

# Biological Diversity and the Convention

From a Canadian environmental perspective



**THE UNITED NATIONS CONVENTION ON BIOLOGICAL DIVERSITY**

**BACKGROUND DOCUMENT**

March 2008

CANADIAN ENVIRONMENTAL NETWORK

**RCCEN**

## FORWARD

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To all our readers – We offer this document to inform you (NGOs and civil society at large) about the role of the Convention on Biological Diversity (CBD) and how it relates to some of the most important biodiversity issues in Canada. This background is prepared in advance of International Biodiversity Day on May 22 2008 and the ninth meeting of the Conference of the Parties (COP9) of the CBD on May 19-30 in Bonn Germany. We have included a brief history of the CBD and a description of the current implementation cycle leading up to the COP9 meeting. This paper also includes elements of recommendations from the environmental community in Canada.

The Canadian Environmental Network (RCEN), with the support of Environment Canada, has produced this background paper with the assistance of 7 environmental non-governmental organisations across Canada.

If you have questions about specific terminology, we have also provided a Glossary at the back.

For more information about this background document and what you can do to get involved, please visit the links provided at the end of this document or feel free to contact the Canadian Environmental Network at: (613) 728-9810 ext. 229

**We encourage you to distribute copies of this document to everyone in your community.**

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# BIODIVERSITY

## What is biodiversity?

Biological diversity – or biodiversity – is the great variety of life we find on Earth, and the natural patterns it forms. It is the variability among plants, animals and microorganisms and the ecosystems they inhabit, including among others, terrestrial, marine and other aquatic ecosystems. Biodiversity is the diversity within a species, among species, and comparative diversity among ecosystems:

- **Genetic diversity** - *diversity of genes, of a population or individuals, within a same species;*
- **Species diversity** - *diversity between species in an ecosystem;*
- **Ecosystem diversity** - *diversity at higher levels of organization, the variety of ecosystems on Earth*

## Why is biodiversity important?

Biodiversity is essential to maintaining life on earth. Biodiversity is the natural heritage of life, the fruit of billions of years of evolution, shaped by natural processes and, increasingly, by the influence of humans. In each ecosystem, living organisms are part of a whole, interacting with not only other organisms, but also with the air, water, and soil that surround them. This forms the web of life of which we are an integral part and upon which we so fully depend. However, increasingly under threat from overexploitation, habitat loss and degradation, pollution, invasive species, and climate change - its conservation is a prerequisite for sustainable development and, as such, constitutes one of the greatest challenges of our time.

## How is biodiversity important?

Biodiversity includes the environmental services responsible for sustaining life on earth, for the interactions between living beings, and for the supply of the goods and services that support human societies and their economies. These goods and services include food, medicine, clothing, clean water and air, and other natural resources that support a broad range of human activities such as those at the base of the industries we have built - from forestry to mining to pharmaceuticals. Our relationship with, and knowledge of, biodiversity is integral to the development and future of our diverse human cultures.

## Biodiversity and you

We all depend on biodiversity for our survival and well-being, and in our global world it is not just the diversity in our own ecosystems that affects our lives and livelihoods but also the health and wealth of diversity across the planet. As the dominant species in all ecosystems our impact is ever mounting. It is for this reason that working together at all levels - local, regional, national, and international - to preserve biodiversity is necessary. As individuals we can take informed consumer choices and share our knowledge; as local communities we can serve as stewards of our ecosystems; as leaders in business we can bring the concepts of sustainable development into our economies; and as citizens working together in a democracy we can take important leadership roles, through policy development and program implementation, in the conservation of biodiversity. Whether through backyard composting, protecting local watersheds, growing native plants or bringing local varieties to your dinner plate, all of us can lighten our ecological footprint and promote biological diversity.

# THE UNITED NATIONS CONVENTION ON BIOLOGICAL DIVERSITY

## What is it?

The United Nations Convention on Biological Diversity (CBD) is one of the most broadly subscribed international environmental treaties in the world. It is a multilateral environmental agreement that was adopted in June 1992 in Rio de Janeiro, Brazil during the United Nations Conference on Environment and Development, also known as the Earth Summit. This was the largest gathering of world leaders in history and its purpose was to reconcile worldwide economic development with environmental protection. From the Earth Summit, five international agreements followed: *Rio Declaration on Environment and Development*, *Agenda 21*, *Forest Principles*, *the Framework Convention on Climate Change* and the *Convention on Biological Diversity*.

