canada. Indicators are being developed, for example, as the result of the Environment Canada Task Force on Biodiversity Indicators.

In September 2000, the National Round Table on the Environment and the Economy (NRTEE) launched its Environment and Sustainable Development Indicators (ESDI) Initiative to develop indicators that link economic activity to its long-term effects on the environment. The initiative will attempt to track stocks of key types of capital, including natural capital (natural resources and ecosystem services)

Participants in the State of the Great Lakes Ecosystem Conference (SOLEC) are near completion of a set of indicators that include measures of biodiversity in the Great Lakes Basin ecosystem, to aid in the management of the Great Lakes Water Quality Agreement (see Article 5). Major partners for this initiative include the federal government in Canada and the US, and provincial/state governments with an interest in the Great Lakes.

Canada has combined efforts with other OECD countries to develop a set of environmental indicators that can be used to track environmental progress, as well as integration of environmental priorities into sectoral and economic policies. Biodiversity and natural resources are included in the core set of environmental indicators.

Specific federal and provincial departments are also developing biodiversity indicators related to their related mandates. For example, in 2000, Agriculture and Agri-Food Canada (AAFC) published the Agri-Environmental Indicators Project Report. This report included an

indicator for agroecosystem biodiversity. The Canadian Council of Forest Ministers has also developed a set of Criteria and Indicators for Sustainable Forest Management in Canada. National Status 2000 is the first report on sustainable forest management using these indicators (www.ccfm.org/pi/4_e.html).

147. The International Development Research Council (IDRC) assists developing nations in various regions to build capacity to implement sustainable use practices through its research and development of Community-Based Natural Resource Management Programs and Environmental Management Programs.

The Canadian International Development Agency (CIDA) also conducts programs to help developing nations to protect their environment and to contribute to addressing global and regional environmental issues. Both IDRC and CIDA focus on poverty alleviation and the development of sustainable communities/livelihoods.

148. The use of co-management boards assures that some indigenous and local communities, as well as other non-government actors participate in decisions for and benefit from sustainable resource use. Co-management agreements have been established for some communities as part of aboriginal land claim agreements in the territories and in Quebec (e.g. Nunavut Land Claims Agreement). Other, less formal co-management arrangements also exist elsewhere in Canada.

Sustainable use initiatives of local communities are also supported by federal and provincial governments through various funding and policy initiatives. For instance, EcoAction Community Funding Program is a program of Environment Canada that encourages Canadians to take action in their communities in support of healthy environments, with both a public awareness and community funding component. At the provincial level, Saskatchewan has developed a set of guidelines to aid the establishment of co-management agreements.

Industry associations are often invited to represent sectoral interests in national round table discussions on natural resource use. It is also possible for the private sector to organize lobby groups to promote their sustainable use interests.

149. Areas for conservation that would benefit through the sustainable use of biodiversity have been identified, but this information has not yet been communicated to the Executive Secretary.

150. The Government of Canada has been involved in protecting and presenting natural areas and commemorating significant aspects of Canada’s natural heritage for over a century. Parks Canada was established as an Agency in 1998, with a mandate to foster public understanding, use and enjoyment of representative natural areas in ways that ensure their ecological integrity. Together with provincial and territorial governments, Canada maintains a vast network of parks and protected areas with joint priorities for conservation and tourism. However, additional human and financial resources could benefit further development of integrated tourism and conservation activities.

There are also examples of the promotion of best management practices in linking tourism development and conservation. The Canadian Tourism Commission has been involved in sharing best practices, by

commissioning and disseminating studies on best practices in nature-related tourism.

In addition, several recent environmental assessments of the impacts of tourism on protected areas (ex. Report of the Panel on Ecological Integrity of Canada's National Parks, Banff-Bow Valley Study, etc.) have resulted in some legislative changes and the development of strategies to better integrate tourism while enhancing the protection of ecological integrity in areas of biological importance.

151. In January 2001, Canada completed a case study entitled "Integration of Biodiversity and Tourism: Canada Case Study for UNEP's Biodiversity Planing Support Programme". This document provides an overview of the present state of tourism in Canada, as well as the links between tourism development and biodiversity conservation and planning. The document also introduces some proposed strategies and solutions for improving the linkages between biodiversity and tourism in Canada. While completed, this document has not yet been submitted to the Executive Secretary.

152. Canada is the host country for the main event of the International Year of Ecotourism – the World Ecotourism Summit that will be held in Quebec from 19 to 22 May 2002.

156. Canada has a comprehensive system to ensure sustainable development of biological resources which includes tourism considerations. Tourism in federal protected areas is controlled by Parks Canada and Environment Canada. Environmental assessment legislation requires a review of proposed tourism projects prior to implementation. Federal, provincial and municipal land use planning is also useful in controlling ecotourism. Provincial legislation controls outfitters and tourist operators. Municipal legislation is also in place to control potentially harmful activities such as cottage wastes and off-road vehicle activity.

Sustainable Uses of Natural Resources – Sectoral/Regional

5NR Working Group

In 1995, the five federal departments dealing with natural resources – Agriculture and Agri-Food Canada, Environment Canada, Health Canada, Department of Fisheries and Oceans and Natural Resources Canada – banded together to encourage the use of science and technology for sustainable development. The Working Group, known as the 5NR (www.durable.gc.ca), also collaborates with private industry, provincial and municipal governments, foreign agencies and grassroots groups to collect data, test solutions, and share knowledge and information. The collective focus on the member departments includes efforts to protect the long-term health and diversity of all species and the wise management and conservation of renewable resources.

Canada's Ocean Strategy

Canada is currently developing, through the legislative authority of the Oceans Act, a Canadian Oceans Strategy for the sustainable management of Canada's coastal, estuarine and marine ecosystems. This federal framework for action engages all levels of government, local communities, aboriginal peoples and other partners for integrated management of the multiple uses of ocean resources. The strategy will apply the ecosystem approach for protecting the marine environment (including habitat and biodiversity protection) and supporting sustainable economic opportunity.

Canada Forest Accord

In 1998, the Canadian Council of Forest Ministers (CCFM) signed *the Canada Forest Accord*, describing a national vision and commitment to action to maintain and enhance the long-term health of Canadian forest ecosystems. In April 2001, several groups added their signatures to *the Canada Forest Accord*, reaffirming and strengthening the commitment of its signatories, currently totaling 52, to take action toward sustainable forest management nation wide. Individuals and companies are invited to sign the accord and assist in expanding the dialogue and partnerships across Canada.

National Forest Strategy (1998-2003), Sustainable Forests: A Canadian Commitment

This Strategy sets out in broad terms what is needed to achieve the goal of sustainable forest management nationwide and is intended to influence and complement other national initiatives for economic, environmental and social progress. This Strategy identifies priorities that will guide the policies and actions of Canada's forest community. Implementation and evaluation of the Strategy, as well as the Canada Forest Accord, are overseen by the National Forest Strategy Coalition (NFSC). The NFSC reports to the CCFM and represents a wide array of forest interests from governments, industry, the Aboriginal community, academic institutions, conservation and environmental groups, labour, private woodlot associations, professional and technical associations and research organizations.

A mid-term evaluation of the Strategy was published in early 2001.

Biodiversity in Agriculture

The agriculture sector in Canada has long recognized that the conservation and protection of biodiversity in Canada is a key in sustaining the earth’s resources on which the industry depends. Agriculture and Agri-Food Canada (AAFC) has developed an action plan for the sustainable use of biodiversity in the agricultural sector. While this represents a federal framework, it is accompanied by an inventory of federal and sectoral initiatives currently directed towards the goal of biodiversity conservation in agricultural production. See Decision V/5 for more information.

Prairie Conservation Action Plan (PCAP)

The first Prairie Conservation Action Plan (PCAP) was released by the World Wildlife Fund in 1988 in consultation with the governments of Alberta, Manitoba and Saskatchewan. It was a five year "blueprint for action" aimed at prairie-wide efforts to conserve and manage native prairie species. More recently, each of the three prairie provinces has renewed its commitment to PCAP and has prepared its own updated action plan. The Canadian Wildlife Service, along with other government and non-government agencies, has assisted in the development of these plans.

Sustainable Use in the Arctic – the Arctic Council

The Arctic Council (www.arctic-council.org) is an intergovernmental forum that provides a mechanism to address the common concerns and challenges faced by the Arctic governments and the people of the Arctic. As part of the international forum, Canada works in partnership with seven other circumpolar countries and various indigenous Councils and Associations. The main activities of the Council focus on protection of the Arctic environment and sustainable development (including biodiversity resources) as a means of improving the economic, cultural and social well-being of the north.

Sustainable Communities

The Sustainable Communities and Environmental Policy Department of the Federation of Canadian Municipalities (FCM – www.fcm.ca) provides tools, services and support to help Canadian municipalities deliver community services and manage operations in an environmentally responsible and cost-effective manner. This includes policy goals for biodiversity (e.g. conservation of environmentally sensitive areas and municipal support of endangered species legislation). The FCM has also developed tools to help municipalities assess and monitor their sustainability, such as the Sustainable Community Indicators Program.

The FCM produces case studies to document the success of local sustainable development strategies and the sustainable use of municipal resources. For example, the Natural and Open Spaces Study (NOSS) of Ottawa, Ontario, evaluated all remaining open spaces in the city, regardless of ownership, for their environmental and social value. Based on study results, targets for the preservation of natural areas and corridors were set and areas were assigned one of four protection levels. Similar initiatives have been undertaken in other Canadian municipalities.

Some provinces have also coordinated formal arrangements to ensure municipal participation in sustainable use initiatives. For instance, Newfoundland's Municipal Stewardship Program involves municipalities in stewardship agreements with the provincial government.

Sustainable Use in the Private Sector

Biodiversity Management Procedures Guide

Guides such as *Biodiversity Conservation: Creating a Biodiversity Management Procedures Guide for Your Organization,* have been produced in consultation with a variety of government and non-government partners as a business tool to assist organizations to take biodiversity into consideration in their daily decision and policy making.

Canadian Code of Conduct for Responsible Fishing Operations

The Canadian fishing industry has taken the lead in applying the International Code of Conduct for Responsible Fisheries adopted in 1995 by the United Nations Food and Agriculture Organization. The Canadian Code of Conduct for Responsible Fishing Operations was developed as a grassroots initiative by fishermen for fishermen and represents a fundamental change in Canada's approach to achieving sustainable, conservation-based commercial fisheries across the country. The grassroots development of the Code remains unique in the world, with the broad-based involvement of all Canadian fishing organizations being the driving force behind the development process. It is estimated that the Canadian Code of Conduct for Responsible Fishing Operations has now been ratified or endorsed by fisheries fleets and organizations that account for over 80% of Canada's commercial fish harvest. More information on the Code is available at: www.ncr.dfo.ca/communic.fish_man/code/eng/con_eng.htm.

Biodiversity Stewardship and Resource Industries Initiative

Industry and conservation organizations have banded together in the Biodiversity Stewardship and Resource Industries (BSRI) initiative, aimed at promoting conservation and stewardship partnerships between natural resource industries, conservation organizations and Aboriginal and rural communities. The BSRI will promote stewardship by facilitating information sharing among stakeholders about biodiversity and leading practices for the conservation of

wildlife and habitat, partnerships for the conservation of wildlife and habitat relying on volunteerism and trust to produce measurable results, and promotion of global wildlife and habitat conservation through communication of Canadian leading practices worldwide.

Information on the BSRI can be accessed through CBIN at: http://www.cbin.ec.gc.ca/cbin/HTML/en/Networks/Bsri/default.cfm.

Sustainable Use and Industry Associations

Industry associations from across Canada, in all natural resource sectors, have recognized their responsibility for conservation and the sustainable use and management of natural resources. Industry is regularly consulted in government decision making affecting natural resources, and works with government to implement strategies and adopt voluntary frameworks for action. Some notable examples include:

- Canadian Sustainable Forestry Certification Coalition – developing national standards for forest products.
- Forest Products Association of Canada and provincial forestry associations – support initiatives that promote sustainable forestry and certification of forestry products.
- Ontario Federation of Agriculture, Union des producteurs agricoles and other provincial agriculture associations – support initiatives that promote sustainable agriculture.
- Tourism Industry Association of Canada – support initiatives that promote sustainable tourism development.
- Canadian Council of Professional Fish Harvesters and other provincial and regional fisheries organizations – implementation of code of conduct.
- Various sports hunting and fishing organizations – support habitat preservation and species conservation for sustainable hunting and fishing opportunities.

Sustainable Tourism

Survey on the Importance of Nature to Canadians

The Survey on the Importance of Nature to Canadians, which assesses the social and economic value of nature-related activities to Canadians, draws on a nationwide partnership of 16 federal, provincial, and territorial agencies. The survey examines the popularity of nature-related recreational activities, participation in these activities according to the natural areas in which they take place (such as the ecozones of Canada), and the significant benefits to the economy resulting from spending on these activities. Socioeconomic insights based on survey results contribute to the management of Canada's wildlife, water, forests, and protected areas that are essential for the public's enjoyment of nature-related activities. The survey has been conducted approximately every five years since 1981.

Tourism Industry Association of Canada (TIAC)

The Tourism Industry Association of Canada (TIAC – www.tiac.ca) actively supports initiatives for sustainable tourism development in Canada. TIAC supports the mandate of the Parks Canada Agency to maintain ecological integrity, and had representation on the Ecological Integrity Advisory Committee.

Trans Canada Trail

As a major tourism initiative linked to biodiversity conservation, Canada is currently nearing completion of the Trans Canada Trail (TCT – www.tctrail.ca). When completed the TCT will be the longest recreational nature trail in the world. TCT is a recreational trail that winds its way through every province and territory, with a mission of allowing users to connect with nature and with communities across Canada. The TCT Discovery Program, with a series of over 2000 interpretative discovery panels, will allow tourists to learn more about Canada's forests. The TCT is made possible with the support of individual, corporations and all levels of government.

UNESCO World Biosphere Reserves

In Canada, UNESCO World Biosphere Reserves play an active role in integrating nature-based tourism and biodiversity. For example, the Niagara Escarpment Commission, the management body created in support of the Niagara Escarpment UNESCO World Biosphere Reserve, actively promotes sustainable tourism within the region.

Article 11 Incentive measures

156. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

157. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
To maintain or develop incentives and legislation that support the conservation of biodiversity and the sustainable use of biological resources is one of the major goals of the Canadian Biodiversity Strategy.

158. Are programmes in place to identify and ensure the adoption of economically and socially sound measures that act as incentives for the conservation and sustainable use of components of biological diversity?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) programmes in place	X
e) review of implementation available	

159. Do these incentives, and the programmes to identify them and ensure their adoption, cover the full range of sectoral activities?	
a) no	
b) some sectors	X
c) all major sectors	
d) all sectors	

Decision III/18. Incentive measures

160. Has your country reviewed legislation and economic policies to identify and promote incentives for the conservation and sustainable use of components of biological diversity?	
a) no	
b) reviews in progress	
c) some reviews complete	X
d) as far as practically possible	

161. Has your country ensured the development of mechanisms or approaches to ensure adequate incorporation of both market and non-market values of biological diversity into plans, policies and programmes and other relevant areas, *inter alia*, national accounting systems and investment strategies?	
a) no	
b) early stages of identifying mechanisms	X
c) advanced stages of identifying mechanisms	
d) mechanisms in place	
e) review of impact of mechanisms available	
162. Has your country developed training and capacity building programmes to implement incentive measures and promote private-sector initiatives?	
a) no	
b) planned	
c) some	X
d) many	
163. Has your country incorporated biological diversity considerations into impact assessments as a step in the design and implementation of incentive measures?	
a) no	
b) yes	X
164. Has your country shared experience on incentive measures with other Contracting Parties, including making relevant case-studies available to the Secretariat?	
a) no	
b) yes - previous national report	
c) yes – case-studies	X
d) yes - other means (please give details below)	

***Decision IV/10. Measures for implementing the Convention* [part]**

165. Is your country actively designing and implementing incentive measures?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) measures in place	X
e) review of implementation available	
166. Has your country identified threats to biological diversity and underlying causes of biodiversity loss, including the relevant actors, as a stage in designing incentive measures?	
a) no	
b) partially reviewed	X
c) thoroughly reviewed	
d) measures designed based on the reviews	
e) review of implementation available	

167. Do the existing incentive measures take account of economic, social, cultural and ethical valuation of biological diversity?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
168. Has your country developed legal and policy frameworks for the design and implementation of incentive measures?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) frameworks in place	X
e) review of implementation available	
169. Does your country carry out consultative processes to define clear target-oriented incentive measures to address the underlying causes of biodiversity loss?	
a) no	X
b) processes being identified	
c) processes identified but not implemented	
d) processes in place	
170. Has your country identified and considered neutralizing perverse incentives?	
a) no	
b) identification programme under way	
c) identified but not all neutralized	X
d) identified and neutralized	

Decision V/15. Incentive measures

171. Has your country reviewed the incentive measures promoted through the Kyoto Protocol to the UN Framework Convention on Climate Change?	
a) no	
b) yes	X
172. Has your country explored possible ways and means by which these incentive measures can support the objectives of the Convention on Biological Diversity in your country?	
a) no	X
b) under consideration	
c) early stages of development	
d) advanced stages of development	
e) further information available	

Further comments on implementation of this Article

Several incentive measures have been developed by all levels of government and non-government organisations across Canada. Most incentives are directed at habitat conservation rather than species protection, with participation on a voluntary basis. Incentive measures are also often closely tied to stewardship and education programs. The following are just a few examples of existing initiatives.

