

## Chair Report

**Forum:** Environmental Council

**Issue:** The Issue of Protecting Biodiversity in Natural Environments

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### Introduction

There is no doubt that biodiversity is one of the most essential supporting factors of all life on earth including humans. While biodiversity may seem like such a wide and broad topic, as scientists have only identified around 1.2 million out of 8.7million species, without the variance of animals, plants, and microorganisms we have recognized so far, we will be further away from having healthy ecosystems, secured food and provision of livelihoods.

In the past 50 years, over 69 percent of wildlife populations have declined with 38,500 species under threat and over 16,300 species endangered. Each species that's been endangered naturally leads to other potential loss of other species within the ecosystem. This occurs in many aspects of our natural environments from forests, grasslands, oceans, rivers, and many other ecosystems. Countless debates can surround the topic of how we could help these precious lives through financial support, implementing new technologies, captive breeding, and many more whilst considering the different geographical terms, the growing population, and the industrialization each country holds.

Knowing that this issue is inherently interdisciplinary, dear delegates, be prepared to have concrete evidence and research in each interrelated issue that will revolve around the following agenda.

### Definition of Key Terms

#### *Biodiversity*

"The variety of plant and animal life in the world or in a particular habitat, a high level of which is usually considered to be important and desirable."

#### *Interdisciplinary*

"Relating to more than one branch of knowledge."

#### *Scenic vistas*

"A picturesque, pastoral scene of rural land, or open space with little or no modern intrusions."

#### *Negotiations*

“Discussion aimed at reaching an agreement.”

### **Species**

“A group of living organisms consisting of similar individuals capable of exchanging genes”

## **Background Information**

In the scientific eye, it has become clear that biodiversity loss has rapidly increased in recent years. Many of the root causes of this issue are mainly results from human activities including deforestation, the use of agricultural chemicals, and pollution. The following research report will briefly discuss the following issues mentioned above and delegates are highly encouraged to research on other root causes other than the following points.

Firstly, pollutants are one of the sources that affect plant communities and aquaculture as the atmosphere is filled with nitrogen, carbon monoxide, and sulfur oxide, leading to such risks of acid in lakes and soils. This will naturally lead to scenic vistas and threats to food security and affect the health of our biodiversity. Stationary sources of such pollutants include power plants, oil refineries, industrial facilities, and factories. Area sources are derived from agricultural areas, cities, and wood-burning fireplaces. Natural sources compromise wind-blown dust, wildfires, and volcanoes and mobile sources can differentiate from cars, buses, planes, trucks, and trains.

Secondly, deforestation is one of the most alarming matters leading to the loss of *137 species each day* of plants, animals, and insects leading to *50,000 species lost annually*. This is clearly an urgent issue at hand that involves negotiations between countries that refuse to stop marketing the forests that are located in their own territories.

The last issue touched on in this report will be the use of agricultural chemicals. Many farmers use chemicals to keep control of weeds and pests from destroying crops and to build on more nutrients to the soils. This is where many debates can come through with questions such as, whether to limit the use of pesticides, who will be responsible for the decrease in incomes of the farmers due to a decrease in the quality of the crops, how to implement new technologies, how to educate such member nations to be capable of such technologies etc... However, these debates are crucial as excessive use and misuse of such chemicals contaminate the population of beneficial insects, which act as natural enemies of pests that reduce the nutritional value of food.

## **Major Parties Involved**

### **European Union (EU):**

aims to protect at least 30% of EU's marine and terrestrial areas from forests, wetlands, peatlands, grasslands, and coastal ecosystems including 10% of EU's oceans as well as remaining primary and old-growth forests.

The European Union has committed to protecting diversity since the first establishment of the Birds Directive in 1979, one of the oldest legislation of the EU and expressed ambition to restore the world's ecosystems by 2050. Some strategies to reach following targets included building a "coherent Trans-Europe Nature Network", designating effective partnerships that lead effective implementations.

#### Canada:

Canada has implemented restoration projects such as enhancing 1,500 hectares of grassland ecosystem through the GSI (Grassland Stewardship Initiative) which aims to protect threatened bird species whilst ensuring the improvement of soil's quality to capture carbon.

Canada has proposed many joint efforts of the collaboration of the federal, provincial and territorial governments as each of the parties share a responsibility. Some legislations implemented includes the "Canada Wildlife Act", "Migratory Birds Convention Act, 1994" and the "Species at Risk Act"

#### Brazil:

Holding 15-20 percent of the world's biodiversity, in 2021, Brazil instrumented projects that combined both environmental education with defending local flora and fauna. This resulted in recovering 600 hectares of land. The project included different activities such as: "monitoring fauna, providing veterinary assistance, animal rescue, training courses, and an "educational blitz" with employees to promote the commitment to managing biodiversity."

#### Global Environment Facility (GEF):

Holds a history of being the largest financier of biodiversity conservation in Africa. Around \$360 million funded for 50 projects implemented (Mozambique, Gabon, Tanzania, South Africa)

\$5.2 billion have been invested by the GEF to sustain and conserve biodiversity which lead to leverages of over \$13.4 billion additional funds supporting over 1,500 project in over 158 countries

### Timeline of Key Events

Date	Description
1952	<b>The IPPC (International Plant Protection Convention)</b> Conserving world plant resources such as cultivated and wild plants through implementing preventative measures towards plant pests and promoting unharmed and appropriate measure for their control.
1973	<b>The CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) enacted.</b> An international agreement is signed by 184 parties to guarantee that international trade among animals and plants will not threaten the survival of nature.