## What is its purpose?

A central purpose of the CBD is to promote sustainable development. While keeping its principles consistent with other “Rio Agreements”, the Convention has three main goals:

1. Conservation of biological diversity (or biodiversity);
2. Sustainable use of the components of biodiversity; and
3. Sharing the benefits, arising from the commercial and other utilization, of genetic resources in a fair and equitable way.

## Ratification

More than 168 countries signed on to the CBD as a result of the Rio Conference. As of March 2008, 190 countries, including Canada, have ratified the agreement, making the CBD a legally binding treaty. In ratifying the Convention, the “**Parties**” (all the national governments that have ratified the CBD) have committed themselves to implementing the Convention’s three main objectives.

## CBD Institutions & Mechanisms

The institutional structures set up inside the CBD are used to translate its general commitments into specific binding norms or guidelines and to assist Parties with implementation. The following are some of the main mechanisms through which the Convention achieves its goals:

### What’s a COP? What’s a MOP?

The COP is the Conference of Parties which is the two-week gathering of all “Parties” to the Convention on Biological Diversity, while the MOP is the Meeting of Parties to the Cartagena Protocol on Biosafety.

**Conference of the Parties (COP)** – is the governing body of the Convention and is attended by all those countries (Parties) that have ratified the Convention. The COP meets every two years to reach consensus on major decisions that will assist the implementation of the Convention;

**Subsidiary Body on Scientific, Technical and Technological Advice (SBSTTA)** – is constituted by representatives from all Parties which meet and advise the Conference of the Parties on scientific and technical issues to help with decision-making;

**CBD Secretariat** – is a neutral organization, based in Montreal and staffed by international civil servants, that prepares for and services the meetings of the COP and other subsidiary bodies of the Convention;

**Ad-Hoc Committees and Working Groups** – are temporary bodies called on by the COP to study specific issues or focus on the implementation of specific provisions between COP meetings;

**Clearing House Mechanism** - is an internet-based network that promotes technical and scientific cooperation and the exchange of information between Parties;

**Financial Mechanism** issues specific guidance for funding of projects in developing countries with the

### **“Thematic Programmes” of the CBD:**

The Conference of the Parties has established seven thematic programs of work;  
Each establishes a vision for, and basic principles to guide, future work:

1. Agricultural Biodiversity
2. Dry and Sub-humid Lands Biodiversity
3. Forest Biodiversity
4. Inland Waters Biodiversity
5. Island Biodiversity
6. Marine and Coastal Biodiversity
7. Mountain Biodiversity

### **“Cross-Cutting Issues”:**

The cross-cutting issues provide bridges and links between the thematic programmes.  
Some directly work under and support a thematic program while others stand as separate initiatives.

- 2010 Biodiversity Target
- Access to Genetic Resources and Benefit-sharing
- Climate Change and Biodiversity
- Communication, Education and Public Awareness
- Economics, Trade and Incentive Measures
- Ecosystem Approach
- Global Strategy for Plant Conservation
- Global Taxonomy Initiative
- Impact Assessment
- Identification, Monitoring, Indicators and Assessments
- Invasive Alien Species
- Liability and Redress - Art. 14(2)
- Protected Areas
- Sustainable Use of Biodiversity
- Tourism and Biodiversity
- Traditional Knowledge, Innovations and Practices - Art. 8(j)
- Technology Transfer and Cooperation

purpose of implementing the provisions of the Convention.

## **The Cartagena Protocol on Biosafety**

Just as the UN Framework Convention on Climate Change led to the creation of the Kyoto protocol to specifically address global warming by reducing greenhouse gas emissions, the CBD is complemented by the Cartagena Protocol on Biosafety which specifically addresses the potential risks posed to biodiversity by living modified organisms (LMOs) resulting from modern biotechnology. The term Living Modified Organism was created through the Protocol negotiations and is a compromise in the international controversy over genetically engineered/modified organisms. The Protocol establishes rules and procedures for the safe transboundary movement, transit, handling and use of LMOs. Adopted in January 2000 in Montreal, the Protocol entered into force in September 2003, signed on by 103 countries. Today, 143 countries have ratified the Cartagena Protocol, though Canada is not yet one of them.