NRTEE Ecological Fiscal Reform Program

The goal of the National Round Table on the Environment and the Economy (NRTEE – www.nrtee-trnee.gc.ca) Ecological Fiscal Reform Program is to explore how a co-ordinated and deliberate strategy to redirect government taxation and expenditure programs would support the goal of sustainable development in Canada. Designing discrete, practical economic instruments to achieve these goals will be the primary focus of the program. Issues that may be explored include biodiversity loss and protection of ecological landscapes (wetlands and marginal agricultural land). In 1999, recommendations from the NRTEE Greening the Budget Committee to the Minister of Finance included a recommendation for protecting and conserving natural space by reducing capital gains taxation on ecological gifts by 50% and establishing a stewardship fund for habitat conservation.

Ecogifts

Donation by private individual and corporate landowners of ecologically sensitive land (or *milieu écosensible* in Quebec) is emerging as an important tool in conserving sensitive ecosystems and biodiversity across Canada. The February 28, 2000 federal budget announced that two-thirds of the tax on deemed capital gains associated with any ecological gift will be exempt from income and that new measures for certifying the appraisals of such gifts will be implemented. These tax reforms simplified the donation of ecological gifts, and made donation more favourable economically. To date, over 160 gifts have been donated in eight provinces, totalling over $25 million in value.

More information on Ecogifts can be obtained at: www.cws-scf.ec.gc.ca/ecogifts/.

Conservation Agreements

The Nature Conservancy of Canada and many other conservation groups hold conservation agreements with private landowners for millions of acres of land. In most cases, the agreement hands a portion of a willing landowner’s property rights over to a conservation group, giving it a right to restrict development according to the terms of the agreement. If there is a drop in the value of the land as a result of the agreement, the property owner can receive a charitable tax deduction equal to the drop. While land can be sold and used at the owner’s discretion, the agreement continues to be legally binding as long as the conservation group is involved. Examples of organizations involved in these agreements include the Southern Alberta Land Trust Society and the Manitoba Wildlife Federation and the Manitoba Habitat Heritage Corporation.

Provincial and Territorial Incentive Programs

Provinces and Territories offer a wide range of incentive programs to protect land qualifying as important wildlife habitat, often working with agricultural producers and other private land users. Some examples include the Alberta Buck for Wildlife Program, the Manitoba Critical Wildlife Habitat Program, the Saskatchewan Fish and Wildlife Development Fund, and the Nova Scotia Habitat Conservation Fund.

Quebec has recently adopted an *Act Respecting Nature Reserves on Private Land* which will promote landowner contributions to biodiversity conservation.

In Ontario, there are three programs that provide tax incentives for land conservation – the Ontario Conservation Land Tax Incentive Program (CLTIP); the Ontario Managed Forest Tax Incentive Program (MFTIP); and the Ontario Farmland Taxation Policy Program. These programs are designed to promote long-term private stewardship for conservation and management of lands, by providing tax credits or exemptions to eligible participants.

Incentives in Agriculture

Because farmland is usually privately owned, response options usually involve the voluntary participation of landowners. Incentive measures can further the understanding and appreciation of producers for the value of conserving wildlife and wildlife habitat. In response to this, various levels of government and non-government organizations have created incentive programs for agricultural habitat conservation.

One large example is the Ontario Land CARE and Prairie CARE Programs (www.ducks.ca/habitat/pcare.html). CARE means Conservation of Agriculture, Resources and the Environment. In the prairie provinces, this program provides incentives and technical assistance to promote practical farming techniques which benefit wildlife and the landowner in the Prairie provinces. Prairie CARE is a major component of the NAWMP and is delivered by Ducks Unlimited Canada in cooperation with federal, provincial and United States partners. The Ontario program provides financial incentives and technical assistance to help farmers increase agricultural productivity, conserve their soil and water resources and improve the environmental conditions.

The Ontario Environmental Farm Plan Program administered by the Ontario Soil and Crop Improvement Association (OSCIA) encourages farmers in Ontario to identify areas of environmental concern and develop farm plans by providing farmers up to $1500 per farm business to help implement new management practices. The Ontario Land Stewardship Program (provided by the Ontario Ministry of Agriculture, Food and Rural Affairs and OSCIA) offers additional grants for improved environmental farm management.

Article 12 Research and training

173. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

174. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Improved research capacity is identified as a strategic priority under the Canadian Biodiversity Strategy. Research is focussed to improve policy development for the integration of multiple resource-use objectives and to increase our understanding of ecosystems and to manage human use. Federal, provincial and territorial governments recognize that science capacity related to biodiversity research and training must be enhanced. Gaps are particularly acute in areas such as taxonomy, as specialists retire and are not replaced, as well as in emerging issues such as invasive alien species and the ecological impacts of GMO's. There have been recent attempts to bolster science capacity related to recovery of species at risk and protection of ecological integrity of National Parks.

175. Has your country established programmes for scientific and technical education and training in measures for the identification, conservation and sustainable use of biological diversity and its components (12a)?	
a) no	
b) early stages of development	X
c) advanced stages of development	
d) programmes in place	

176. Has your country provided support to other Parties for education and training in measures for the identification, conservation and sustainable use of biological diversity and its components (12a)?	
a) no	
b) yes	X

177. Does your country promote and encourage research which contributes to the conservation and sustainable use of biological diversity (12b)?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

178. Does your country promote and cooperate in the use of scientific advances in biological diversity research in developing methods for conservation and sustainable use of biological resources (12c)?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

If a developed country Party -	
179. Does your country's implementation of the above activities take into account the special needs of developing countries?	
a) no	
b) yes, where relevant	X

Further comments on implementation of this Article

175. Scientific and technical education and training (12(a)) – early stages of discussion with provinces toward creating a national biodiversity science agenda.

176. IDRC has been engaged in education and training to meet needs of developing countries (e.g. protecting traditional crop breeding activities in mountain ecosystems). Also, CIDA helped sponsor the Arenal Project in Costa Rica to develop ecotourism. Yet ODA has been declining in recent years.

177. Research that contributes to sustainable use of natural resources (fisheries, agriculture, forestry) is supported to a significant extent, while more research related to conservation is still required.

178. The Sustainable Forest Management Network provides research support for the development of a total management protocol for Canada's Boreal Forest so it will be sustained in all its physical, biological, ecological and economic dimensions for future generations (sfm-1.biology.ualberta.ca/).

Post Secondary Research and Training Programs

The majority of post secondary institutions in Canada (college and university) offer a variety of environmental training programs. Faculties of engineering, science, arts, social science and agriculture provide biodiversity oriented courses such as biology, environmental science, environmental studies, agricultural science and ecology.

These academic institutions are also actively engaged in biodiversity research in support of their education and training programs.

Article 13 Public education and awareness

180. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

181. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Education is one of the five goals of the Canadian Biodiversity Strategy, and engaging Canadians through stewardship is one of the national priorities being recommended to Ministers for national action over the next 5 years. Responsibility for formal education resides with the provincial governments. Informal or public education is a shared responsibility. Stewardship is the term the federal government uses for voluntary actions that individuals, communities (including Aboriginal communities), industries, and non-profit organizations undertake to help conserve habitat. Stewardship programs can also include public education and outreach. The federal government has stated that stewardship is its preferred approach to conserving habitat for the protection and recovery of species at risk.

182. Does your country promote and encourage understanding of the importance of, and the measures required for, the conservation of biodiversity (13a) through media?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

183. Does your country promote and encourage understanding of the importance of, and the measures required for, the conservation of biodiversity (13a) through the inclusion of this topic in education programmes?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X

184. Does your country cooperate with other States and international organizations in developing relevant educational and public awareness programmes (13b)?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

Decision IV/10. Measures for implementing the Convention [part]

185. Are public education and awareness needs covered in the national strategy and action plan?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X

186. Has your country allocated appropriate resources for the strategic use of education and communication instruments at each phase of policy formulation, implementation and evaluation?	
a) limited resources	
b) significant but not adequate resources	X
c) adequate resources	
187. Does your country support initiatives by major groups that foster stakeholder participation and that integrate biological diversity conservation matters in their practice and education programmes?	
a) no	
b) yes	X
188. Has your country integrated biodiversity concerns into education strategies?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) yes	
189. Has your country made available any case-studies on public education and awareness and public participation, or otherwise sought to share experiences?	
a) no	
b) yes	X
190. Has your country illustrated and translated the provisions of the Convention into any local languages to promote public education and awareness raising of relevant sectors?	
a) not relevant	
b) still to be done	X
c) under development	
d) yes	
191. Is your country supporting local, national, sub-regional and regional education and awareness programmes?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
If a developing country Party or Party with economy in transition -	
192. When requesting assistance through the GEF, has your country proposed projects that promote measures for implementing Article 13 of the Convention?	
a) no	
b) yes	

Decision V/17. Education and public awareness

193. Does your country support capacity-building for education and communication in biological diversity as part of the national biodiversity strategy and action plans?	
a) no	
b) limited support	X
c) yes (please give details)	

Further comments on implementation of this Article

Education

Education and awareness raising is one of the five goals of the Canadian Biodiversity Strategy. In 1998, Canada produced a report entitled "Learning about Biodiversity – A First Look at the Theory and Practice of Biodiversity Education, Awareness and Training in Canada". The report provides practitioners with both an academic perspective on biodiversity education, as well as practical examples of programs developed in Canada.

Canada is currently participating in the Biodiversity Education Experts group that will present its report and recommendations at COP 6. Canada is working on a case study as its contribution to the project.

A National Conference of Educators was held recently to consider the role of education institutions in conservation and the associated information and curricula needs of educators.

Formal education in Canada is the responsibility of the provincial governments. Much work is being done to integrate biodiversity into the curriculum. At the college and university level, a variety of institutions offer training in biodiversity related fields.

Informal education is provided by a number of government and non-government organizations, and through a variety of media. Museums, zoos, botanical gardens, aquariums and environmental education centres have exhibits and programs that support informal biodiversity education and public awareness. Visitors to Canada's parks and protected areas are also exposed to informal biodiversity education through interpretation centres and programs provided by staff.

Stewardship

Federal, provincial and territorial governments are currently collaborating in the development of a Canada-wide stewardship action plan aimed at engaging Canadians in conservation and sustainable use of biodiversity on private lands. A draft of the action plan has been prepared, and is expected to be presented for ministerial approval as early as Fall 2002.

The private sector is also promoting stewardship activity and have formed an organisation called Biodiversity Stewardship in Resource Industries (see comments for Article 10).

Stewardship objectives in Canada are furthered by national conferences and workshops such as "Caring for Our Land and Water", a national stewardship conference held in June 2000.

NGO's such as the World Wildlife Fund (WWF), Canadian Nature Federation (CNF), Canadian Wildlife Federation (CWF), Sierra Club and Wildlife Habitat Canada (WHC) also play a major role in raising public awareness. Volunteer

monitoring and observation networks are also creating opportunities for citizens to get involved in biodiversity science. Ex situ facilities also provide valuable biodiversity science experiences and information to millions of Canadians each year (e.g. Metro Toronto Zoo, Quebec Biodome, etc).

Habitat Stewardship Program for Species at Risk

The Habitat Stewardship Program is a federal program that aims to enhance existing and encourage new conservation activities that foster land and resource use practices that maintain habitat critical to the survival and recovery of identified species at risk. To be proactive and prevent wildlife species from becoming at risk, the program also contributes to habitat needs for species of conservation concern. Specific projects are directed by the federal government, and are developed and funded in partnership with provincial governments and a variety of non-government agencies. In 2000, the federal government announced a substantial amount of new funding for the program - $45 million over five years. More information on the program is available at http://www.speciesatrisk.gc.ca/sar/media/back2_e.htm.

Stewardship Canada Portal

The Stewardship Canada Web Portal and network of integrated provincial "hubs" are in the early stages of development. The portal is designed to provide one screen entry to directories of funders and organizations, resources such as case studies, demonstration projects, and training programs, as well as events and forums. The Stewardship Canada network links established provincial hubs which share common architecture, interactive applications, hardware and some management services. In addition, as partners, organizations can link or transfer their web sites to the network and be hosted on the national portal, or at the provincial hub as part of an expanding business arrangements.

For further information, or to access the fully functioning prototypes of the national portal and Ontario, Saskatchewan and British Columbia stewardship centres, access the site through WetKit at visit http://www.stewardshipcanada.ca/sc_national/main/index.asp

Natural Legacy 2000

Natural Legacy 2000 (www.naturallegacy2000.com) is an ambitious conservation program being delivered by four of Canada’s largest nature conservation organizations: Ducks Unlimited Canada, the Canadian Nature Federation, The Nature Conservancy of Canada, and World Wildlife Fund (Canada). Together, these groups marked the millennium with a number of bold initiatives aimed at motivating Canadians to become active stewards of their local environments.

Natural Legacy 2000 is comprised of five distinct but complementary components – conserving wetlands, protecting bird habitat, conserving ecologically significant private land, saving endangered species, and building a protected area network. These components are in turn comprised of numerous community conservation projects in all regions of Canada.

Article 14 Impact assessment and minimizing adverse impacts

194. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	
195. To what extent are the resources available adequate for meeting the obligations and recommendations made?					
a) Good		b) Adequate	X	c) Limiting	
d) Severely limiting					
Further comments on relative priority and on availability of resources					
The need for an environmental impact assessment in Canada is determined by both federal and provincial law. In all Environment Canada project assessments under the CEAA, the impacts on biodiversity are identified, recorded, and some mitigation measures suggested. However, there is insufficient capacity to undertake comprehensive surveys of baseline conditions, and engage in follow-up activities. Environment Canada also provides scientific expertise (including impacts on biodiversity) to other federal assessments, or sometimes provinces in joint assessments. Project assessments carried out by other federal departments, provincial and territorial governments, and private companies also contribute to the identification and reporting of potential impacts on biodiversity.					

196. Is legislation in place requiring an environmental impact assessment of proposed projects likely to have adverse effects on biological diversity (14 (1a))?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) legislation in place	X
e) review of implementation available	X
197. Do such environmental impact assessment procedures allow for public participation (14(1a))?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
198. Does your country have mechanisms in place to ensure that the environmental consequences of national programmes and policies that are likely to have significant adverse impacts on biological diversity are duly taken into account (14(1b))?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) fully compliant with current scientific knowledge	

199. Is your country involved in bilateral, regional and/or multilateral discussion on activities likely to significantly affect biological diversity outside your country's jurisdiction (14(1c))?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
200. Is your country implementing bilateral, regional and/or multilateral agreements on activities likely to significantly affect biological diversity outside your country's jurisdiction (14(1c))?	
a) no	
b) no, assessment of options in progress	
c) some completed, others in progress	X
b) yes	
201. Has your country mechanisms in place to notify other States of cases of imminent or grave danger or damage to biological diversity originating in your country and potentially affecting those States (14(1d))?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) mechanisms in place	X
e) no need identified	
202. Has your country mechanisms in place to prevent or minimize danger or damage originating in your State to biological diversity in other States or in areas beyond the limits of national jurisdiction (14(1d))?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) fully compliant with current scientific knowledge	X
e) no need identified	
203. Has your country national mechanisms in place for emergency response to activities or events which present a grave and imminent danger to biological diversity (14(1e))?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) mechanisms in place	X
204. Has your country encouraged international cooperation to establish joint contingency plans for emergency responses to activities or events which present a grave and imminent danger to biological diversity (14(1e))?	
a) no	
b) yes	X
c) no need identified	

Decision IV/10. Measures for implementing the Convention **[part]**

205. Has your country exchanged with other Contracting Parties information and experience relating to environmental impact assessment and resulting mitigating measures and incentive schemes?	
a) no	
b) information provided to the Secretariat	
c) information provided to other Parties	X
d) information provided on the national CHM	
206. Has your country exchanged with other Contracting Parties information on measures and agreements on liability and redress applicable to damage to biological diversity?	
a) no	
b) information provided to the Secretariat	X
c) information provided to other Parties	X
d) information provided on the national CHM	

Decision V/18. Impact assessment, liability and redress

207. Has your country integrated environmental impact assessment into programmes on thematic areas and on alien species and tourism?	
a) no	
b) partly integrated	X
c) fully integrated	
208. When carrying out environmental impact assessments does your country address loss of biological diversity and the interrelated socio-economic, cultural and human-health aspects relevant to biological diversity?	
a) no	
b) partly	X
c) fully	
209. When developing new legislative and regulatory frameworks, does your country have in place mechanisms to ensure the consideration of biological diversity concerns from the early stages of the drafting process?	
a) no	
b) in some circumstances	X
c) in all circumstances	
210. Does your country ensure the involvement of all interested and affected stakeholders in a participatory approach to all stages of the assessment process?	
a) no	
b) yes - in certain circumstances	
c) yes - in all cases	X

211. Has your country organised expert meetings, workshops and seminars, and/or training, educational and public awareness programmes and exchange programmes in order to promote the development of local expertise in methodologies, techniques and procedures for impact assessment?	
a) no	
b) some programmes in place	
c) many programmes in place	X
d) integrated approach to building expertise	
212. *Has your country carried out pilot environmental impact assessment projects, in order to promote the development of local expertise in methodologies, techniques and procedures*?	
a) no	X
b) yes (please provide further details)	
213. Does your country use strategic environmental assessments to assess not only the impact of individual projects, but also their cumulative and global effects, and ensure the results are applied in the decision making and planning processes?	
a) no	
b) to a limited extent	
c) to a significant extent	X
214. Does your country require the inclusion of development of alternatives, mitigation measures and consideration of the elaboration of compensation measures in environmental impact assessment?	
a) no	
b) to a limited extent	X
c) to a significant extent	
215. Is national information available on the practices, systems, mechanisms and experiences in the area of strategic environmental assessment and impact assessment?	
a) no	
b) yes (please append or summarise)	X

Further comments on implementation of this Article

197. Canadian Environmental Assessment Act (CEAA) came into force in 1995. It prescribes conditions under which federal departments and agencies must perform environmental assessments.