1979	<p><b>The CMS (Convention on the Conservation of Migratory Species of Wild Animals) established</b></p> <p>Aims to maintain terrestrial, marine and avian migratory species possible in their range. Provision of strict protection and forming regional multilateral agreements and taking co-operative measures with research and conservation activities is included.</p>
1992	<p><b>UNCED a.k.a 'Earth Summit' held in Rio, Brazil</b></p> <p>Recognizing the different social, economic and environment factors, the UNCED lead agendas covering many areas such as the "Rio Declaration", "Declaration on the Priciples of forest management".</p>
2001	<p><b>The International Treaty on Plant Genetic Resources for Food and Agriculture established</b></p> <p>Governing Body (GB 9) aims of promoting the sustainable use of plant genetic resources for food and agriculture and policies regarding such matter was most recently discussed in 19-24 September 2022</p>
2020	<p><b>Global Footprint Network calculates how the population overused planet's resources by 75%</b></p> <p>The measure of the demands humans input on Earth's "biocapacity"</p>

### Related UN Treaties and Events

- The United Nations Framework Convention on Climate Change
- The United Nations Convention to Combat Desertification.
- The Convention on Migratory Species (CMS)

### Previous Attempts to solve the issue

- Critical Loads Mapper Tool (CL Mapper) - "joint project supported by EPA, the U.S. Department of Agriculture, the U.S. Forest Service, and the U.S. National Park Service to make information more accessible on effects from atmospheric nitrogen and sulfur deposition."
- *The World Bank Group is working with countries to better conserve and sustainably manage biodiversity. This includes:*
  - investing in watershed management
  - integrated coastal zone management and protected areas,
  - finding ways to generate revenues from biodiversity—including through tourism or payments for environmental services
  - Partnership programs to improve forest governance and prevent wildlife crime as a way to protect the value of nature-based tourism which in turn affects the resilience of people living around protected areas.

## Bibliography

Lai, Olivia. "How Many Endangered Species Are There?" *Earth.Org*. Earth.Org, 30 May 2022. Web. 21 Jan. 2023.

<https://earth.org/how-many-endangered-species-are-there/>

Manisalidis, Ioannis, Elisavet Stavropoulou, Agathangelos Stavropoulos, and Eugenia Bezirtzoglou. "Environmental and Health Impacts of Air Pollution: A Review." *Frontiers*. Frontiers, 17 Jan. 2020. Web. 21 Jan. 2023.

<https://www.frontiersin.org/articles/10.3389/fpubh.2020.00014/full>

*Ecosystems and Air Quality* (2022) EPA. Environmental Protection Agency.

<https://www.epa.gov/eco-research/ecosystems-and-air-quality>

*Biodiversity loss: What is causing it and why is it a concern?: News: European parliament* (2021) *Biodiversity loss: what is causing it and why is it a concern? | News | European Parliament*. Available at:

<https://www.europarl.europa.eu/news/en/headlines/society/20200109STO69929/biodiversity-loss-what-is-causing-it-and-why-is-it-a-concern>

*Where does air pollution come from?* (no date) *National Parks Service*. U.S.

Department of the Interior. <https://www.nps.gov/subjects/air/sources.htm>

*Deforestation: Clearing the path for wildlife extinctions* (no date) *Deforestation: Clearing The Path For Wildlife Extinctions - Wild Earth News & Facts*.

<https://www.adoptananimalkits.com/advocate/wild-earth/params/post/1278141/deforestation-clearing-the-path-for-wildlife-extinctions>

*Pesticides and the loss of biodiversity* (2022) *PAN Europe*.

<https://www.pan-europe.info/issues/pesticides-and-loss-biodiversity>

*Here's how five countries are reviving biodiversity* (no date) *UNEP*.

<https://www.unep.org/news-and-stories/story/heres-how-five-countries-are-reviving-biodiversity>

*Protecting biodiversity is an opportunity for sustainable development* (no date) *The protection of biodiversity in Brazil | Enel Green Power*.

<https://www.enelgreenpower.com/stories/articles/2022/09/protection-program-biodiversity-brazil>

Kennedy, F. (2022) *A history of the Endangered Species Act, Earth Day*.

<https://www.earthday.org/a-history-of-the-endangered-species-act/>

*United Nations Framework Convention on Climate Change* (no date) *The Rio Conventions*.

[https://unfccc.int/resource/docs/publications/rio\\_20\\_adaptation\\_brochure.pdf](https://unfccc.int/resource/docs/publications/rio_20_adaptation_brochure.pdf)

Hub, I.I.S.D.S.D.G.K. (no date) *Event: Ninth session of the governing body of the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGRFA): SDG Knowledge Hub: IISD, SDG Knowledge Hub*.

<https://sdg.iisd.org/events/ninth-session-of-the-governing-body-of-the-international-treaty-on-plant-genetic-resources-for-food-and-agriculture-itpgrfa/>

Government of Canada, Office of the Auditor General of Canada. (no date) *Biodiversity in Canada: Commitments and trends, Biodiversity in Canada: Commitments and Trends*.  
[https://www.oag-bvg.gc.ca/internet/English/oth\\_202210\\_e\\_44128.html](https://www.oag-bvg.gc.ca/internet/English/oth_202210_e_44128.html)

*Biodiversity-related Conventions*.  
[www.cbd.int/brc](http://www.cbd.int/brc).