## **CBD Achievements**

One of the CBD's great achievements is increased global awareness about the importance of biodiversity and the increased role of national governments across the world in protecting biodiversity. Each year the prominence of the CBD grows internationally, particularly as protecting biodiversity becomes more critical to the survival of our economies and cultures. With a call to action on sustainable development, the Convention was the first to define biodiversity in the context of social, economic, and other environmental issues. The CBD was also the first international legal instrument to recognize the importance of traditional knowledge, thereby providing space for Indigenous peoples and local communities to participate in and influence the CBD process. Through its many decisions, the Convention has also developed a multitude of principles, guidelines, reports and data exchange mechanisms which continue to help all Parties strive

to reach CBD goals - these include the Cartagena Protocol on Biosafety, the 2010 Biodiversity Target as well as the Global Strategy for Plant Conservation and the Programme of Work on Protected Areas.

## CANADA'S PARTICIPATION IN THE CBD

The Convention on Biological Diversity, as an international treaty, identifies common problems, sets overall goals, policies and general obligations, and organizes technical and financial cooperation. However, the responsibility for achieving its goals rests largely with the countries or "Parties" themselves.

### Canada's response to the Convention

<b>June 1992</b>	Canada signs the Convention at the Earth Summit
<b>Dec. 1992</b>	Canada is the first industrialized country to ratify the Convention
<b>June 1994</b>	Draft Canadian Biodiversity Strategy released for consultation
<b>1995</b>	Canadian Biodiversity Strategy Implementation Phase released
<b>April 2001</b>	Canada signs the Cartagena Protocol on Biosafety

Canada is a Party to the CBD; however we are a Non-Party to the Biosafety Protocol as Canada has yet to ratify it.

Canada has hosted many CBD meetings over the years and, significantly, **Canada is actually home to the Secretariat of the Convention on Biological Diversity, based in Montreal, Quebec.**

### Canada's National Strategy and Action Plan

To determine the national measures required to meet our obligations under the Convention, the federal, provincial and territorial governments jointly developed the Canadian Biodiversity Strategy. Although the Canadian Biodiversity Strategy itself covers a much wider range of issues, the following four points were identified (agreed in 2001) as priorities for joint work:

- Addressing the Threat of Invasive Alien Species
- Monitoring and Reporting on Biodiversity Status and Trends
- Building a Foundation of Biodiversity Science and Information
- Engaging Canadians in Biodiversity Stewardship

#### Signing vs. Ratifying?

Canada **signed** the Biosafety Protocol indicating general support for its objectives and provisions, as well as an intention to become a Party. However, in order to become a Party, Parliament needs to take the decision to **ratify** the Protocol and thereby commit to compliance with its obligations and legally

**Our Biodiversity Convention Office:** The Biodiversity Convention Office (BCO) within Environment Canada serves as Canada's National Focal Point for the CBD and is home to the Canadian Biodiversity Strategy. In coordination with other government departments, the BCO plays a central role in coordinating, catalyzing and facilitating policy development.

**Canadian Biodiversity Information Network:** The Canadian Biodiversity Information Network was developed in 1996 under Environment Canada. Its role is to deliver information on the Canadian Biodiversity Strategy and to serve as Canada's national node to the global CBD Clearing House Mechanism.

### Transparency and Public Participation

Canada is one of only two countries in the world to incorporate non-governmental organizations (NGOs) in government delegations to CBD meetings. The input of NGOs, along with that of Indigenous peoples organizations and provincial governments, is unique and valuable to the Canadian delegation and shows Canada to be a leader in engaging civil society in the area of biodiversity conservation.

## **CONSULTATION WITH CANADIANS**

### **The Participation of Non-Governmental Organizations (NGOs)**

In the CBD, non-governmental organizations (NGOs) are not-for-profit groups or associations, whether local or international, acting outside political institutions. NGOs can include international and national environmental or social justice organizations and together they often are seen to represent civil society. NGOs are granted accreditation to CBD meetings so that they may attend negotiations and have an opportunity to make statements.