In 1998, the Commissioner of the Environment and Sustainable Development (CESD) in the Office of the Auditor General of Canada (OAG) conducted an audit of the implementation of environmental assessments under the Canadian Environmental Assessment Act (CEAA) and the processes in place for the implementation of policies and programs in accordance with the Cabinet Directive. A follow-up audit was completed in 2000.

199. A Cabinet Directive issued in 1990 requires a strategic environmental assessment (SEA) of federal policy and program initiatives. This Cabinet Directive was revised in 1999 to strengthen role of SEA by clarifying obligations and linking SEA to sustainable development strategies. The Canadian Environmental Assessment Agency has recently published guidelines on implementing the Directive.

Other guides have also been published to assist project, program and policy developers in determining when an EA is required and how it should be conducted. For example*, A Guide on Biodiversity and Environmental Assessment* (1996) *and Strategic Environmental Assessments at Environment Canada – How to Conduct Environmental Assessments of Policy, Plan and Program Proposals*. Issue-specific guides such as the *Wetlands Environmental Assessment Guideline* and the *Migrating Birds Environmental Assessment Guideline* have been developed to guide impact assessment in specific program and policy areas.

201. National Environmental Emergencies Contingency Plan
Canada – USA Joint Inland Pollution Contingency Plan
joint plans with Canada and US coast guard services
www.ec.gc.ca/ee-ue/pub/pub_e.cfm

202. National Environmental Emergencies Contingency Plan
Canada – USA Joint Inland Pollution Contingency Plan
joint plans with Canada and US coast guard services
www.ec.gc.ca/ee-ue/pub/pub_e.cfm

206. Canada participated in the Workshop on Liability and Redress hosted by the Secretariat in Paris, June 18-20, 2001. Previous to that workshop, Canada submitted a written summary of Canadian legal provisions on liability and redress to the Secretariat.

215. See SEA Manual.zip

Provincial and Territorial Impact Assessment

Several provinces and territories have established legislation or policies that include provisions for environmental impact assessment of projects and programs. Impact assessments of wetlands provide one example. The provinces of Prince Edward Island, Nova Scotia and New Brunswick have environmental legislation that requires an environment impact assessment for both private and public projects affecting wetlands. The province of Ontario’s Natural Heritage Policies prohibit development and site alteration on certain “significant wetlands” and requires demonstration of no negative impacts on other significant wetlands in adjacent areas.

However, provincial legislation is not limited to wetlands. For example, the New Brunswick *Clean Environment Act* includes provisions for environmental

impact assessment for activities that impact any aspect of the environment. Schedule ‘A’ of the regulation provides a list of activities that automatically trigger an EIA. The Act can be viewed at: http://www.gov.nb.ca/justice/acts/acts/c%2D06.htm

Article 15 Access to genetic resources

216. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

217. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources

218. Has your country endeavoured to create conditions to facilitate access to genetic resources for environmentally sound uses by other Contracting Parties (15(2))?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
219. Is there any mutual understanding or agreement in place between different interest groups and the State on access to genetic resources (15(4))?	
a) no	X?
b) yes – limited extent	X?
c) yes – significant extent	
220. Has your country an open participation planning process, or any other process in place, to ensure that access to resources is subject to prior informed consent (15(5))?	
a) no	X
b) early stages of development	
c) advanced stages of development	
d) processes in place	
221. Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Contracting Parties is developed and carried out with the full participation of such Contracting Parties (15(6))?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	

222. Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and the benefits arising from the commercial and other use of genetic resources with any Contracting Party providing such resources (15(7))?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
If so, are these measures	
a) Legislation	
b) Statutory policy or subsidiary legislation	
c) Policy and administrative measures	X

Decision II/11 and Decision III/15. Access to genetic resources

223. Has your country provided the secretariat with information on relevant legislation, administrative and policy measures, participatory processes and research programmes?	
a) no	X
b) yes, within the previous national report	
c) yes, through case-studies	
d) yes, through other means (please give details below)	
224. Has your country implemented capacity-building programmes to promote successful development and implementation of legislative, administrative and policy measures and guidelines on access, including scientific, technical, business, legal and management skills and capacities?	
a) no	
b) some programmes covering some needs	X
c) many programmes covering some needs	
d) programmes cover all perceived needs	
e) no perceived need	
225. Has your country analysed experiences of legislative, administrative and policy measures and guidelines on access, including regional efforts and initiatives, for use in further development and implementation of measures and guidelines?	
a) no	
b) analysis in progress	X
c) analysis completed	
226. Is your country collaborating with all relevant stakeholders to explore, develop and implement guidelines and practices that ensure mutual benefits to providers and users of access measures?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

227. Has your country identified national authorities responsible for granting access to genetic resources?	
a) no	X
b) yes	
228. Is your country taking an active role in negotiations associated with the adaptation of the International Undertaking on Plant Genetic Resources for Food and Agriculture?	
a) no	
b) yes	X

Decision V/26. Access to genetic resources

229. Has your country designated a national focal point and one or more competent national authorities to be responsible for access and benefit-sharing arrangements or to provide information on such arrangements?	
a) no	X
b) yes	
c) yes, and Executive Secretary notified	
230. Do your country's national biodiversity strategy, and legislative, administrative or policy measures on access and benefit-sharing, contribute to conservation and sustainable use objectives?	
a) no	
b) to a limited extent	X
c) to a significant extent	
Parties that are recipients of genetic resources	
231. Has your country adopted administrative or policy measures that are supportive of efforts made by provider countries to ensure that access to their genetic resources is subject to Articles 15, 16 and 19 of the Convention?	
a) no	X
b) other arrangements made	
c) yes	
232. Does your country co-operate with other Parties in order to find practical and equitable solutions supportive of efforts made by provider countries to ensure that access to their genetic resources is subject to Articles 15, 16 and 19 of the Convention, recognizing the complexity of the issue, with particular consideration of the multiplicity of prior informed consent considerations?	
a) no	X
b) yes (please provide details)	

233. In developing its legislation on access, has your country taken into account and allowed for the development of a multilateral system to facilitate access and benefit-sharing in the context of the International Undertaking on Plant Genetic Resources?	
a) no	n/a
b) legislation under development	
c) yes	
234. Is your country co-ordinating its positions in both the Convention on Biological Diversity and the International Undertaking on Plant Genetic Resources?	
a) no	
b) taking steps to do so	
c) yes	X
235. Has your country provided information to the Executive Secretary on user institutions, the market for genetic resources, non-monetary benefits, new and emerging mechanisms for benefit sharing, incentive measures, clarification of definitions, *sui generis* systems and "intermediaries"?	
a) no	X
b) some information provided	
c) substantial information provided	
236. Has your country submitted information on specific issues related to the role of intellectual property rights in the implementation of access and benefit-sharing arrangements to the Executive Secretary?	
a) no	X
b) yes	
237. Has your country provided capacity-building and technology development and transfer for the maintenance and utilization of ex situ collections?	
a) no	
b) yes to a limited extent	X
c) yes to a significant extent	

Further comments on implementation of this Article

Canada is currently doing a detailed study of the domestic law situation. The below information provides a general outline of our general framework.

In Canada, access to genetic resources is governed by existing law, in particular property laws (including intellectual property statutes), laws governing crown land, laws governing access and use of biological resources in national and provincial parks etc., and policies governing access to material kept in ex situ genebank collections. Canada does not have a single piece of national access legislation per se.

Generally, national policy governing access to genetic resources is more developed for ex-situ than in-situ genetic resources. In Canada, the level of national policy development is more advanced for certain sectors such as the agricultural sector than other industrial sectors (e.g. medicines). Although many sectors in the Canadian economy are dependent upon the use of genetic

resources, as defined by the CBD, ranging from textiles and pulpwood/lumber to pharmaceutical/chemical and other manufacturing industries, and even to ornamental horticulture and landscaping, to date there has there has been little debate nationally regarding the need for a national policy governing access to and benefit sharing of genetic resources.

In general, access to in situ genetic resources falls under laws governing land tenure. Approximately, 11 % of land in Canada is privately owned, 48 % is provincial crown land and 41 % is federal crown land. Thus, the majority of crown land in Canada falls under provincial jurisdiction. Access to and use of crown land is regulated under both provincial and federal laws. Thus, the federal, provincial, territorial and local governments are involved in the development of a national policy in this area.

Jurisdiction over natural resources is shared by federal and provincial governments. Many aboriginal communities participate actively in decision-making processes involving issues such as sustainable or customary use and regional development. Aboriginal governments may have jurisdiction over natural resources on the land as set out in a comprehensive claim agreement or self-government agreement.

Several federal departments are responsible for administering crown lands and most have developed policies that may affect the protection of and access to in-situ genetic resources. However, currently there is no comprehensive national policy concerning access to in-situ genetic resources in Canada.

In Canada, the federal and provincial governments, universities and private companies manage ex-situ collections of genetic resources. In the agricultural sector there is a long history in Canada of supporting public agricultural research and open access to our agricultural innovation. Additionally, Canada has a tradition of providing government to government aid related to the agricultural sector, specifically plant and animal breeding. In the past, Canadian plant and animal genetics have been shared widely throughout the world.

The Department of Agriculture and Agri-Food Canada follows the general principles of Article 15 of the Convention on Biological Diversity. Samples of plant genetic resources for food and agriculture are generally available without restriction for purposes of breeding, research and education. Animal genetic resources are available mainly by contract. A fee schedule was implemented for access to the Canadian Collection of Fungal Cultures. Biological specimens are freely exchanged on the basis of reciprocal treatment. The Department promotes national and international consensus on access to genetic resources for food and agriculture.

Access to Genetic Resources in Agriculture

The Department of Agriculture and Agri-Food Canada follows the general principles of Article 15 of the Convention on Biological Diversity. Samples of plant genetic resources for food and agriculture are available without restriction for purposes of breeding, research and education. Animal genetic resources are available mainly by contract. A fee schedule was implemented for access to the Canadian Collection of Fungal Cultures. Biological specimens are freely exchanged on the basis of reciprocal treatment. The Department promotes national and international consensus on access to genetic resources for food and agriculture.

217. The relative importance of genetic resources in the Canadian context of

the CBD is a little obscure. In the agricultural sector there are traditions of supporting free access and viewing the third objective of the CBD, which is largely supported by Article 15 (but by others article, also), as something to be achieved through government to government contact at the aid level, disconnecting the objective of facilitating access to genetic resources from the ethical heard of the CBD's third objective. While this strategy is understandable and I believe appropriate, it also has resulted in, or perhaps better, is part of a larger lack of awareness of "Article 15" issues. Many sectors of Canadian society are dependent upon the use of genetic resources, as defined by the CBD, ranging from textiles and pulpwood/lumber to chemical and other manufacturing industries, and even to ornamental horticulture and landscaping, but there has been little obvious attention paid to the implications of Article 15.

The Canadian Biodiversity Strategy places more emphasis on sustainable use of biological diversity than does the CBD, and pays less attention to "Article 15 issues" of access to genetic resources or the critical third objective of the CBD, the fair and equitable sharing of benefits arising from the use of genetic resources, including by access to those resources. This may be a reflection of the fact that this is a relatively new policy issue for Canada and one that will require more research and consultation to determine specific Canadian interests and approaches.

If "your country" means only the federal government then there is clearly room for further enhancement of understanding of these issues. Looking to other sectors in Canadian society does lead to a little more activity.

There have been very few efforts made to examine the implications of Article 15 in a coherent fashion. The Canadian Institute for Environmental Law and Policy (CIELP) held a workshop on this matter in the fall of 1997, and has produced some overview reports that summarizes Canadian law and policy on access to genetic resources and on sharing of benefits. Lack of Canadian examples of how access to genetic resources issues are being addressed in Canada is a real concern.

Within the Botanical Gardens sector, efforts are underway to address Article 15 and the implications of the CBD as a whole, led in large part by several major institutions that undertake botanical prospecting, especially in the United States and Great Britain. Canada does not have any botanical gardens that are themselves involved in the more obvious genetic resources sectors such as pharmaceutical development, but in recent years at least one - Montreal Botanical Garden - has been approached by pharmaceutical companies looking to obtain large numbers of plant tissue specimens for screening for potential drugs and other products.

219. To a more significant extent with respect to ex-situ resources in the agricultural sector.

221. No, except for the agricultural sector where some processes are in place.

222. Some measures are in place, except in the agricultural sector where comprehensive measures are in place.

223. Some measures are in place, except in the agricultural sector where comprehensive measures are in place.

227. Level of collaboration varies across sectors.

228. No, except national authority established for granting access to federal ex-situ agriculture collections.

230. No national focal point established, however there is a national authority responsible for federal ex-situ agriculture collections.

232. No, except for other arrangements that exist for the agriculture sector.

233. No, except in the agricultural sector.

AAFC INPUT – Notes on Questions

The Secretariat should note that further questions would have elicited more complete explanations of the national approach.

The questionnaire focuses entirely on CoP decision V/26, para.4(c) and "neglects" to ask how or whether Parties "promote flexibility" in their measures for access and benefit-sharing as set out in CoP decision V/26 para.4(b), or to ask about practical and equitable solutions for prior informed consent as in para.4(d). Even para.4(c) notes however that "all countries are providers and recipients of genetic resources.

Comments on the wording used for specific questions follows:

219. Is there any mutual understanding or agreement in place between different interest groups and the State on access to genetic resources (15(4))? This question is not really legitimate – Art.15.4 refers to mutually agreed terms, not mutual "understanding or agreement".

In Canada, access is governed by existing law, in particular property law, laws governing availability of material *in situ* in national or provincial parks etc., and policy including access policy to material kept *ex situ* in genebank collections. It's not because Canada doesn't have laws identified as "access legislation" that access isn't subject to law.

220. Has your country an open participation planning process, or any other process in place, to ensure that access to resources is subject to prior informed consent (15(5))? This is a poor question – Art.15.5 does not require an "open participation planning process" or for that matter any "process" at all. There should also be reference in this question to "unless otherwise determined" by the Party providing access.

221. Has your country taken measures to ensure that any scientific research based on genetic resources provided by other Contracting Parties is developed and carried out with the full participation of such Contracting Parties (15(6))? A poor question – Art.15.6 says "endeavour", not "ensure", it doesn't refer to "any" scientific research, and "full participation" is to be "where possible".

222. Has your country taken measures to ensure the fair and equitable sharing of the results of research and development and the benefits arising from the commercial and other use of genetic resources with any Contracting Party providing such resources (15(7))? A poor question, because only part of Art.15.7 is being referenced.

Note that when Canada was deciding in 1993 whether we should ratify the CBD or not, a legal opinion stated that we were already in conformity with its obligations. It would not be consistent now to state that we were not implementing this provision. Canada consistently pays its quota to GEF, which is the financial mechanism cited in Art.15.7.

227. Has your country identified national authorities responsible for granting access to genetic resources? Another poor question, because it assumes countries are supposed to identify such national authorities. CoP decision III/15 para.6 adds "…and/or competent national authorities to provide information on the granting of access to genetic resources".

233. In developing its legislation on access, has your country taken into account

and allowed for the development of a multilateral system to facilitate access and benefit-sharing in the context of the International Undertaking on Plant Genetic Resources? Another poor question, which assumes that each country is choosing to develop access legislation!