NGOs also often work with other groups that are highly active in the CBD process such as Indigenous peoples organizations (which have organized into an Indigenous Caucus at the CBD). Other groups including research and academic institutions, religious bodies, industry associations and other UN agencies are also engaged and present at meetings. Canadian environmental NGOs also have a history of working in cooperation with Environment Canada in order to better share information and build the capacity for Canadian groups to understand the process and prepare to participate more effectively in the CBD.

### **The Role of NGOs**

The NGO community plays an important role as an extended voice for civil society by bringing concerns and perspectives to the attention of Canadian government delegations to CBD meetings. NGOs played a leading role in the initial conception, negotiation and adoption of the Convention on Biological Diversity at the Earth Summit in 1992. NGOs continue to help shape policy development by being active participants at CBD meetings. Their role, and that of Indigenous peoples and local communities, is highly valued by the CBD especially because, while the primary responsibility for carrying out the CBD lies with national governments, NGOs, Indigenous peoples and local communities are also key to the implementation of the Convention and have a unique and important role in education and global awareness raising.

### **Democracy at work in CBD Negotiations**

It is Parties to the Convention that negotiate text and reach decisions at CBD meetings, via delegations of government representatives, but NGOs, Indigenous peoples and local communities are also involved and can participate, sometimes in direct cooperation with their governments. For example, in a model to be emulated by other governments, Canada and Denmark have included NGO representatives into their official delegations. Official Canadian delegations to the CBD can also include representatives from provincial governments and Indigenous peoples organizations. The inclusion of NGOs in official delegations can provide government representatives with specific expertise from environmental groups ensure a level of transparency in the process and encourage the consideration of issues of concern to groups working on these issues on the ground.

## HOW THE CBD WORKS TO PROTECT BIODIVERSITY

### Forest biodiversity

**Description:** The CBD defines forest biological diversity as encompassing not just trees but the multitude of plants, animals and micro-organisms that inhabit forest areas as well as their associated genetic diversity. The CBD addresses forests directly through the expanded programme of work on forest biological diversity. In order to implement this work programme, the COP urges donors and the international community to contribute through financing and technology transfer to nationally or regionally identified priorities such as provincial and territorial conservation and sustainable development strategies, wildlife and wetland policies, forest management plans and protected area strategies. These all reflect the efforts of various levels of government to protect forest biodiversity. In Canada, such efforts include the Canada Forest Accord, Wildlife Policy for Canada, RENEW strategy, and the Federal Policy on Wetland Conservation.

**How does it concern Canada?** Canada possesses 10% of the world's forests, about 35% of the world's boreal forests, and 20% of the global temperate rainforest. This wealth confers on Canada a global responsibility for conserving forest biodiversity. Over one-quarter of Canada's forest area is subject to variable levels of forest management, such as clear cutting that results in the destruction of old-growth forests. Roughly 40% of the world's entire forest area has been lost during the industrial era and forests continue to be lost in many regions. Forests are intimately tied with the cultures and livelihoods of many First Nations in Canada, just as they are to forest peoples across the world. The world's forests are home to unique species of plants, animals and other organisms that are increasingly facing extinction and, as we all know, forests are needed now more than ever to help regulate our global climate.

**Key Issues for COP9:** Many Canadian groups have joined a worldwide movement of NGOs, forest peoples and Indigenous peoples asking COP9 to establish a moratorium (suspension of ongoing or planned activities) on any field testing and commercialization of **genetically engineered trees**. (These groups and communities are working for a ban but the CBD language can only go as far as establishing a "de facto" moratorium.) Many countries in Africa for example strongly oppose genetically engineered (GE) trees while countries like Canada already have field trials and China has actually commercially introduced GE trees. Pollen from trees can travel hundreds of miles and the contamination issues from GE trees is therefore a global issue of concern.

## Agricultural Biodiversity

**Description:** Agricultural Biodiversity includes all the components of biological diversity that play a part of agricultural production such as the variety and variability of animals, plants and micro-organisms, at the genetic, species and ecosystem levels. Agricultural systems depend on biodiversity and, over millennia of seed saving, plant breeding and livestock husbandry, humans have developed what is called agricultural biodiversity. This diversity provides food security to all peoples across the world. Agriculture also provides humans with raw materials for goods, for example cotton for clothing, wood for shelter and fuel, and roots and herbs for medicines. Agricultural production also provides income and livelihoods and this is recognized in the use of the ecosystem approach, whereby cultural and socio-economic elements are recognized along with environmental elements. By way of example, this programme has three major International Initiatives: on pollinators, soil biodiversity, and biodiversity for food and nutrition.

**How does it concern Canada?** Canadians feed themselves through a global food system that includes many imported goods, and Canadian farmers export agricultural commodities across the world. Canada's agriculture is highly industrialized and relies on a few crops and crop varieties that, in the context of climate change, may lose their ability to grow efficiently as growing conditions change. We may find that we need to borrow, as we have in the past, plant varieties and knowledge from other cultures and agro-ecosystems. Though Canada has vast agricultural land, this land is under increasing pressure from urban sprawl. Additionally, expanding agricultural production for biofuels is limiting food production and the price of grains is consequently rising across the world, affecting everyone including Canadian consumers.

**Key Issues for COP9:** COP9 will undertake an in-depth review of the Agricultural Biodiversity Programme of Work and so many major issues will be addressed at this meeting. Significantly, COP9 will deal with the internationally controversial issues raised by **agrofuels (biofuels) production**. In 2006, the CBD introduced the new agenda item of "New and Emerging Issues" to their scientific meetings and chose to examine the impact of agrofuels on biodiversity as the first urgent issue. The rapid growth of a agrofuels industry has created a worldwide conflict over land use and the protection of agricultural and forest biodiversity, as forests and other important ecosystems are now being converted to agricultural production. For example, the UN Environmental Program has issued an alert about the "State of Emergency" for endangered orangutan whose forest habitat is now being converted to palm oil plantations in Malaysia and Indonesia. In every country of the world there are dramatic stories of biodiversity destruction, and accompanying social impacts, from expanding agrofuels production. Indigenous Peoples and NGOs are asking the COP9 meeting to recognize the potential impacts of biofuel production on forest destruction and climate change as well as the many indirect impacts of expanded agricultural production. Some governments and environmental NGOs are recommending rigorous sustainability criteria for biofuels production to resolve these issues while others fear that these will never adequately protect biodiversity.

**Terminator Technology:** In 2000, under Agriculture Biodiversity, the CBD placed what NGOs call a "*de facto* moratorium" on Genetic Use Restriction Technology (GURTs) or "Terminator technology" (seeds genetically engineering to be sterile after first harvest). The CBD recommends that no governments approve GURTs for field-testing or commercialization until "scientific data can justify testing" and socio-economic and ecological impacts are fully studied, including impacts on food security. The CBD Decision states that "the conditions for their safe and beneficial use" need to be "validated" first. This Decision was reaffirmed and strengthened in 2005-2006 because of widespread protests from Indigenous peoples and NGOs across the world, including Canada. Because there are huge corporate interests in seeing

## Access to Genetic Resources and Benefit Sharing

**Description:** Genetic resources whether from plant, animal or micro-organisms may be used for different purposes (e.g. basic research, commercialization of products). Users of genetic resources may include research institutes, universities and private companies operating in various sectors such as pharmaceuticals, cosmetics, agriculture, horticulture and biotechnology.

**How does it concern Canada?** Home to over 100,000 plant and animal species, spread throughout a variety of climates and ecosystems, Canada is rich in genetic resources. These genetic resources and the associated traditional knowledge are being accessed for research and commercial purposes. While this is the case, Canada has no official access and benefit-sharing system in place which means that the rights of Indigenous peoples to the genetic resources that are on their territories and those that are the product of their traditional knowledge, are not protected. The recognition of these rights is needed in order to make sure that any benefit sharing will be fair and equitable.

**Key Issues:** Canada has been very slow in working on this agenda item and interested Canadian NGOs therefore encourage Canada to take a more progressive position in future meetings. The major goal of these efforts is to ensure that access and benefit-sharing recognizes the unique role of Indigenous peoples as traditional knowledge holders. There still remain many disagreements between the developed and developing countries on the nature, scope and objective of an international regime on Access and Benefit Sharing.