Article 16 Access to and transfer of technology

238. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

239. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
IDRC focuses on strengthening and supporting the development of local solutions for the sustainable use of biodiversity.

240. Has your country taken measures to provide or facilitate access for and transfer to other Contracting Parties of technologies that are relevant to the conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant damage to the environment (16(1))?	
a) no measures	
b) some measures in place	
c) potential measures under review	X
d) comprehensive measures in place	
241. Is your country aware of any initiatives under which relevant technology is transferred to your country on concessional or preferential terms (16(2))?	
a) no	X
b) yes (please give brief details below)	
242. Has your country taken measures so that Contracting Parties which provide genetic resources are provided access to and transfer of technology which make use of those resources, on mutually agreed terms (16(3))?	
a) not relevant	
b) relevant, but no measures	
c) some measures in place	
d) potential measures under review	X
e) comprehensive measures in place	
If so, are these measures	
a) Legislation	
b) Statutory policy or subsidiary legislation	
c) Policy and administrative arrangements	

243.Has your country taken measures so that the private sector facilitates access to joint development and transfer of relevant technology for the benefit of government institutions and the private sector of developing countries (16(4))?	
a) no measures	
b) some measures in place	
c) potential measures under review	X
d) comprehensive measures in place	
If so, are these measures	
a) Legislation?	
b) Statutory policy and subsidiary legislation?	
c) Policy and administrative arrangements?	
244.Does your country have a national system for intellectual property right protection (16(5))?	
a) no	
b) yes	X
245.If yes, does it cover biological resources (for example, plant species) in any way?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X

Decision III/17. Intellectual property rights

246.Has your country conducted and provided to the secretariat case-studies of the impacts of intellectual property rights on the achievement of the Conventions objectives?	
a) no	
b) some	
c) many	X

Further comments on implementation of this Article

245. Canada's national system for intellectual property right protection includes the Canada Patent Act and Plant Breeders' Rights.

246. Canada's national system for intellectual property rights currently covers new plant varieties. Plants and animals per se are not patentable subject matter under Canadian patent law.

247. Through IDRC, the Crucible Group and the Third World Network have done research in this area. IDRC, working in partnership with the Crucible Group, has produced documents such as *Seeding Solutions: Policy Options for Genetic Resources – People, Plants and Patents Revisited.*

Biotechnology Patents

There are more than 2,500 applications every year in Canada for patents related to biotechnology. On average, that's about 100 inventions every working day. Under the Canadian Patent Act, no patents are granted for products existing in nature.

- Canadian law grants patents for scientific inventions in areas such as DNA, RNA, proteins and unicellular life forms and viruses. Patents can also be granted for processes which depend on living matter, such as using a micro-organism to degrade toxic compounds or to control agricultural pests and diseases.
- Current Canadian law does not permit patents for higher life forms, such as plants, seeds and animals.
- To be granted patent protection, an invention must meet three basic criteria:
  - New - not known by anybody;
  - Not obvious to somebody with expertise in the field;
  - Useful – has industrial applicability.
- The patent gives the inventor the exclusive right to exclude others from selling, making or using the patented invention for a maximum of 20 years.
- To encourage scientific and technological research, scientists are allowed to carry out non-commercial experimental work during the patent protection period.

The Crucible Project

The Crucible Group is a multi-national, multi-stakeholder gathering of experts to examine questions of genetic resources control and management (IPR, benefit-sharing, indigenous use, conservation, etc). In its first report, *People, Plants and Patents: The impact of intellectual property on trade, plant biodiversity and rural society* (1994), the Group identified 28 recommendations they felt able to offer collectively to policy- and decision-makers. A second publication, *Seeding Solutions: Policy options for genetic resources – Plants, people and patents revisited* (2000), provided another set of recommendations from a wider variety of Group participants. IDRC has played a critical role in the work of the Group.

Article 17 Exchange of information

247. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

248. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources

The Canadian Biodiversity Strategy makes specific commitments to enhance data and information management in Canada, including commitments to establish Conservation Data Centres (CDC), and commitments to enhance access, distribution, and sharing of data and information that has been generated by publicly funded research.

While more progress is still required, there has been progress in enhancing data and information management across Canada over the past five years. Conservation Data Centres have continued their collection and dissemination of data, and are now working with the Association for Biodiversity Information (ABI) to develop, manage and distribute critical information on biodiversity.

While a national node has yet to be established, Canada is also a signatory to the Global Biodiversity Information Facility (GBIF) which requires member countries to make appropriate investments in biodiversity information infrastructure and promote global access to biodiversity data.

249. Has your country taken measures to facilitate the exchange of information from publicly available sources (17(1))?	
a) no measures	
b) restricted by lack of resources	X
c) some measures in place	X
d) potential measures under review	X
e) comprehensive measures in place	
If a developed country Party -	
250. Do these measures take into account the special needs of developing countries (17(1))?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
251. If so, do these measures include all the categories of information listed in Article 17(2), including technical, scientific and socio-economic research, training and surveying programmes, specialized knowledge, repatriation of information and so on?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

Article 18 Technical and scientific cooperation

252. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium	X	c) Low	

253. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
The Sustainable Use of Biodiversity (SUB) Program at IDRC has a budget of approximately $3 million per year to address these issues as part of the Canadian ODA.

254. Has your country taken measures to promote international technical and scientific cooperation in the field of conservation and sustainable use of biological diversity (18(1))?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
255. Do the measures taken to promote cooperation with other Contracting Parties in the implementation of the Convention pay special attention to the development and strengthening of national capabilities by means of human resources development and institution building (18(2))?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
256. Has your country encouraged and developed methods of cooperation for the development and use of technologies, including indigenous and traditional technologies, in pursuance of the objectives of this Convention (18(4))?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) methods in place	X

257. Does such cooperation include the training of personnel and exchange of experts (18(4))?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X
258. Has your country promoted the establishment of joint research programmes and joint ventures for the development of technologies relevant to the objectives of the Convention (18(5))?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	

Decision II/3, Decision III/4 and Decision IV/2. Clearing House Mechanism

259. Is your country cooperating in the development and operation of the Clearing House Mechanism?	
a) no	
b) yes	X
260. Is your country helping to develop national capabilities through exchanging and disseminating information on experiences and lessons learned in implementing the Convention?	
a) no	
b) yes - limited extent	X
c) yes – significant extent	
261. Has your country designated a national focal point for the Clearing-House Mechanism?	
a) no	
b) yes	X
262. Is your country providing resources for the development and implementation of the Clearing-House Mechanism?	
a) no	
b) yes, at the national level	
c) yes, at national and international levels	X
263. Is your country facilitating and participating in workshops and other expert meetings to further the development of the CHM at international levels?	
a) no	
b) participation only	
c) supporting some meetings and participating	X

264. Is your CHM operational	
a) no	
b) under development	
c) yes (please give details below)	X
265. Is your CHM linked to the Internet	
a) no	
b) yes	X
266. Has your country established a multi-sectoral and multi-disciplinary CHM steering committee or working group at the national level?	
a) no	X
b) yes	X

Decision V/14. Scientific and technical co-operation and the clearinghouse mechanisms (Article 18)

267. Has your country reviewed the priorities identified in Annex I to the decision, and sought to implement them?	
a) not reviewed	
b) reviewed but not implemented	X
c) reviewed and implemented as appropriate	X

Further comments on implementation of these Articles

254. There are several (mainly sector-specific) initiatives in Canada for international technical and scientific cooperation on biodiversity. For example, the North American Forestry Commission is a trilateral organization for which a primary objective is to identify and take advantage of opportunities for increasingly scientific and technical collaboration of a variety of forest biodiversity issues. Similarly, the Great Lakes Fisheries Commission is a partnership between Canada and the US with a major responsibility to develop coordinated programs of research on the Great Lakes and to recommend measures which will permit the maximum sustained productivity of stocks of fish of common concern. Other examples include the Trilateral Forestry Commission and the North Atlantic Fisheries Organization (NAFO).

In 1997, the US and Canadian governments signed the *Framework for Cooperation Between the US and Canada for the Protection and Recovery of Wild Species at Risk.* The goal of the Framework is to protect species shared by Canada and the US. Under the framework, American and Canadian biologists share research, coordinate habitat protection, assist one another with on-the-ground species protection activities, and conduct joint reintroduction efforts.

255. The International Development and Research Centre (IDRC) of Canada is a public corporation created in 1970 to help developing countries find long-term solutions to the social, economic and environmental problems they face. IDRC assists scientists in developing countries to establish solutions to development problems, mobilizing research capacity and

developing links among developing-country researchers, and ensuring that products from the activities it supports are effectively used by communities in the developing world. IDRC has developed a specific research priority for protecting local management and control of biodiversity in light of global initiatives and policies governing genetic resources.

CIDA has set an environmental mandate to help developing countries protect their environment and contribute to addressing global and regional environmental issues.

257. Methods of cooperation are encouraged and developed through research projects funded by IDRC.

258. Canada has promoted the establishment of joint research programmes on biodiversity, for example, through the International Model Forest Network (IMFN). The IMFN came into being in 1992 as an outgrowth of the successful Canadian Model Forest Network, and is designed to strengthen the management of forests on a sustainable basis.

267. Yes, the Biodiversity Convention Office has struck an interdepartmental committee to steer the future and current developments for the Canadian Biodiversity Information Network. The steering Committee has developed a "vision" and guiding principles that assists the committee in developing the information system. The Biodiversity Convention Office is also in the process of developing a wider consultation mechanism/committee that will include non-governmental organizations in order to address the NGO community's needs for biodiversity information

268. Canada has commenced the implementation of Annex 1, Decision CoP IV/14, with a few exceptions. Canada is in the process of inter-linking an array of databases and information holdings that will address the majority of the information needs identified in Annex 1. Canada is also very active in the development of regional biodiversity information networks, mainly the North American Biodiversity Information Network (NABIN) and the Inter-American Biodiversity Information Network (IABIN).

IDRC Sustainable Use of Biodiversity (SUB) Program

The Sustainable Use of Biodiversity program initiative looks at ways to conserve biodiversity by promoting its sustainable use by indigenous and local communities. It emphasizes research approaches that are sensitive to gender issues and inclusive of indigenous knowledge and culture, and seeks ways to inform policies with these approaches. The initiative will support research that concentrates on:

- developing models for intellectual property and traditional resource rights to ensure equitable sharing of the benefits of biodiversity;
- promoting Indigenous and local knowledge of biodiversity and the institutions needed to protect and use this knowledge;
- involving communities in the development and conservation of agricultural and aquatic biodiversity and supporting the development of incentives, methods, and policy options for *in situ* or on-farm conservation; and
- supporting income-generating strategies and incentives for the sustainable use of the products of biodiversity, especially medicinal plants and non-timber forest products.

Examples of projects undertaken to date include assessing the role of uncultivated foods in Bangladesh, conserving traditional agricultural diversity in India, studying the role of indigenous seeds in Africa's food security, and creating ecologically based businesses for the Maya Biosphere Reserve. More information is available on the SUB from IDRC: www.idrc.ca.

Inter-American Institute (IAI) for Global Change Research

The IAI is an intergovernmental organization supported by 18 countries in North and South America, including Canada, dedicated to fostering an increased understanding of global change phenomena and their socio-economic consequences on the Americas. The goal of the IAI is to augment the scientific capacity of the region and to provide information in a useful and timely manner to policy makers. Its primary objective is to encourage research beyond the scope of national programs by advancing comparative and focused studies based on scientific issues important to the region as a whole. One focus for research initiatives of IAI is biodiversity, including the recent development of scenarios of global biodiversity for the year 2100.

5NR Working Group

In 1995, the five federal departments dealing wth natural resources – Agriculture and Agri-Food Canada, Environment Canada, Health Canada, Department of Fisheries and Oceans and Natural Resources Canada – banded together to encourage the use of science and technology for sustainable development. The Working Group, known as the 5NR (www.durable.gc.ca), also collaborates with private industry, provincial and municipal governments, foreign agencies and grassroots groups to collect data, test solutions, and share knowledge and information. The collective focus on the member departments includes efforts to protect the long-term health and diversity of all species and the wise management and conservation of renewable resources.

Clearing House Mechanism

The approach that Canada will take as with many other national focal points, will be to implement decision V/14 in the context of the Strategic Plan for the Clearing-House Mechanism which was adopted at the Fifth Conference of the Parties. Subsequent implementation of the Strategic Plan will result in the implementation of decision V/14.

The Biodiversity Convention Office has held a meeting of the renewed Interdepartmental Steering Committee on the Canadian Biodiversity Information Network (CBIN). The meeting developed the following 'mission' for CBIN and has laid a foundation of guidelines for its continued development.

Mission: Act as a gateway to information sources aimed at enhancing the understanding, conservation and sustainable use of biodiversity in Canada.

Objectives:

- Provide access to information on the implementation of, and activities related to, the United Nations Convention on Biological Diversity.

- Provide access to information on the implementation of, and activities related to, the Canadian Biodiversity Strategy.

- Provide a gateway to biodiversity information held by others, including scientific databases and ecological assessments.

- Provide an opportunity for consultation and dialogue on issues related to the United Nations Convention on Biological Diversity and the Canadian Biodiversity Strategy

- Provide access to a wide range of Canadian institutions, organizations, groups and individuals with an interest or expertise in biodiversity conservation and sustainable use.

Article 19 Handling of biotechnology and distribution of its benefits

268. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High		b) Medium		c) Low	X

269. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
Canada has some resources to implement the use of biotechnology methods for evaluating plant genetic resource collections originating elsewhere. Canada is currently evaluating its own collection to determine the genetic diversity and resolve issues of priority to itself. Current efforts to interact with other Contracting Parties have been limited although collaboration with other Contracting Parties has occurred, ie. through an agreement, PGRC is DNA fingerprinting part of the flax collection of the All Russian Flax Research Institute. PGRC has provided some training to a researcher from Sri Lanka on molecular techniques.

270. Has your country taken measures to provide for the effective participation in biotechnological research activities by those Contracting Parties which provide the genetic resources for such research (19(1))?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	
If so, are these measures:	
a) Legislation	
b) Statutory policy and subsidiary legislation	
c) Policy and administrative measures	X

271. Has your country taken all practicable measures to promote and advance priority access on a fair and equitable basis by Contracting Parties to the results and benefits arising from biotechnologies based upon genetic resources provided by those Contracting Parties (19(2))?	
a) no measures	
b) some measures in place	X
c) potential measures under review	
d) comprehensive measures in place	

Decision IV/3. Issues related to biosafety and Decision V/1. Work Plan of the Intergovernmental Committee for the Cartagena Protocol on Biosafety

272.Is your country a Contracting Party to the Cartagena Protocol on Biosafety?	
a) not a signatory	
b) signed, ratification in progress	X
c) instrument of ratification deposited	

Further comments on implementation of this Article

Canada is currently undertaking an analysis of the regulatory and administrative changes that will be required in order to implement the Biosafety Protocol. A National Focal Point for the Cartagena Protocol has been established.

In June 2001, Canada and France co-hosted a Technical Experts Group on Article 18, paragraphs 2(b) and (c) of the Protocol, held in Paris, France.

Canada contributed financial resources towards the capacity building workshop held in July 2001 in Havana, Cuba.

Canada has participated in the meetings of the Intergovernmental Committee on the Cartanega Protocol on Biosafety held in Montpellier, France (December 2000) and Nairobi, Kenya (October 2001). Consultations were held with stakeholders prior to these meetings to seek views on issues of concern.

Article 20 Financial resources

273. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

274. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources
As a host country to the Secretariat of the Convention on Biological Resources, Canada has placed a relatively high priority on providing financial support to achieve the objectives of the Convention.

275. Has your country provided financial support and incentives in respect of those national activities which are intended to achieve the objectives of the Convention (20(1))?	
a) no	
b) yes – incentives only	
c) yes – financial support only	
d) yes – financial support and incentives	X
If a developed country Party -	
276. Has your country provided new and additional financial resources to enable developing country Parties to meet the agreed incremental costs to them of implementing measures which fulfil the obligations of the Convention, as agreed between you and the interim financial mechanism (20(2))?	
a) no	
b) yes	X
If a developing country Party or Party with economy in transition –	
277. Has your country received new and additional financial resources to enable you to meet the agreed full incremental costs of implementing measures which fulfil the obligations of the Convention (20(2))?	
a) no	
b) yes	

If a developed country Party -	
278. Has your country provided financial resources related to implementation of the Convention through bilateral, regional and other multilateral channels (20(3))?	
If a developing country Party or Party with economy in transition -	
279. Has your country used financial resources related to implementation of the Convention from bilateral, regional and other multilateral channels (20(3))?	
a) no	
b) yes	X

Decision III/6. Additional financial resources

280. Is your country working to ensure that all funding institutions (including bilateral assistance agencies) are striving to make their activities more supportive of the Convention?	
a) no	
b) yes – limited extent	X
c) yes – significant extent	
281. Is your country cooperating in any efforts to develop standardized information on financial support for the objectives of the Convention?	
a) no	
b) yes (please attach information)	X

Decision V/11. Additional financial resources

282. Has your country established a process to monitor financial support to biodiversity?	
a) no	
b) procedures being established	X
c) yes (please provide details)	
283. Are details available of your country’s financial support to national biodiversity activities?	
a) no	
b) not in a standardized format	X
c) yes (please provide details)	
284. Are details available of your country’s financial support to biodiversity activities in other countries?	
a) not applicable	
b) no	
c) not in a standardized format	X
d) yes (please provide details)	

Developed country Parties -	
285. Does your country promote support for the implementation of the objectives of the Convention in the funding policy of its bilateral funding institutions and those of regional and multilateral funding institutions?	
a) no	
b) yes	X
Developing country Parties -	
286. Does your country discuss ways and means to support implementation of the objectives of the Convention in its dialogue with funding institutions?	
a) no	
b) yes	
287. Has your country compiled information on the additional financial support provided by the private sector?	
a) no	
b) yes (please provide details)	
288. Has your country considered tax exemptions in national taxation systems for biodiversity-related donations?	
a) no	
b) not appropriate to national conditions	
c) exemptions under development	
d) exemptions in place	

Further comments on implementation of this Article

277. Additional financial resources provided through the Canadian contribution to the Global Environmental Facility (GEF).