## Protected Areas

**Description:** The establishment and management of protected areas, together with conservation, sustainable use and restoration initiatives in adjacent land and seascape, are central to the CBD's Article 8 on "In-situ Conservation." In order to address gaps, in 2004 the COP adopted a programme of work on protected areas with the objective of supporting the establishment and maintenance by 2010 for terrestrial and by 2012 for marine areas of comprehensive, effectively managed, and ecologically representative national and regional protected areas.

**How does it concern Canada?** The amount of strictly protected area in Canada increased from over 36 million hectares in 1992 to over 61 million hectares in 2001. This trend is extremely important and there are many more additional areas in Canada that require protection as Canada includes 15 ecozones. One area of major concern is the health of our marine ecosystems and the need to reduce the impact of fishing on vulnerable marine habitats and species via the establishment and networking of marine protected areas.

**Key Issues:** There is a need for improved multi-sectoral coordination and integration for biodiversity conservation and sustainable use in marine areas beyond the limits of national jurisdiction as there is currently a lack of implementation, compliance and enforcement of the international legal framework. The

CBD should be encouraged to make recommendations relating to the marine protected areas and attention should be paid to destructive fishing practices in sensitive areas of the high seas (especially bottom trawling). In the establishment of terrestrial Protected Areas, human and cultural rights need to be preserved and, as these decisions directly affect the lives of Indigenous peoples and local communities, their meaningful participation needs to be secured in the Working Group on Protected Areas and other CBD fora.

## Invasive Alien Species

**Description:** Non-native, invasive alien species are human introduced species that are harmful to and threaten the environment, economy, or society, including human health. Article 8(h) of the CBD calls on Parties to "prevent the introduction of, control or eradicate those alien species which threaten ecosystems, habitats, or species". Invasive Alien Species are a threat to biodiversity as they are predators, competitors, parasites, hybridizers, and bring diseases to native and domesticated plants and animals.

**How does it concern Canada?** The World Conservation Union cites invasive alien species as the second most significant threat to biodiversity. Their impact on ecosystems can be severe and is often irreversible. Due to global trade and travel, all countries are seeing an alarming increase in invasive species. In 2004, known invasives in Canada included 181 insects, 24 birds, 26 mammals, 2 reptiles, 4 amphibians, and 55 freshwater fish as well as 27% all vascular plants. Addressing invasive alien species in Canada is necessary in order to protect the health of wildlife and humans, our natural resources and our industries.

**Key Issues:** Canada's strategy to try and deal with invasive species takes a hierarchical approach that that prioritizes the following actions: 1) Prevention of new invasions; 2) Early detection of new invaders; 3) Rapid response to new invaders; 4) Management of established and spreading invaders. Though Federal money has been allocated to this work, it appears that little of these funds have made it to the ground level and work is needed to implement the strategy in an open and transparent manner. There are indications that Canada is moving away from eradication of invasives to containment in a less aggressive approach. A focus on eradication is necessary in order to truly protect biodiversity and in this vain, the CBD could extend the threat of invasives to include new organisms such as those created through genetic engineering, nanotechnology and synthetic biology.

## Ecosystem Approach

**Description:** The CBD has adopted the Ecosystem Approach as the primary framework for action under the Convention. It is a strategy for the integrated management of land, water and living resources that is based on the application of scientific methodologies which encompass the essential processes, functions and interactions among organisms and their environment. It recognizes that humans, with their cultural diversity, are an integral part of many ecosystems. The Ecosystem Approach is central to helping address the objectives of the Convention and, with the precautionary approach, is one of the pillars supporting international efforts for sustainable development.

**How does it concern Canada?** Canada is one of the most urbanized countries in the world. By 2010 an estimated 85% of Canadians will live in cities. Given this, Canada needs to incorporate the Ecosystem Approach into our urban context to help ensure biodiversity survival and ecosystem security both within the urban limits and beyond.

**Key Issues:** In Canada, there has been some progress in using the Ecosystem Approach in areas such as Agriculture, Forestry, Fish Stocks, and Water and the Canadian government has promoted its use at the CBD. The CBD now needs to bring an Ecosystem Approach to the ongoing conversion of natural and agricultural lands to urban areas. To preserve biodiversity and ecosystems, we must measure humanities' use of them. Canada could make use of tools such as the Ecological Footprint to track how we are impacting ecosystems. The Ecological Footprint is a Canadian creation that tells us how our "footprint" extends globally.