282. Canada participates in the OECD Development Assistance Committee (DAC) statistics committee on methodologies for environmental assessment of trade policies and agreements.

283. Process is being developed for biodiversity in general, but not specifically for the Convention on Biodiversity.

285. Details are available for biodiversity in general, but not specifically for the Convention on Biodiversity.

National Funding Directory

The Biodiversity Convention Office has prepared a document entitled *Conserving Canada's Biodiversity: National Funding Directory.* It lists organizations, companies, and foundations across Canada who provide funding for nature-based conservation projects.

Other such funding directories have also been produced by other departments, governments or organizations across Canada.

Article 21 Financial mechanism

289. What is the relative priority afforded to implementation of this Article and the associated decisions by your country?					
a) High	X	b) Medium		c) Low	

290. To what extent are the resources available adequate for meeting the obligations and recommendations made?							
a) Good		b) Adequate		c) Limiting	X	d) Severely limiting	

Further comments on relative priority and on availability of resources

291. Has your country worked to strengthen existing financial institutions to provide financial resources for the conservation and sustainable use of biological diversity?	
a) no	
b) yes	X

Decision III/7. Guidelines for the review of the effectiveness of the financial mechanism

292. Has your country provided information on experiences gained through activities funded by the financial mechanism?	
a) no activities	X
b) no, although there are activities	
c) yes, within the previous national report	
d) yes, through case-studies	
e) yes, through other means (please give details below)	

Further comments on implementation of this Article

Article 23 Conference of the Parties

293. How many people from your country participated in each of the meetings of the Conference of the Parties?	
a) COP 1 (Nassau)	13
b) COP 2 (Jakarta)	22
c) COP 3 (Buenos Aires)	17
d) COP 4 (Bratislava)	17
e) COP 5 (Nairobi)	24

Decision I/6, Decision II/10, Decision III/24 and Decision IV/17. Finance and budget

294. Has your country paid all of its contributions to the Trust Fund?	
a) no	
b) yes	X

Decision IV/16 (part) Preparation for meetings of the Conference of the Parties

295. Has your country participated in regional meetings focused on discussing implementation of the Convention before any meetings of the Conference of the Parties?	
a) no	X
b) yes (please specify which)	
If a developed country Party – 296. Has your country funded regional and sub-regional meetings to prepare for the COP, and facilitated the participation of developing countries in such meetings?	
a) no	
b) yes (please provide details below)	X

Decision V/22. Budget for the programme of work for the biennium 2001-2002

297. Did your country pay its contribution to the core budget (BY Trust Fund) for 2001 by 1st January 2001?	
a) yes in advance	
b) yes on time	X
c) no but subsequently paid	
d) not yet paid	

298. Has your country made additional voluntary contributions to the trust funds of the Convention?	
a) yes in the 1999-2000 biennium	X
b) yes for the 2001-2002 biennium	X
c) expect to do so for the 2001-2002 biennium	
d) no	

Further comments on implementation of this Article

Article 24 Secretariat

299. Has your country provided direct support to the Secretariat in terms of seconded staff, financial contribution for Secretariat activities, etc?	
a) no	
b) yes	X

Further comments on implementation of this Article

In addition to acting as the host to the Secretariat, Canada has:

- Helped pay for receptionist during start-up phase
- Provided part-time help of an indigenous program officer
- Provided resources in support of clearinghouse mechanism
- Provided resources in support of the Ad hoc technical expert group on forest biological diversity.

Article 25 Subsidiary body on scientific, technical and technological advice

300.How many people from your country participated in each of the meetings of SBSTTA?	
a) SBSTTA I (Paris)	5
b) SBSTTA II (Montreal)	15
c) SBSTTA III (Montreal)	16
d) SBSTTA IV (Montreal)	14
e) SBSTTA V (Montreal)	21

Further comments on implementation of this Article

Article 26 Reports

301.What is the status of your first national report?	
a) Not submitted	
b) Summary report submitted	
c) Interim/draft report submitted	
d) Final report submitted	X
If b), c) or d), was your report submitted:	
by the original deadline of 1.1.98 (Decision III/9)?	
by the extended deadline of 31.12.98 (Decision IV/14)?	X
Later (please specify date)	

Decision IV/14 National reports

302.Did all relevant stakeholders participate in the preparation of this national report, or in the compilation of information used in the report?	
a) no	
b) yes	X
303.Has your country taken steps to ensure that its first and/or second national report(s) is/are available for use by relevant stakeholders?	
a) no	
b) yes	X
If yes, was this by:	
a) informal distribution?	X
b) publishing the report?	X
c) making the report available on request?	X
d) posting the report on the Internet?	X

Decision V/19. National reporting

304.Has your country prepared voluntary detailed thematic reports on one or more of the items for in-depth consideration at an ordinary meeting of the parties, following the guidelines provided?	
a) no	
b) yes – forest ecosystems	X
c) yes – alien species	
d) yes – benefit sharing	

Further comments on implementation of this Article

Given the geography of Canada and the wide range of government and non-government interests associated with the Biodiversity Convention, national reporting is a major challenge. Canada is currently working to build a more efficient and predictable process for reporting that would engage key stakeholders while reducing transaction costs. The Canadian Biodiversity Information Network (CBIN – www.cbin.ec.gc.ca), Canada's node on the clearinghouse mechanism is viewed as being a vehicle for the collection, analysis, synthesis and sharing of information.

The current format for national reporting is not seen to be publicly accessible and may be transformed into a more reader-friendly format.

Canada is also enhancing its capacity to monitor and report on biodiversity status and trends to complement the national reporting.

Decision V/6. Ecosystem approach

305. Is your country applying the ecosystem approach, taking into account the principles and guidance contained in the annex to decision V/6?	
a) no	
b) under consideration	
c) some aspects are being applied	X
d) substantially implemented	
306. Is your country developing practical expressions of the ecosystem approach for national policies and legislation and for implementation activities, with adaptation to local, national, and regional conditions, in particular in the context of activities developed within the thematic areas of the Convention?	
a) no	
b) under consideration	X
c) some aspects are being applied	X
d) substantially implemented	
307. Is your country identifying case studies and implementing pilot projects that demonstrate the ecosystem approach, and using workshops and other mechanisms to enhance awareness and share experience?	
a) no	
b) case-studies identified	X
c) pilot projects underway	X
d) workshops planned/held	X
e) information available through CHM	
308. Is your country strengthening capacities for implementation of the ecosystem approach, and providing technical and financial support for capacity-building to implement the ecosystem approach?	
a) no	
b) yes within the country	
c) yes including support to other Parties	X
309. Has your country promoted regional co-operation in applying the ecosystem approach across national borders?	
a) no	
b) informal co-operation	
c) formal co-operation (please give details)	X

Inland water ecosystems

Decision IV/4. Status and trends of the biological diversity of inland water ecosystems and options for conservation and sustainable use

310. Has your country included information on biological diversity in wetlands when providing information and reports to the CSD, and considered including inland water biological diversity issues at meetings to further the recommendations of the CSD?	
a) no	
b) yes	X
311. Has your country included inland water biological diversity considerations in its work with organizations, institutions and conventions affecting or working with inland water?	
a) no	
b) yes	X
If a developing country Party or Party with economy in transition –	
312. When requesting support for projects relating to inland water ecosystems from the GEF, has your country given priority to identifying important areas for conservation, preparing and implementing integrated watershed, catchment and river basin management plans, and investigating processes contributing to biodiversity loss?	
a) no	
b) yes	
313. Has your country reviewed the programme of work specified in annex 1 to the decision, and identified priorities for national action in implementing the programme?	
a) no	
b) under review	
c) yes	

Decision V/2. Progress report on the implementation of the programme of work on the biological diversity of inland water ecosystems (implementation of decision IV/4)

314. Is your country supporting and/or participating in the River Basin Initiative?	
a) no	X
b) yes	
315. Is your country gathering information on the status of inland water biological diversity?	
a) no	
b) assessments ongoing	X
c) assessments completed	

316.Is this information available to other Parties?	
a) no	
b) yes - national report	
c) yes – through the CHM	
d) yes – other means (please give details below)	X
317.Has your country developed national and/or sectoral plans for the conservation and sustainable use of inland water ecosystems?	
a) no	
b) yes – national plans only	
c) yes – national plans and major sectors	X
d) yes – national plans and all sectors	
318. Has your country implemented capacity-building measures for developing and implementing these plans?	
a) no	
b) yes	X

Decision III/21. Relationship of the Convention with the CSD and biodiversity-related conventions

319.Is the conservation and sustainable use of wetlands, and of migratory species and their habitats, fully incorporated into your national strategies, plans and programmes for conserving biological diversity?	
a) no	
b) yes	X

Further comments on implementation of these decisions and the associated programme of work

Decision V/6 – Ecosystem Approach

Canada recognizes that an ecosystem approach is fundamental to the management of marine and terrestrial ecosystems. Canada has come a long way in establishing the partnerships required for an ecosystem approach – cooperation has been essential in such a vast country where responsibility for the environment is shared by several levels of government. Decisions concerning the environment and the management of land resources are being made on a broader and more inclusive basis than in the past. There has also been a transition over the years to cooperative management as communities and non-governmental organizations become more involved.

However, while progress is being made in implementing an ecosystem approach, we still have a long way to go. Moving further toward an ecosystem approach to resource management will require additional shifts in values and commitment on the part of Canadian society. Progress will need to be built strategically upon the wide range of existing activities and programs to conserve, protect, and restore ecosystems.

In 2000, Canada published a document entitled *Learning from Nature: Canada – The Ecosystem Approach and Integrated Land Management.* This document represents the Canadian contribution to the land use dialogue to the 8th Session of the United Nations Commission on Sustainable Development (2000). The document outlines some of the major Canadian initiatives and successes in implementing the ecosystem approach. Some examples of this are as follows:

Ecosystem Initiatives

The Ecosystem Initiatives (www.ec.gc.ca/ecosyst/infodoc.html) began as a co-operative effort between the United States and Canada to address pollution in the Great Lakes, with a mandate for implementing an ecosystem approach established by the Canada-US Great Lakes Water Quality Agreement. There are now six ecosystem initiatives that have been established by Environment Canada based on the Great Lakes model – the Georgia Basin Ecosystem Initiative, the Northern Rivers Ecosystem Initiative, Great Lakes 2020, St. Lawrence Vision 2000, the Atlantic Coastal Action Program, and the Northern Ecosystem Initiative.

While initiatives vary in scope, scale and participation, there are several common characteristics. They are managed through an ecosystem approach involving the consideration of all components of the ecosystem – land, air, water, and living things. The initiatives also recognize the interrelationships and interdependency of social, economic and environmental issues. Decisions are based on science, combined with local and traditional knowledge. The initiatives reflect partnerships among governments, the private sector, non-government and the local community.

As the Environment Canada Ecosystem Initiatives continue to grow (e.g. recent completion of the Fraser River Action Plan), regional ecosystem-based initiatives that exist outside of the larger projects also continue to evolve. Some examples of regional ecosystem-based initiatives include the Oldman River Basin Water Quality Initiative (Alberta), Partners for the Saskatchewan River Basin (Prairie Provinces), and the Environmental Information Partnership of the Moose River Basin (Ontario).

Parks and Protected Areas

In the case of protected areas, the application of the ecosystem approach has required viewing and managing protected areas as part of the broader ecosystem. For example, the federal government is putting an ecosystem approach into practice by establishing integrated and collaborative management agreements and programs for protected areas that include such activities as monitoring and working with adjacent landowners and land management agencies.

The Yukon Protected Areas Strategy was prepared through extensive public consultation, was endorsed by the governments of Yukon, Canada and First Nations. Similarly, the Northwest Territories Protected Areas Strategy promotes the community-based development of a system of protected areas.

Canada also has eight UNESCO designated Man and the Biosphere reserves, where communities work towards the conservation of ecosystems, sustainable use of natural resources, and research, education, and monitoring related to ecosystems.

Global Efforts

Canada is working with other countries to develop solutions and share best practices so that ecosystems of local and global importance are protected, conserved and rehabilitated through joint actions. Some of these initiatives (e.g. Arctic Council, North Atlantic Fisheries Organization, North American Commission for Environment Cooperation – previously discussed) focus on shared ecosystems.

Ecological Management

Goal 2 of the Canadian Biodiversity Strategy deals with ecological management. Canada is currently developing an ecological management module that will provide guiding principles in this area.

Decision IV/4 – Inland Water Ecosystems

Canada is often called a "water-rich" nation, as we are the stewards of 9 % of the world's renewable fresh water supply. With the diversity of freshwater issues that exist, interests in freshwater are many and varied, and the interplay of jurisdictional responsibilities are very complex, both domestically and internationally. A diverse array of federal, provincial, territorial and municipal authorities and agencies, industrial and commercial interests, the research and academic communities, environmental, health and consumer advocacy groups, Aboriginal communities and their representatives, the recreational and cultural sector, and individual Canadians all have a stake in how our freshwater resources and watersheds are managed. We want to ensure that our efforts are properly directed towards achieving a Canada where freshwater resources and ecosystems are clean, productive and secure for present and future generations.

312. Canada is working across jurisdictions both domestically and internationally to ensure that the goals of the Convention are met for inland waters. Biological diversity considerations have been incorporated into the work of the International Joint Commission (IJC), the organization designated to improve the management of inland waters that are shared between Canada and the US.

Federal, provincial and municipal governments are actively engaged in

partnerships with non-government organizations with a mandate for the conservation of inland water ecosystems and migratory birds, such as Ducks Unlimited Canada.

316. Information on the status of inland water biological diversity is collected by the National Water Research Institute (see below). Monitoring networks are in place as part of the large watershed-based ecosystem initiatives (e.g. Great Lakes 2000, Georgia Basin, St. Lawrence Vision 2000). Information is also collected by various other government, non-government and academic organizations (e.g. Canadian Wildlife Service and Ducks Unlimited Canada for migrating bird species).

317. Information concerning inland water biodiversity is provided to other Parties through national web sites. Environment Canada maintains a web site dedicated to information on Canada's freshwater (http://www.ec.gc.ca/water/index.htm). In addition, information on inland water biodiversity is provided in relation to six watershed-based Ecosystem Initiatives implemented by Environment Canada (see above).

318. Inland water ecosystems are currently managed according to the Canada Water Act, the Fisheries Act, and other federal and provincial legislation. Many provincial governments have recently renewed their freshwater policies and the government of Canada is currently working to update its policy framework for freshwater. The existing Canada Water Policy (1987) includes specific policy statements for fish habitat management, wetlands preservation, heritage river preservation and other inland water issues of importance to biodiversity.

Work is underway to develop an aquatic module that will outline the existing and planned work in the area of aquatic biodiversity.

Policy on wetlands has been developed by the federal government and by several provincial governments, but these have not yet been nationally coordinated. Several provinces have established freshwater strategies that are focussed on sustaining healthy aquatic ecosystems while meeting the demands of society (ex. A Freshwater Strategy for British Columbia (1999)).

320. Sustainable use of biological resources in aquatic areas is one of the strategic directions of the Canadian Biodiversity Strategy. Canada has implemented legislative protection for wetlands and migratory bird species through the Ramsar Convention on Wetlands, the Migratory Birds Convention and the Canada Wildlife Act.

In 1991, Canada began implementing the *Federal Policy on Wetland Conservation.* Key commitments under the policy include "no net loss" of wetland functions on federal lands and waters and rehabilitation of wetlands in areas of continuing degradation through cooperative actions with other governments. Implementation of the seven strategies under the Policy is now facilitated by the *Implementation Guide for Federal Land Managers*. Environment Canada has also developed environmental assessment guidelines for wetlands and migratory birds in order to assist in the implementation of the policy.