## CONCLUSION

We hope that this document offers useful information on the role of the Convention on Biological Diversity (CBD) and an introduction to some of the major biodiversity issues in Canada as seen in relation to the Convention. We look forward to working together with you for International Biodiversity Day on May 22 2008 with its theme of "Biodiversity and Agriculture" and the ninth meeting of the Conference of the Parties (COP9) to the CBD on May 19 – 30 in Bonn, Germany. The need to understand the role of biodiversity in our lives is paramount. It is our intention to work with our government and all of you to move the Convention work forward to protect species biodiversity as well as safeguard social, cultural and economic health and diversity. We hope that this background motivates you to find out more and that you will join with us in engaging on these critical issues with our government and international partners at the Convention on Biological Diversity.

## Acknowledgements

We wish to thank Environment Canada for seeking and supporting our participation and input as well as supporting the creation of this document. We thank the Canadian Government for its ongoing commitment to transparency and NGO participation in work around the Convention. We look forward to strengthening the role of environmental NGOs in Canada through increased education and awareness with communities across Canada and through our continued work with government in pursuing biodiversity objectives through policy, research, programs, education and outreach.

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## LINKS

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### Useful Websites:

<b>The Convention on Biological Diversity</b>	<a href="http://www.cbd.int">www.cbd.int</a>
<b>The Canadian Environmental Network (RCEN)</b>	<a href="http://www.cen-rce.org">www.cen-rce.org</a>
<b>Canadian Biodiversity Information Network</b>	<a href="http://www.cbin.ec.gc.ca">www.cbin.ec.gc.ca</a>
<b>Environment Canada – Biodiversity</b>	<a href="http://www.ec.gc.ca">www.ec.gc.ca</a>
<b>CBD Alliance</b>	<a href="http://www.cbdalliance.org">www.cbdalliance.org</a>
<b>UN Non-Governmental Liaison Service</b>	<a href="http://www.un-ngls.org">www.un-ngls.org</a>
<b>Biodiversity International</b>	<a href="http://www.biodiversityinternational.org">www.biodiversityinternational.org</a>
<b>The Food and Agriculture Organization of the United Nations</b>	<a href="http://www.fao.org">www.fao.org</a>
<b>Center for International Forestry Research</b>	<a href="http://www.cifor.cgiar.org">www.cifor.cgiar.org</a>

### Useful Documents:

#### **Sustaining Life on Earth**

<http://www.cbd.int/convention/guide.shtml>

#### **Canadian Biodiversity Strategy:**

National - <http://www.cbin.ec.gc.ca/strategy/>

Provincial - <http://www.cbin.ec.gc.ca/strategy/prov.cfm?lang=e>

**The Convention on Biological Diversity: Understanding and Influencing the Process:** A Guide to Understanding and Participating Effectively in the Eighth Conference of the Parties to the Convention on Biological Diversity (COP8) - <http://www.cbd.int/ngo/resources.shtml>

**UN System Engagement** with NGOs, Civil Society, the Private Sector, and Other Actors

<http://www.cbd.int/ngo/resources.shtml>

**Navigating International Meetings: A Pocketbook Guide to Effective Youth Participation**

<http://www.cbd.int/youth/action.shtml>

**Web Links – For Teachers & Kids** - <http://www.cbd.int/doc/ref/bioday-weblinks.doc>

**Biodiversity and Agriculture - Safeguarding Biodiversity and Securing Food for the World**  
***What can you do: (p.48-51)*** - <http://www.cbd.int/ibd/2008/booklet/>

## **GLOSSARY OF TERMS**

Please note not all definitions here are official CBD definitions. The sources are referenced below.

TERMS	Definition	Source
<b>Biodiversity or Biological Diversity</b>	The variability among living organisms from all sources including terrestrial, marine and other aquatic systems and the ecological complexes of which they are part; this includes diversity within species (genetic), between species and of ecosystems.	1
<b>Biological Resources</b>	Genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.	2
<b>Biotechnology</b>	Any technological application of science and engineering that uses, directly or indirectly, biological systems, living organism, or derivatives thereof, to make or modify products or processes for specific use.	2 a
<b>Civil Society</b>	Forms of social association intermediate between the family and the state.	5
<b>Conservation</b>	The sustainable use of the Earth's resources in a manner that maintains ecosystem, species and genetic diversity and the evolutionary and other processes that shaped them. Certain areas, species or populations may be excluded from human use as part of an overall landscape/waterscape conservation approach.	2
<b>Ecological Footprint</b>	The area of productive land and aquatic ecosystems required to produce the resources used and to assimilate the wastes produced by a defined population at a specific material standard of living, wherever on Earth that land may be located.	1
<b>Ecosystems</b>	A dynamic complexity of plant, animal, and microorganism communities and their non-living environment interacting as a functional unit. Describes small-scale units, such as a drop of water, as well as large-scale units, such as the biosphere.	2
<b>Ecosystem Approach</b>	A strategy for the integrated management of land, water and living resources that promotes conservation and sustainable use in an equitable way. It recognizes that humans, with their cultural diversity, are an integral component of ecosystems.	1
<b>Ecosystem Function</b>	An intrinsic ecosystem characteristic related to the set of conditions and processes whereby an ecosystem maintains its integrity (such as primary productivity, food chain, and biogeochemical cycles). Ecosystem functions include such processes as decomposition, production, nutrient cycling, and fluxes of nutrients and energy.	1
<b>Ecosystem Services</b>	The benefits people obtain from ecosystems. These include provisioning services such as food and water; regulating services such as flood and disease control; cultural services such as spiritual and recreational benefits; and supporting services such as nutrient cycling that maintain the conditions for life on Earth. The concept "ecosystem goods and services" is synonymous with ecosystem services.	1
<b>Endangered species</b>	Species that are threatened with immediate extinction or extirpation if the factors threatening them continue to operate. Included are species whose numbers have been reduced to a critical level or whose habitats have been so drastically reduced that they are deemed to be in immediate danger of extinction.	2
<b>Food security</b>	A situation in which all people at all times have physical and economic access to sufficient, safe and nutritious food to meet their dietary needs and food preferences for an active and healthy life.	3

<b>Habitat</b>	The place or type of site where an organism or population naturally occurs. Species may require different habitats for different uses throughout their life cycle.	2
<b>Invasive Alien Species</b>	Species that enter an ecosystem where they are not naturally known to exist—either through deliberate or inadvertent action by humans—and may pose a threat to native species. <i>(Also referred to as Harmful Alien Organisms)</i>	2 a
<b>Living Modified Organisms</b>	Organisms that have been genetically modified through the applications of biotechnology, including organisms that have been modified by novel recombinant DNA techniques, as well mutagenesis or classical breeding and selection techniques.	2
<b>Nutritional needs</b>	Sufficient protein, carbohydrates, fats, and micronutrients provided by a diversity of food sources for an individual to lead a healthy and active life.	1 a
<b>Precautionary principle/approach</b>	The management concept of the precautionary principle or “approach” as defined in the Rio Declaration and used as a pillar by the CBD, states that in cases “ <i>where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a resource for postponing cost-effective measures to prevent environmental degradation.</i> ”	a
<b>Sustainability</b>	A characteristic or state whereby the needs of the present and local population can be met without compromising the ability of future generations or populations in other locations to meet their needs.	1
<b>Sustainable Development</b>	Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.	2
<b>Sustainable Use</b>	The use of components of biodiversity in a way that does not lead to their long-term decline, thereby maintaining the potential for future generations to meet their needs and aspirations.	2
<b>Terminator Technology</b>	Referred to as Genetic Use Restriction Technology or GURTs, Terminator technology refers to plants that are genetically engineered to make seeds sterile after the first generation.	4 a
<b>Vascular Plant</b>	Any of various plants, such as the ferns and seed-bearing plants, in which the phloem transports sugar and the xylem transports water and salts.	6
<b>Well-being</b>	A context-and situation-dependent state, comprising basic material for a good life, freedom and choice, health good social relations and security.	1
<b>Wildlife</b>	Includes mammals, birds, reptiles, amphibians, fishes, invertebrates, plants, protists, viruses, fungi, algae and bacteria. <i>(Also known as Wild Fauna, Flora, and Organisms)</i>	2 a

*Source of definitions:*

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- a – Adapted definition