Canada has also established a number of protected areas such as National Wildlife Areas, Migratory Birds Sanctuaries and designated wetlands of international importance under the Ramsar Convention to protect wetlands

and migratory bird species.

Federal, provincial and territorial governments, in partnership with organizations such as Ducks Unlimited Canada, actively work towards the conservation and rehabilitation of wetlands and migratory birds. To date, four provinces – Alberta, Saskatchewan, Manitoba, and Ontario- have wetland policies in place. New Brunswick's policy has been developed and is currently seeking approval. Other policy or legislative arrangements have been developed or are being developed in other provinces. Territorial government decisions are guided by the federal policy. In 1999, Environment Canada published an inventory of legal and policy instruments entitled *Wetlands and Government: Policy and Legislation for Wetland Conservation in Canada* available at www.cws-scf.ec.gc.ca

National Water Research Institute

The National Water Research Institute (NWRI - www.cciw.ca/nwri/nwri.html) is Canada's largest freshwater research establishment. NWRI generates scientific knowledge through ecosystem-based research to support the development of sound government policies and programs, public decision-making, and early identification of environmental problems. NWRI works in partnership with Canadian and international science communities.

The Aquatic Ecosystem Impacts Research Branch (AEIRB) of NWRI conducts research to understand and predict the impacts of environmental stressors on the ecology of aquatic ecosystems. In addition, the Branch conducts research to develop innovative modelling approaches to integrated watershed management.

CCME Canadian Water Quality Guidelines

The Canadian Council of Ministers of the Environment (CCME – www.ccme.ca) published the first Canada Water Quality Guidelines in 1987. The guidelines are now used in 45 countries. These guidelines include recommendations for biological parameters necessary to protect and enhance aquatic life. The CCME Water Quality Guidelines Task Force is currently coordinating the development of an integrated compendium of guidelines for all resource uses including the protection of biodiversity.

Institute for Wetland and Waterfowl Research (IWWR)

The Institute for Wetland and Waterfowl Research (IWWR - www.ducks.org/conservation/canada.asp) serves as Ducks Unlimited's respected science and research arm. The IWWR's mission is to help guide the conservation of waterfowl and wetlands by developing and sustaining a premier program of research and by cultivating skilled professionals in wetland and waterfowl conservation biology.

Experimental Lakes Area

The Experimental Lakes Area (ELA - www.umanitoba.ca/institutes/fisheries/) occupies a unique position as a dedicated research facility for ecosystem-scale experimental investigations and long-term monitoring of ecosystem processes. It serves as a natural laboratory for the study of physical, chemical and biological processes and interactions operating on an ecosystem spatial scale and a multi-year time scale. The ELA includes 58 small lakes (1 to 84 ha) and their drainage basins, plus 3 additional stream segments, which have been set aside and are managed through a joint agreement between the Canadian and Ontario governments. Only research activities, or activities compatible with that research, are permitted within or adjacent to these

watersheds. Data records from these watersheds began in 1967 and experimental studies began in 1969. The ELA is operated by the Department of Fisheries and Oceans out of the Freshwater Institute located at the University of Manitoba.

North American Wetlands Conservation Council (Canada)

The North American Wetlands Conservation Council (Canada) advises the Minister of the Environment on the development, coordination and implementation of wetland conservation initiatives of national or international importance, and coordinates and implements the North American Waterfowl Management Plan. The Council led the crafting of "A Wetlands Conservation Vision for Canada" to map out the cooperative work required of governments, non-government organizations and the private sector, and negotiated a Memorandum of Understanding on wetland conservation with the agriculture sector. The Council also spearheaded a project to create Canada's premier internet site of wetland information resources – WetKit (http://www.wetkit.net).

Centre Saint-Laurent (CSL)

Created in 1988, the St. Lawrence Centre (SLC) is the only federal research and development centre devoted entirely to the river ecosystem. SLC experts study the ecosystems of the St. Lawrence River and conduct research programs with the aim of better understanding how these ecosystems function, and maintaining up to date knowledge of the St. Lawrence River (http://www.qc.ec.gc.ca/csl/).

Review of Wetlands Policy

A number of current initiatives are contributing to a review of wetlands policy in Canada. Ducks Unlimited Canada is currently undertaking a review of the impact of provincial laws and policies on wetlands. The National Round Table on the Economy and the Environment (NRTEE), under its review of ecological fiscal reform for sustainable development, will examine economic incentives to help farmers across Canada conserve rather than cultivate ecologically sensitive lands and riparian areas. The Federal Wetlands Forum has identified as a priority an assessment of the effect on wetlands of federal policy and legislation. While a number of studies have examined laws and institutions specific to an area (e.g. Prairies) or issue (e.g. income tax relief), no comprehensive national assessment of the effect of legislation and policy on Canada's wetland resource has been conducted since the early 1980's.

Great Lakes Wetlands Conservation Action Plan (GLWCAP)

The GLWCAP brings together a number of government and non-governmental partners to conserve and rehabilitate the remaining wetlands in the Great Lakes basin. The large task of conserving wetlands in the Great Lakes basin is divided into eight parts or strategies under GLWCAP. Through these eight strategies a wide range of initiatives are being implemented – everything from information gathering and policy reform to the direct acquisition of wetlands.

North American Waterfowl Management Plan

The North American Waterfowl Management Plan is an international action plan to conserve migratory birds throughout the continent. The Plan is a partnership of federal, provincial/state and municipal governments, non-governmental organizations, private companies and many individuals, all working towards achieving better wetland habitat for the benefit of migratory birds, other wetland-dependant species and people. The Plan's unique combination of biology, landscape conservation and partnerships comprise its exemplary conservation legacy. Through the Habitat Joint Venture Programs(Pacific Coast, Prairie, and Eastern), the NAWMP focuses on priority areas for habitat conservation. The North American Waterfowl Management Plan is considered one of the most successful conservation initiatives in the world. Information on the NAWMP is available at: www.ducks.ca/habitat/nawmp.html.

Fish Habitat Conservation and Protection Policy

Under the authority of the Fisheries Act, the Department of Fisheries and Oceans (DFO) has decision making authority for the conservation and protection of fish and fish habitat supporting Canadian fisheries. The long-term policy objective of the Department is to achieve an overall net gain in the productive capacity of fish habitats. A fundamental strategy for achieving this is to prevent further erosion of the productive capacity of existing habitat by applying the No Net Loss Guiding Principle to habitat management decisions related to the review of proposed works and undertaking. Under this guiding principle, DFO works with developers or provincial agencies so that projects are designed in a way that maintains the fish habitat's productive capacity. In cases where this is not possible, unavoidable losses in habitat productive capacity are compensated by habitat replacement or enhancement on a case-by-case basis. This policy applies to both marine and inland water ecosystems.

Marsh Monitoring Program (MMP)

The Marsh Monitoring Program (MMP - www.bsc-eoc.org/mmpmain.html) is a binational, long-term monitoring program that coordinates citizen volunteers across the Great Lakes Basin to help understand, monitor and conserve the region’s wetlands and their amphibian and bird inhabitants.

Riparian Area Management Program (RAMP)

RAMP is a federal-provincial funding initiative designed to improve the management of riparian areas by agricultural producers. It is administered by PFRA under the National Soil and Water Conservation Program (NSWCP). NSWCP also promotes stewardship, awareness and technology development in support of rural water quality.

Freshwater Initiatives

In 1999, the Department of Fisheries and Oceans released a discussion paper entitled *Freshwater Initiative*, which outlines major freshwater issues, describes the department’s freshwater roles and responsibilities, and points to future direction on key issues in keeping with Fisheries and Oceans’ long-term goals, including the management and protection of fisheries resources and the freshwater environment. This discussion paper can be accessed at (http://www.ncr.dfo.ca/regions/CENTRAL/pub/initiative/1pream_e.htm).

Canadian Heritage Designation of Inland Waters

The Canadian Heritage Rivers System (CHRS – www.chrs.ca) was established in 1984 by the federal, provincial and territorial governments to conserve and protect the best examples of Canada's river heritage, to give them national recognition, and to encourage the public to enjoy and appreciate them. It is a cooperative program of the federal, provincial and territorial governments. Today there are more than 38 designated rivers across Canada. The management plans for Canadian Heritage Rivers ensure the conservation of their outstanding natural, cultural, and/or recreational values.

Other initiatives, such as the Ontario Government's recently launched Great Lakes Heritage Coast Project, seek to protect the natural, economic and recreational value of Canada's inland waters. The federal government is also seeking protection of sections of the Great Lakes as national marine conservation areas.

Marine and coastal biological diversity

Decision II/10 and Decision IV/5. Conservation and sustainable use of marine and coastal biological diversity

320. Does your national strategy and action plan promote the conservation and sustainable use of marine and coastal biological diversity?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X
321. Has your country established and/or strengthened institutional, administrative and legislative arrangements for the development of integrated management of marine and coastal ecosystems?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) arrangements in place	X
322. Has your country provided the Executive Secretary with advice and information on future options concerning the conservation and sustainable use of marine and coastal biological diversity?	
a) no	X
b) yes	
323. Has your country undertaken and/or exchanged information on demonstration projects as practical examples of integrated marine and coastal area management?	
a) no	
b) yes – previous national report	
c) yes - case-studies	X
d) yes - other means (please give details below)	
324. Has your country programmes in place to enhance and improve knowledge on the genetic structure of local populations of marine species subjected to stock enhancement and/or sea-ranching activities?	
a) no	
b) programmes are being developed	
c) programmes are being implemented for some species	X
d) programmes are being implemented for many species	
e) not a perceived problem	
325. Has your country reviewed the programme of work specified in an annex to the decision, and identified priorities for national action in implementing the programme?	
a) no	
b) under review	X
c) yes	

Decision V/3. Progress report on the implementation of the programme of work on marine and coastal biological diversity (implementation of decision IV/5)

326. Is your country contributing to the implementation of the work plan on coral bleaching?	
a) no	
b) yes	
c) not relevant	X
327. Is your country implementing other measures in response to coral bleaching?	
a) no	
b) yes (please provide details below)	
c) not relevant	X
328. Has your country submitted case-studies on the coral bleaching phenomenon to the Executive Secretary?	
a) no	
b) yes	
c) not relevant	X

Further comments on implementation of these decisions and the associated programme of work

321. The Department of Fisheries and Oceans is currently developing an integrated management framework under the Oceans Act which provides the tools to support implementation of integrated Management plans by permitting the creation of management or advisory bodies and by enabling the establishment of marine environmental quality guidelines, objectives and criteria.

324. DFO has launched a number of Integrated Management initiatives on all three coasts (e.g. Eastern Scotian Shelf Integrated Management, Beaufort Sea Integrated Management Initiative and the Central Coast of British Columbia).

325. While currently under review, DFO has taken steps to implement ecosystem-based approaches to fisheries management and takes the precautionary approach into account in its decisions. DFO is active in the five program element areas of Decision IV/5:

1. The Oceans Act, administered by DFO, provides for development of an oceans management strategy and integrated management plans. DFO is currently leading pilot integrated management projects in the Beaufort Sea and the Eastern Scotian Shelf.
2. DFO has also secured significant new resources to promote sustainable aquaculture (i.e. mariculture) in Canada. This includes resources for research on the impacts of aquaculture on the environment.
3. Canada’s Oceans Act gives us the ability to establish Marine Protected Areas (MPAs) to conserve and protect unique habitats, endangered or threatened marine species and their habitats, commercial and non-commercial fishery resources (including marine mammals) and their habitats, marine areas of high biodiversity or biological productivity, and any other marine resource or habitat requiring special protection.

DFO is currently investigating establishment of 12 potential MPAs across Canada and the design of a network of marine protected areas.

4. The majority of DFO's research focuses on marine and coastal living resources and their supporting ecosystems.
5. The Department is also active in the area of alien invasive species (working on ballast water issues with Transport Canada) and introductions and transfers of non-indigenous species (developing a policy on introductions and transfers).

Canadian Oceans Strategy

The Canada Oceans Act calls for the federal government to lead and facilitate the development and implementation of a national oceans management strategy. The Canadian Oceans Strategy will help Canada to meet current ocean challenges by:

- moving to an integrated, comprehensive vision for ocean management
- optimizing economic opportunities while considering social and environmental goals, and
- involving Canadians in decision-making affecting Canada's three oceans.

This federal framework for action engages all levels of government, local communities, aboriginal peoples and other partners for integrated management of the multiple uses of ocean resources. The strategy will apply the ecosystem approach for protecting the marine environment (including habitat and biodiversity protection) and supporting sustainable economic opportunity.

Canada's National Program of Action (NPA)

Canada's National Program of Action for the Protection of the Marine Environment from Land-Based Activities (NPA - www.ec.gc.ca/marine/npa-pan.htm) responds to an international call to protect the marine environment through co-ordinated actions at the local, regional, national and global levels. The NPA is a collective federal, provincial and territorial initiative. It is a co-operative and collaborative approach to preventing pollution from land-based sources and protecting habitat in the nearshore and coastal zones.

In November 2001, Canada will host the first Intergovernmental Review Meeting of the Global Programme of Action (GPA) for the Protection of the Marine Environment from Land-based Activities in Montreal, Quebec. At that meeting Canada will table a country report outlining it's current framework for managing the marine environment including an overview of more than 80 regional and community-level initiatives being led by government, non-governmental organizations, and communities that are helping to deliver on Canada's NPA's goals and objectives.

Integrated Coastal Zone Management

Through Canada's Oceans Strategy the Government of Canada is committed to developing and implementing Integrated Management planning initiatives that will establish oceans management structures and processes to manage ocean issues and empower Canadians to participate in the management of the coastal and marine areas.

Integrated management means planning and managing human activities in a comprehensive way so that they do not conflict with one another and in a way that considers all factors necessary for the conservation and sustainable use

of marine resources and shared use of ocean spaces. The Canadian approach to integrated management recognizes that governance structures and practices for resource and activities management cannot be divorced from their ecosystem context: integrated management requires that decisions on ocean and coastal use are made with full consideration of their impacts on ecosystems. Accordingly, the proposed approach to integrated management is based on a geographic framework ranging from small Coastal Management Areas (CMAs) which may be nested with Large Ocean Management Areas (LOMAs).

Although Integrated Management of coastal and marine activities is not a new concept, increased effort is now underway to develop integrated management plans for all of Canada's estuarine, coastal and marine waters in direct support of Canada's Oceans Strategy. These plans are being developed in partnership with the federal government, provinces and territories, Aboriginal peoples, industry, non-governmental organisations and communities.

DFO has a number of integrated management initiatives currently underway across Canada (e.g. Eastern Scotian Shelf, St. Lawrence Upper North Shore, Beaufort Sea). Information on these, and other activities can be viewed at the DFO web site –www.dfo-mpo.gc.ca/canoceans.

National Marine Protected Areas (MPA)

Fisheries and Oceans, Canadian Heritage and Environment Canada all have different but complementary mandates for establishing marine protected areas.

Under the ***Oceans Act***, the Minister of Fisheries and Oceans may establish MPAs to conserve and/or protect various marine resources. These resources include commercial and non-commercial fisheries resources, including marine mammals and their habitats; endangered or threatened species and their habitats; unique marine habitats; areas of high biodiversity or biological productivity; or any other marine resource of habitat as necessary to fulfill the mandate of Fisheries and Oceans Canada. The department's MPA program is guided by a *National Marine Protected Areas Policy(1998)* and a *National Framework for Establishing and Managing Marine Protected Areas* (1999). DFO is currently working on twelve potential MPA sites across Canada. More information on individual sites can be obtained by visiting the Oceans Web Site: Http://www.oceanscanada.com

Environment Canada protects critical wildlife habitats and migratory birds in Canada's marine areas via Migratory Bird Sanctuaries, National Wildlife Areas and Marine Wildlife Areas.

National Marine Conservation Areas are part of the family of protected areas administered by Parks Canada to preserve representative marine areas. In 1998, the governments of Canada and Quebec jointly created the Saguenay-St. Lawrence Marine Park, representing the first MPA in Canada. Since then, the federal government, in cooperation with the governments of British Columbia and Ontario, has established two new marine conservation areas - Gwaii Haanas (B.C.) and Fathom Five (Ontario). A feasibility study is underway for the establishment of a marine protected area on Lake Superior. Finally, a *Marine Protected Areas Strategy* for the Pacific Coast is in preparation as a joint initiative of the federal and B.C governments.

Progress on implementing *Canada's National Marine Conservation Areas System Plan* can be accessed through the Parks Canada web site -

http://www.parkscanada.gc.ca/nmca/nmp_e.htm

Work to date has focussed on identifying the distinctive marine ecosystems found in Canada's waters, developing the planning and legislative tools, developing intergovernmental cooperation mechanisms, and beginning to identify and study specific areas for potential protection.

Under the Oceans Act, the Minister of Fisheries and Oceans is also responsible for developing and coordinating a national system of MPAs with other federal agencies on behalf of the Government of Canada. Currently, the three agencies are working together to design a network of protected areas that help to maintain the integrity of the marine ecosystem.

Canadian Code of Conduct for Responsible Fishing Operations

The Canadian fishing industry has taken the lead in applying the International Code of Conduct for Responsible Fisheries adopted in 1995 by the United Nations Food and Agriculture Organization. The Canadian Code of Conduct for Responsible Fishing Operations was developed as a grassroots initiative by fishermen for fishermen and represents a fundamental change in Canada's approach to achieving sustainable, conservation-based commercial fisheries across the country. The grassroots development of the Code remains unique in the world, with the broad-based involvement of all Canadian fishing organizations being the driving force behind the development process. It is estimated that the Canadian Code of Conduct for Responsible Fishing Operations has now been ratified or endorsed by fisheries fleets and organizations that account for over 80% of Canada's commercial fish harvest.

More information on the Code of Conduct can be accessed at:

www.ncr.dfo.ca/communic/fish_man/code/eng/con_eng.htm.

Information related to marine ecosystems and fisheries is available from the Department of Fisheries and Oceans: www.dfo-mpo.gc.ca.

Agricultural biological diversity

Decision III/11 and Decision IV/6. Conservation and sustainable use of agricultural biological diversity

329. Has your country identified and assessed relevant ongoing activities and existing instruments at the national level?	
a) no	
b) early stages of review and assessment	
c) advanced stages of review and assessment	X
d) assessment completed	
330. Has your country identified issues and priorities that need to be addressed at the national level?	
a) no	
b) in progress	
c) yes	X
331. Is your country using any methods and indicators to monitor the impacts of agricultural development projects, including the intensification and extensification of production systems, on biological diversity?	
a) no	
b) early stages of development	X
c) advanced stages of development	
d) mechanisms in place	
332. Is your country taking steps to share experiences addressing the conservation and sustainable use of agricultural biological diversity?	
a) no	
b) yes – case-studies	
c) yes – other mechanisms (please specify)	X
333. Has your country conducted case-studies on the issues identified by SBSTTA: i) pollinators, ii) soil biota, and iii) integrated landscape management and farming systems?	
a) no	
b) yes – pollinators	X
c) yes – soil biota	X
d) yes – integrated landscape management and farming systems	X
334. Is your country establishing or enhancing mechanisms for increasing public awareness and understanding of the importance of the sustainable use of agrobiodiversity components?	
a) no	
b) early stages of development	
c) advanced stages of development	X
d) mechanisms in place	

335. Does your country have national strategies, programmes and plans which ensure the development and successful implementation of policies and actions that lead to sustainable use of agrobiodiversity components?	
a) no	
b) early stages of development	
c) advanced stages of development	
d) mechanisms in place	X
336. Is your country promoting the transformation of unsustainable agricultural practices into sustainable production practices adapted to local biotic and abiotic conditions?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X
337. Is your country promoting the use of farming practices that not only increase productivity, but also arrest degradation as well as reclaim, rehabilitate, restore and enhance biological diversity?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X
338. Is your country promoting mobilization of farming communities for the development, maintenance and use of their knowledge and practices in the conservation and sustainable use of biological diversity?	
a) no	
b) yes - limited extent	X
c) yes - significant extent	
339. Is your country helping to implement the Global Plan of Action for the Conservation and Sustainable Utilization of Plant Genetic Resources?	
a) no	
b) yes	X
340. Is your country collaborating with other Contracting Parties to identify and promote sustainable agricultural practices and integrated landscape management?	
a) no	
b) yes	X

Decision V/5. Agricultural biological diversity: review of phase I of the programme of work and adoption of a multi-year work programme

341. Has your country reviewed the programme of work annexed to the decision and identified how you can collaborate in its implementation?	
a) no	
b) yes	X

342. Is your country promoting regional and thematic co-operation within this framework of the programme of work on agricultural biological diversity?	
a) no	
b) some co-operation	X
c) widespread co-operation	
d) full co-operation in all areas	
343. Has your country provided financial support for implementation of the programme of work on agricultural biological diversity?	
a) no	
b) limited additional funds	X
c) significant additional funds	
If a developed country Party –	
344. Has your country provided financial support for implementation of the programme of work on agricultural biological diversity, in particular for capacity building and case-studies, in developing countries and countries with economies in transition?	
a) no	
b) yes within existing cooperation programme(s)	X
b) yes, including limited additional funds	
c) yes, with significant additional funds	
345. Has your country supported actions to raise public awareness in support of sustainable farming and food production systems that maintain agricultural biological diversity?	
a) no	
b) yes, to a limited extent	
c) yes, to a significant extent	X
346. Is your country co-ordinating its position in both the Convention on Biological Diversity and the International Undertaking on Plant Genetic Resources?	
a) no	
b) taking steps to do so	
c) yes	X
347. Is your country a Contracting Party to the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade?	
a) not a signatory	
b) signed – ratification in process	X
c) instrument of ratification deposited	
348. Is your country supporting the application of the Executive Secretary for observer status in the Committee on Agriculture of the World Trade Organisation?	
a) no	
b) yes	X

349. Is your country collaborating with other Parties on the conservation and sustainable use of pollinators?	
a) no	
b) yes	X
350. Is your country compiling case-studies and implementing pilot projects relevant to the conservation and sustainable use of pollinators?	
a) no	X
b) yes (please provide details)	
351. Has information on scientific assessments relevant to genetic use restriction technologies been supplied to other Contracting Parties through media such as the Clearing-House Mechanism?	
a) not applicable	X
b) no	
c) yes - national report	
d) yes – through the CHM	
e) yes – other means (please give details below)	
352. Has your country considered how to address generic concerns regarding such technologies as genetic use restriction technologies under international and national approaches to the safe and sustainable use of germplasm?	
a) no	
b) yes – under consideration	X
c) yes – measures under development	
353. Has your country carried out scientific assessments on inter alia ecological, social and economic effects of genetic use restriction technologies?	
a) no	X
b) some assessments	
c) major programme of assessments	
354. Has your country disseminated the results of scientific assessments on inter alia ecological, social and economic effects of genetic use restriction technologies?	
a) no	X
b) yes – through the CHM	
c) yes – other means (please give details below)	
355. Has your country identified the ways and means to address the potential impacts of genetic use restriction technologies on the in situ and ex situ conservation and sustainable use, including food security, of agricultural biological diversity?	
a) no	
b) some measures identified	X
c) potential measures under review	
d) comprehensive review completed	

356. Has your country assessed whether there is a need for effective regulations at the national level with respect to genetic use restriction technologies to ensure the safety of human health, the environment, food security and the conservation and sustainable use of biological diversity?	
a) no	X
b) yes – regulation needed	
c) yes – regulation not needed (please give more details)	
357. Has your country developed and applied such regulations taking into account, inter alia, the specific nature of variety-specific and trait-specific genetic use restriction technologies?	
a) no	X
b) yes – developed but not yet applied	
c) yes – developed and applied	
358. Has information about these regulations been made available to other Contracting Parties?	
a) no	X
b) yes – through the CHM	
c) yes – other means (please give details below)	

Further comments on implementation of these decisions and the associated programme of work

The *Constitution Act of 1867* identifies agriculture as a shared jurisdiction between federal and provincial governments. Given the shared responsibility and greater attention to environmental issues in support of sustainable agriculture, complementary partnerships with the provinces have become increasingly important.

Agriculture and Agri-Food Canada (AAFC) has long recognized the need to conserve biodiversity as a key activity in sustaining the earth's resources, and has initiated and worked with other federal departments, provinces, and producers on a number of programs. AAFC and the agriculture sector in Canada are concerned with and maintain programs for the conservation of all levels of biodiversity – ecosystem, species and genetic.

In 2001, federal, provincial and territorial agriculture Ministers agreed in principle on a national action plan to make Canada a world leader in food security, innovation and environmental protection. Ministers agreed to work towards a comprehensive plan for accelerated environmental action, covering all farms, to achieve meaningful and measurable goals in areas of biodiversity. The action plan will include the development of science and research for improved resource stewardship and innovation in the development of new products. This action plan will build off the success of the *National Environmental Strategy for Agriculture and Agri-Food* developed by Ministers in 1995.

- **PLANT GENE RESOURCES OF CANADA (questions 125-134)**
  Note that Plant Gene Resources of Canada (a component of AAFC's Saskatoon Research Centre) actively collaborates with other countries including the USA, Germany, Russia and MOU's with PRC, Ukraine, S. Korea, Egypt and

others.

- **THE CANADIAN FOOD INSPECTION AGENCY – (questions 351 TO 358)** **Note** that Canada does not have GURT technology. The Canadian Food Inspection Agency has a regulatory framework in place through which plants with novel traits are assessed prior to their release into the environment. Plants using GURT technology would be assessed through this same framework].

330. AAFC is applying a non-legislative environmental assessment process to Departmental policy and program proposals. AAFC conducts environmental assessments of projects under the *Canadian Environmental Assessment Act.*

In 1991, the Department incorporated a provision under the *Farm Income Protection Act* to require periodic environmental assessments of the three major agricultural subsidy programs. The first assessment described the impact of the programs on biodiversity and natural resources.

332. In 1993, the Department initiated the Agri-environmental Indicator (AEI) Project to develop indicators that support the larger policy goal of integrating environmental considerations into decision-making processes at all levels of the agri-food sector. The project aims to develop a core set of regionally-sensitive national indicators that will enhance the information currently available on environmental conditions and trends related to primary agriculture in Canada. An indicator for biodiversity conservation (availability of wildlife habitat) was developed and reported in the 2000 Agri-Environmental Indicators Report. Other indicators (input use efficiency, land management, etc.) monitor agricultural activities with a potential impact on biodiversity.

The Department is also developing a modeling system that integrates economic and environmental variables based on the Canadian Regional Agriculture Model (CRAM) and the Erosion Productivity Impact Calculator (EPIC). This predictive capability will assist in assessing the direct and indirect environmental impacts from policy initiatives. The model currently has the capacity to assess the effects of policy changes on soil erosion in the Prairie region, and to link wind and water soil erosion rates in the Prairies to farm management practices. The overall objective of the initiative is to develop a predictive capability for all key agri-environmental issues, including biodiversity.

333. AAFC, on behalf of Canada, presented a monograph on Sustainable Agriculture/Rural Development (SARD) to the Eighth Session of the UN Commission on Sustainable Development (CSD-8) held in spring of 2000; AAFC provides education and outreach services both domestically as well as internationally (eg. to China, the Ukraine) The principal mechanisms relative to other countries are through bilateral contacts among scientists and planners, and through the FAO, which is the Agenda 21 task manager for SARD. In terms of recent developments, there was the establishment of the PROCINORTE network (US, Canada, Mexico) through IICA.

336. At the federal level, the AAFC Sustainable Development Strategy (2001) includes a strategic objective to improve agricultural biodiversity. This commitment represents AAFC’s second Biodiversity Action Plan. As part of the strategy, AAFC commits to continued collaborative work with the sector, investments in research and development, and engaging in education and awareness initiatives for the enhancement of agricultural biodiversity and

the conservation of natural biodiversity by agriculture.

The National Environment Strategy for Agriculture and Agri-Food, endorsed by all federal, provincial and territorial Ministers for agriculture in 1995, includes two specific goals for agricultural biodiversity – to preserve and ensure access to the genetic resources needed to secure the sustainability of the agriculture sector and to pursue opportunities for the agriculture and agri-food sector to contribute to enhanced biodiversity while continuing to generate wealth from the agricultural land base.

340. The GPA is being implemented domestically. The international dimension requires completion of the revision of the International Undertaking on PGRFA, because the Undertaking will set the terms for global cooperation in this domain.

343. We have partnered with the U.S. and Mexico to establish the North American regional Genetic Resources Task Force in the context of PROCINORTE in IICA. Canada has contributed more than any other country to the thematic agricultural content of the CBD's Clearing House Mechanism.

348. Note that though ratification has not taken place, PMRA indicates that Canada is proceeding as if it has been ratified, nonetheless.

AAFC Biodiversity Action Plan and Companion Documents

In 1997, subsequent to the *Canadian Biodiversity Strategy*, Agriculture and Agri-Food Canada (AAFC) produced its Biodiversity Action Plan. The Action Plan, updated in 2001, sets a framework to guide the Department's implementation of the strategy. Challenges addressed by the Action Plan include sustainable agricultural practices, habitat conversion, wild species at risk, diversity of domesticated species, exotic species, living modified organisms and atmospheric changes.

The Action Plan was accompanied by two companion documents – *Biodiversity Initiatives: Agriculture and Agri-Food Canada* and *Biodiversity Initiatives: Canadian Producers* - that provide an overview of the range of biodiversity conservation initiatives in which the Department and the agricultural sector are involved.

A revised biodiversity action plan was included as part of AAFC's sustainable development strategy for 2001.

Prairie and Land CARE

Under the Prairie CARE (Alberta, Saskatchewan, Manitoba) and Land CARE (Ontario) Programs, landowners have modified agricultural practices to benefit both wildlife and agricultural production objectives. As part of a commitment to the North American Waterfowl Management Plan, the CARE Programs are supported by various levels of government, Ducks Unlimited Canada, and producers. Financial and technical assistance is available to farmers implementing modified agricultural practices on their private lands.

More information on these programs is provided by Ducks Unlimited Canada at: www.ducks.ca/habitat/pcare.html.

PFRA Permanent Cover Program

The purpose of the Permanent Cover Program (Alberta, Saskatchewan, Manitoba and selected parts of British Columbia) is to reduce soil erosion while improving wildlife habitat. The planting of grasses in other forages provides ground cover and habitat for birds. Participating producers are compensated for losses in crop production in the form of lease payments, and are provided with financial assistance for the initial seeding.

PFRA Shelterbelt Program

The Shelterbelt Program aims to improve agriculture on the Prairies by contributing to soil conservation, protection of crops and farmyards, and enhancement of wildlife habitat. The PFRA Shelterbelt Centre in Saskatchewan produces seedlings for distribution to producers.

Environmental Farm Plans

Agricultural producers in various regions of Canada are using Farm Plans to evaluate the environmental performance of their management practices and systems. The implementation of Farm Plans in Canada varies according to province. Ontario's Environmental Farm Plan Program is well established and internationally recognized as a success.

Guidelines for Sustainable Agricultural Production

Numerous non-regulatory publications are available to guide agricultural producers on how to incorporate sustainable agricultural practices into their management plans. For example, Environment Canada has produced *A Landowner's Guide: Conservation of Canadian Prairie Grasslands.* At the provincial level, the Government of Ontario with the Ontario Federation of Agriculture has produced a series of Best Management Practices Guides, including titles for *Farm, Forestry and Habitat Management* and *Wildlife Management.*

Riparian Area Management Program (RAMP)

RAMP is a federal-provincial funding initiative designed to improve the management of riparian areas by agricultural producers. It is administered by PFRA under the National Soil and Water Conservation Program (NSWCP). NSWCP also promotes stewardship, awareness and technology development in support of rural water quality.

Community Pasture Program

PFRA monitors rangeland conditions in the Prairies and develops grazing management plans designed to maintain or restore the native range land to "good condition". PFRA also pursues the restoration of degraded Prairie ecosystems by identifying these areas and implementing proper management or restoration to increase ecological integrity. Lands managed by PFRA are some of the largest and best examples of native ecosystems remaining in Canada. Community pastures are rich in biological diversity and provide habitat for some of the rarest species.

More information on Agriculture and Agri-Food Canada is available at www.agr.ca. More information on the PFRA: www.agr.ca/pfra/pfintroe.htm.

Forest biological diversity

Decision II/9 and Decision IV/7. Forest biological diversity

359. Has your country included expertise on forest biodiversity in its delegations to the Intergovernmental Panel on Forests?	
a) no	
b) yes	X
c) not relevant	
360. Has your country reviewed the programme of work annexed to the decision and identified how you can collaborate in its implementation?	
a) no	
b) under review	
c) yes	X
361. Has your country integrated forest biological diversity considerations in its participation and collaboration with organizations, institutions and conventions affecting or working with forest biological diversity?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X
362. Does your country give high priority to allocation of resources to activities that advance the objectives of the Convention in respect of forest biological diversity?	
a) no	
b) yes	X
For developing country Parties and Parties with economies in transition -	
363. When requesting assistance through the GEF, Is your country proposing projects which promote the implementation of the programme of work?	
a) no	
b) yes	

Decision V/4. Progress report on the implementation of the programme of work for forest biological diversity

364. Do the actions that your country is taking to address the conservation and sustainable use of forest biological diversity conform with the ecosystem approach?	
a) no	
b) yes	X
365. Do the actions that your country is taking to address the conservation and sustainable use of forest biological diversity take into consideration the outcome of the fourth session of the Intergovernmental Forum on Forests?	
a) no	
b) yes	X

366. Will your country contribute to the future work of the UN Forum on Forests?	
a) no	
b) yes	X
367. Has your country provided relevant information on the implementation of this work programme?	
a) no	
b) yes – submission of case-studies	
c) yes – thematic national report submitted	X
d) yes – other means (please give details below)	
368. Has your country integrated national forest programmes into its national biodiversity strategies and action plans applying the ecosystem approach and sustainable forest management?	
a) no	
b) yes – limited extent	
c) yes – significant extent	X
369. Has your country undertaken measures to ensure participation by the forest sector, private sector, indigenous and local communities and non-governmental organisations in the implementation of the programme of work?	
a) no	
b) yes – some stakeholders	
c) yes – all stakeholders	X
370. Has your country taken measures to strengthen national capacities including local capacities, to enhance the effectiveness and functions of forest protected area networks, as well as national and local capacities for implementation of sustainable forest management, including restoration?	
a) no	
b) some programmes covering some needs	
c) many programmes covering some needs	X
d) programmes cover all perceived needs	
e) no perceived need	
371. Has your country taken measures to implement the proposals for action of the Intergovernmental Forum on Forests and the Intergovernmental Panel on Forests on valuation of forest goods and services?	
a) no	
b) under consideration	X
c) measures taken	X

Biological diversity of dry and sub-humid lands

Decision V/23. Consideration of options for conservation and sustainable use of biological diversity in dryland, Mediterranean, arid, semi-arid, grassland and savannah ecosystems

372. Has your country reviewed the programme of work annexed to the decision and identified how you will implement it?	
a) no	
b) under review	X
c) yes	
373. Is your country supporting scientifically, technically and financially, at the national and regional levels, the activities identified in the programme of work?	
a) no	
b) to a limited extent	X
c) to a significant extent	
374. Is your country fostering cooperation for the regional or subregional implementation of the programme among countries sharing similar biomes?	
a) no	
b) to a limited extent	X
c) to a significant extent	

Further comments on implementation of these Decisions and the associated programme of work

359. Canada also contributed to the Intergovernmental Forum on Forests and supports the United Nations Forum on Forests.

365. The final meeting of the IFF dealt with all substantive issues, including biodiversity. Previously, the Intergovernmental Panel on Forests (IPF) also addressed biodiversity, as early as 1995. As noted below, Canada has or is in the process of following through on the entire range of commitments.

367. Canada has submitted a thematic report on forest ecosystems. A mid-term evaluation of the *National Forest Strategy (1998-2003), Sustainable Forests: A Canadian Commitment* was submitted to the first session of the United Nations Forum on Forests in June 2001.

371. To date, Canada's main vehicle for implementing IPF/IFF proposals for action, including those pertaining to valuation of forest goods and services, is through its National Forest Strategy. In the coming months, a more focused approach will be developed with other relevant federal departments, provinces and territories, in consultation with the aboriginal community and domestic stakeholders.

Forest Biological Diversity

Canada remains committed to the conservation and sustainable use of forest biological diversity, as demonstrated by the wide array of programs and policies in place. Indeed, forest biological diversity ranks high in the considerations of all Canadian stakeholders working towards sustainable forest management. The forest biological component of the Canadian

Biodiversity Strategy provides strategic directions in support of the goals and objectives of the Convention on Biological Diversity. These strategic directions are linked to Canada's *National Forest Strategy (1998-2003) – Sustainable Forests: A Canadian Commitment.*

The *National Forest Strategy* guides the Canadian forest community's efforts in sustainable forest management. Individually and collectively, the signatories to the Canada Forest Accord have committed to develop their own public and measurable action plans in response to the Strategy. Both the Strategy and the Accord exemplify the Canadian multi-stakeholder approach, whereby governments, Indigenous communities, academia, non-governmental organizations and industry are involved, hence ensuring broad participation and engagement. Forest biodiversity is addressed in many of the Strategy's commitments, and the action plan stemming from these commitments contribute to delivering on the programme of work adopted by CoP4. Activities carried out under the Strategy are intended to influence and complement other national initiatives for economic, environmental and social progress. Conservation of biological diversity is one of the six main components of our national C&I framework, hence ranking high in Canadian priorities. Furthermore, forest biodiversity is also important in the Montreal Process for C&I, to which Canada is a member country.

The Canadian public owns 94% of the nations forests. The remaining 6% are the property of more than 425 thousand private landowners. On behalf of the public, provincial governments manage nearly 71% of Canada's forests while the federal and territorial governments are stewards of about 23%. They are therefore the driving force behind sustainable management efforts, including biodiversity. In addition, various groups and organizations, often through innovative partnerships, carry out valuable work across the country. Experts in areas related to biodiversity, including traditional forest related knowledge, technology transfer and capacity building, are regularly involved in initiatives at home, as well as within Canadian delegations attending international meetings.

Canada is proud of its efforts regarding the sharing of knowledge and expertise with countries and institutions, collaborative projects in the areas of criteria and indicators, forest fires, remote sensing and information management systems being a few examples. The Canadian approach consists of integrating biodiversity considerations into sustainable forest management activities and policies. Canadian actions in the numerous domestic and international processes, organizations and institutions are planned, developed and implemented with a view to foster holistic, ecosystem-based approaches to advance the objectives of the Convention. In addition, Canada continues to be active and to play a lead role in the international forest policy dialogue, implementing the IPF/IFF proposals for action including those related to forest biodiversity.

Below are a few examples of activities undertaken in Canada in the last four years that support the objectives of the convention and foster the advancement of the programme of work on forest biological diversity.

- Federal, Provincial and Territorial Governments, Aboriginal peoples, industry and the Canadian public have added, over the past eight years, more than 24 million hectares to the networks of parks and protected areas across Canada. Many more protected areas, which will eventually represent all Canadian forest ecosystems, will soon be established.

- The Canadian Pulp and Paper Association (now called the Forest Products Association of Canada – FPAC) expanded its Biodiversity Program and established an "Open Doors" communications program, which helps the members communicate with the public on biodiversity issues.
- In 1998, Wildlife Habitat Canada initiated its Forest Stewardship Recognition Program, developed in partnership with the Canadian Forest Products Association (FPAC) Ontario Ministry of Natural Resources, and the Canadian Forest Service, with the support of numerous national and provincial forestry and conservation organizations. The Program promotes awareness and appreciation of good stewardship, sustainable forest practices and biodiversity conservation in Canada's forests.
- The Tree Canada Foundation has established Green Streets Canada, which allows municipalities to apply for funding urban forestry. This program offers citizens a deeper appreciation of how trees can contribute to a healthier urban environment.
- In 2000, the Canadian Model Forest Network produced *A Users' Guide to Local Level Indicators of Sustainable Forest Management: Experiences from the Canadian Model Forest Network*. The document covers information on the processes, protocols and methodologies developed for identifying, monitoring, reporting and applying local-level indicators.
- The Forest Ecosystem Research Network of Sites (FERNS), established in all Canadian ecozones, in collaboration with the provinces, forest industry and universities, promotes, nationally and internationally, the multi-disciplinary study of innovative sustainable forest management practices and ecosystem processes at the stand level.
- FORCAST, the coalition for advancing science and technology (S&T) in the forest sector, was launched in September 1998. FORCAST includes 31 members representing federal and provincial governments, industry, academia, Aboriginal and conservation groups.
- In 1998 and 1999, the Sustainable Forest Management Network hosted research-based conferences that encouraged forest community networking and informed science-based policies toward adaptive forest management. For example, one workshop brought together students and First Nations' elders to discuss protocols for researching traditional knowledge.
- The National Aboriginal Forestry Association (NAFA) completed five case studies on applying traditional Aboriginal knowledge to forest management in Canada, including its use in Model Forests.
- The Bas-Saint-Laurent Model Forest, in partnership with La Fondation de la Faune du Québec, Wildlife Habitat Canada, Ducks Unlimited Canada, and the North America Waterfowl Management Plan, developed a successful voluntary wetland conservation program for private lands. The project educates woodlot owners on the importance of protecting wetlands, and seeks their voluntary cooperation in wetland conservation.
- The International Development Research Centre (IDRC), a public corporation created by the Canadian government to help communities in the developing world find solutions to social, economic, and environmental problems through research, initiated the Sustainable use of biodiversity (SUB) program. The program’s goal is “to promote the conservation and sustainable use of biodiversity by indigenous and local communities through the application of gender considerations and local and indigenous

knowledge to the development of appropriate technologies, local institutions and policy frameworks".

Specific provincial and territorial actions towards the conservation of forest biological diversity include the Northwest Territories *Forest Policy*, British Columbia *Forest Code of Practices* and *Forest Renewal Plan*, the Alberta *Forest Conservation Strategy*, the Saskatchewan *Long-Term Integrated Forest Resource Management Plan*, the Ontario *Crown Forest Sustainability Act*, and amendments to the Quebec *Forestry Act*.

Decision V/23 – Biological Diversity of Dry and Sub-Humid Lands

373. Canada has its own drylands, used for agriculture (mainly the western prairies) and vulnerable to drought and mismanagement. The main national agency responsible for protecting those drylands, to ensure sustainable rural development, is the Prairie Farm Rehabilitation Administration (PFRA). PFRA has carried out major land and water management programs across the Prairies, and has developed leading-edge expertise in desertification related areas, which it applies both domestically and internationally.

    Canada also has a long history of helping countries and communities combat desertification and related problems through the Official Development Assistance (ODA) Program. Canada has provided support to the Secretariat of the Convention on Desertification (financial, legal, regional consultations, hosting of S&T workshop). Canada also provided financial support to the IUCN Forum Linking Biodiversity and Desertification, held in connection with the COP2, in Dakar, Senegal (1998).

    Through the Canadian International Development Agency (CIDA) and the Department of Foreign Affairs and International Trade (DFAIT), Canada provides funding to several multilateral development institutions which contribute to efforts to combat desertification (e.g. UNDP, GEF, FAO, CGIAR). Canada has also provides technical assistance to developing countries for the development of national actions plans (particularly in West Africa), development of the methodology for indicators of progress, and public awareness campaigns.

    A major part of Canada's response comes from partners outside government – the academic community, the private sector, and non-governmental organizations. A particular role has been played by Solidarité Canada Sahel (SCS), a coalition that coordinates the North American NGOs' interest in the Convention.

374. The Canadian International Development Agency (CIDA) supports the desertification-related efforts carried out by more than a hundred partners – non-government organizations (domestic and international), universities and colleges, companies, municipalities and community groups. The International Development Research Centre (IDRC) assists developing countries in applying science and technology to their environmental and development problems, including desertification. For example, the Desert Margins Initiative, jointly funded by a consortium of donors including IDRC, is an integrated local, national, sub-regional, and international research program for developing sustainable natural resource management options to combat desertification in sub-Saharan Africa.

Decision V/20. Operations of the Convention

375. Does your country take into consideration gender balance, involvement of indigenous people and members of local communities, and the range of relevant disciplines and expertise, when nominating experts for inclusion in the roster?	
a) no	
b) yes	X
376. Has you country actively participated in subregional and regional activities in order to prepare for Convention meetings and enhance implementation of the Convention?	
a) no	
b) to a limited extent	X
c) to a significant extent	
377. Has your country undertaken a review of national programmes and needs related to the implementation of the Convention and, if appropriate, informed the Executive Secretary?	
a) no	X
b) under way	
c) yes	

Please use this box to identify what specific activities your country has carried out as a DIRECT RESULT of becoming a Contracting Party to the Convention, referring back to previous questions as appropriate:

- Creation of the Biodiversity Convention Office at Environment Canada
- Hosting of the Secretariat to the Convention on Biological Diversity
- Canada Country Study – Canada's Biodiversity
- Biodiversity in Canada – A Science Assessment
- Development of the Canadian Biodiversity Strategy
- Development of Federal Implementation Reports
- Creation of the Federal-Provincial-Territorial Working Group on Biodiversity
- Creation of the Canadian Biodiversity Forum
- Creation of the Indigenous Caucus on Article 8(j) of the Convention of Biological Diversity
- Creation of the Biosafety Advisory Group
- Creation of a National Focal Point for the Cartegena Protocol on Biosafety
- Creation of the Biodiversity Stewardship in Resource Industries Group
- Canadian Forest Products Association – Biodiversity Strategy
- International, national, and regional conferences and workshops
- Creation of the Canadian Biodiversity Information Network (CBIN)

Please use this box to identify joint initiatives with other Parties, referring back to previous questions as appropriate:

- North American Biodiversity Strategy (under CEC)
- Economic Valuation of Biodiversity Workshop (Chile)
- Capacity building efforts of the Canadian Museum of Nature to assist parties with development of national strategies.
- Capacity building efforts of Quebec Government, including development of a guide on how to prepare biodiversity strategies and action plans
- Support for capacity building meeting in Havana, Cuba.
- Hosting of International Experts Group on Forests
- Capacity building efforts at the Canadian International Development Agency (CIDA) and the International Development Research Council (IDRC) in support of biodiversity conservation and sustainable use.
- Capacity building efforts of the federal and Quebec governments to enhance the ability of Francophone countries to effectively participate in SBSTTA and COP meetings.

Please use this box to provide any further comments on matters related to national implementation of the Convention:

Canada has many programs and initiatives in place that together address the provisions of the Convention dealing with the first two objectives of the Convention. More effort will be needed to understand the third objective of the Convention from a Canadian perspective and to determine how Canada will approach difficult issues such access and benefit sharing.

Much attention will be focussed in the coming years to enhancing Canada's science and biological information management capacity, including its ability to monitor and report in a more complete and integrated way on biodiversity status and trends. More effort will also be placed on engaging the public and private sector in biodiversity stewardship activity.

The wording of these questions is based on the Articles of the Convention and the decisions of the Conference of the Parties. Please provide information on any difficulties that you have encountered in interpreting the wording of these questions

- Questions sometimes lack specificity and are high level, thereby limiting their relevance to a small circle of federal officials.
- Questions require one to have a "national" perspective, thereby limiting input from non-government stakeholders except by way of reaction or provision of examples.
- Overlap among sections – e.g. sustainable use/ecosystem approach/COP decisions related to marine and coastal, agriculture, forestry, etc.
- Little opportunity to provide examples without creating a document that is overly text-laden.
- Format of the report is not user-friendly for a domestic audience that is not familiar with the provisions of the Convention.
- Difficult to follow additional information provided in response to specific questions – was suggested that text box immediately follow each question.

If your country has completed its national biodiversity strategy and action plan (NBSAP), please give the following information:

Date of completion:		November 30, 1995	
If the NBSAP has been adopted by the Government			
By which authority?		Federal, Provincial and Territorial Governments	
On what date?		April 22, 1996	
If the NBSAP has been published please give			
Title:		Canadian Biodiversity Strategy	
Name and address of publisher:		Minister of Supply and Services Canada	
ISBN:		0-662-23221-6	
Price (if applicable):			
Other information on ordering:			
If the NBSAP has not been published			
Please give full details of how copies can be obtained:		Contact: Biodiversity Convention Office Environment Canada 351 St. Joseph Blvd. Hull, Quebec Canada K1A 0H3	
If the NBSAP has been posted on a national website			
Please give full URL:		http://www.bco.ec.gc.ca/documents/CBS_E.pdf	
If the NBSAP has been lodged with an Implementing Agency of the GEF			
Please indicate which agency:			
Has a copy of the NBSAP been lodged with the Convention Secretariat?			
Yes	X	No	

Please provide similar details if you have completed a Biodiversity Country Study or another report or action plan relevant to the objectives of this Convention

- Country Study: “Canada’s Biodiversity”
- Biodiversity in Canada – A Science Assessment
- Provincial and Territorial Biodiversity Reports, Plans and Strategies
- Federal Implementation Reports (Wildlife, Protected Areas, Agriculture, Forestry, Education)
- Federal Sustainable Development Strategies
- 1996 State of the Environment Report (Biodiversity Chapter)
- Status of Wild Species Report
- Report of the Panel on the Ecological Integrity of Canada’s National Parks

Please provide details of any national body (e.g. national audit office) that has or will review the implementation of the Convention in your country

In 1998, the Commissioner of the Environment and Sustainable Development (CESD) in the Office of the Auditor General (OAG) conducted an audit of Canada’s implementation of the Canadian Biodiversity Strategy. A follow-up to the audit was published in 2000.

CESD also assesses other federal issue areas that are directly and indirectly related to the Convention on Biodiversity (ex. audit of the implementation of federal sustainable development strategies, of which biodiversity can be a large component). Audits conducted by the OAG are focused on federal implementation.

Since 1993, a national perspective on the implementation of the Convention has also been provided on an annual basis by the Sierra Club of Canada in the form of the *Rio Report Card*.

A performance measurement framework that will allow for regular performance reporting by the Biodiversity Convention Office at Environment Canada is currently in development.

REFERENCES

Please note that the following list of references is only a sample, and does not represent a comprehensive list of references used in the preparation of this report. The federal, provincial and territorial governments, as well as a wide variety of non-government agencies have a wealth of biodiversity related material that is not listed here. Other specific references used as a basis for the report are discussed in relevant sections throughout the text.

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