United Nations Environment Programme (UNEP)

Background Guide Topic: Tackling the Loss of Biodiversity



Director's Note

Dear delegates,

Welcome to the United Nations Environmental Programme of Japan Metropolitan Model United Nations 2024! I would first like to thank the chairs for your cooperations and we promise to perform our best to make this conference a valuable and memorable experience for all of you.

My name is Saki Shigeno and I will serve as the director of Beginner II for the duration of the conference. I am currently a second-year student at Senzoku Gakuen Senior High School. As much as I am glad to have received the position of director of the United Nations Environment Programme, I am also extremely nervous about the conference. Although I cannot deny my inexperience as a chair, I can with confidence say that I have done my best this year to understand what MUN is all about. The chairs have practiced for this conference in hope of creating an engaging, intellectual MUN experience for you. We look forward to seeing you at the conference, and please feel free to contact us if you have any questions or concerns!

Sincerely,

Saki Shigeno Director of United Nations Environment Programme Senzoku Gakuen Model United Nations Club Japan Metropolitan Model United Nations



Introduction of the Committee

History of Committee

Established in 1972, the United Nations Environment Programme (UNEP) is the leading global authority within the United Nations system, dedicated to promoting environmental sustainability and fostering collective action to protect the Earth's natural resources. As the principal environmental organization of the United Nations, UNEP acts as a catalyst, advocate, and facilitator for a wide range of environmental activities, collaborating with governments, civil society, and the private sector to create lasting positive impacts.

Introduction to the Topic

The loss of biodiversity, driven primarily by human activities, has reached unprecedented levels, threatening the delicate balance of ecosystems and endangering countless plant and animal species. To tackle the loss of diversity, it is necessary that we embrace a multifaceted approach that recognizes the complex interplay between environmental, economic, and social factors.

Key Terms

Species Diversity¹

Species diversity refers to a region's various species of plants, animals, and other life forms.

Genetic Diversity

Genetic diversity refers to the range of inherited traits within a species.

Ecosystem Diversity

Ecosystem diversity refers to the range of habitats that can be found in a given location (for example grassland, marsh, and woodland).

Endemism²

Endemism is an ecological classification that gives information about a species' or group of species' range or distribution.

Keystone Species³

A keystone species helps define an entire ecosystem.

¹ *Biodiversity, UNEP,* Retrieved July, 22, 2023, from https://leap.unep.org/knowledge/glossary/biodiversity ² *Endemism, Biology dictionary,* Retrieved July, 22, 2023, from

https://biologvdictionarv.net/endemism/

³ Role of Keystone Species in an Ecosystem, National Geographic, Retrieved July, 22, 2023, from https://education.nationalgeographic.org/resource/rol e-keystone-species-ecosystem/

Habitat Loss^{4 5}

Habitat loss describes the shrinkage of the area where a given species, or group of species, may coexist and reproduce.

Threatened Species⁶

"Threatened" means a species is likely to become endangered within the foreseeable future.

Invasive Species⁷

An invasive species is an organism that is not indigenous, or native, to a particular area, sometimes causing great economic and environmental harm to the new area.

Biodiversity Hotspot⁸

Biodiversity hotspots are areas with high levels of species diversity, a large number of endemic species (species that are unique to a particular region), and a sizable number of threatened or endangered species.

Conservation Biology⁹

Conservation biology is an interdisciplinary field of study created to combat the decline in biological variety.

Ecological Resilience¹⁰

Ecological resilience is the capacity of an ecosystem to recover from damage brought on by an ecological disturbance and continue to follow its regular cycles of nutrient cycling and biomass production.

⁴ *Habitat loss, National Wildlife Federation,* Retrieved July 22, 2023, from https://www.nwf.org/Educational-Resources/Wildlife

-Guide/Threats-to-Wildlife/Habitat-Loss

https://ugc.berkeley.edu/background-content/habitat-l oss-restoration/

⁶ What are the differences between endangered, threatened, imperiled, and at-risk species?, USGS, Retrieved from, July, 22, 2023, from https://www.usgs.gov/fags/what-are-differences-betw

een-endangered-threatened-imperiled-and-risk-specie

⁷ *Invasive Species, National Geographic,* Retrieved from July, 22, 2023, from https://education.nationalgeographic.org/resource/inv asive-species/



⁸ What are Biodiversity Hotspots?. Defenders of

https://www.nature.com/scitable/knowledge/library/c onservation-biology-16089256/

⁵ *Habitat loss/ restoration, UCMP*, Retrieved July, 22, 2023, from

Wildlife, Retrieved from, July, 22, 2023, from https://defenders.org/blog/2023/05/what-are-biodiver sity-hotspots ⁹ *Conservation Biology, Nature Education Knowledge*, Retrieved from July, 22, 2023 from

¹⁰ *Ecological Resilience, Britannica,* Retrieved from, July, 22, 2023 from

https://www.britannica.com/science/ecological-resilie nce

Ecotourism¹¹

Ecotourism is ethical travel to natural regions that preserves the environment, supports community welfare, and includes interpretation and education.

Sustainable Development¹²

Sustainable development is development that takes into account the requirements of the present and future generations while also delivering long-term economic, social, and environmental advantages.

Carbon sink

A carbon sink is a place that absorbs more carbon than it releases.

Current Situation

Humans have been altering ecosystems for millennia, either directly through the hunting of other creatures or indirectly through deforestation and changes in land usage for agriculture. Up to one million species could go extinct in the next few decades.

¹²Sustainable Development, UNEP. July 22, 2023 https://leap.unep.org/knowledge/glossary/sustainabledevelopment



Deforestation is converting irreplaceable ecosystems, such as portions of the Amazon rainforest, from carbon sinks to sources of carbon. Additionally, 85 percent of wetlands, including carbon-absorbing mangrove swamps and salt marshes, have vanished in the last 300 years.¹³

A total of 300 million people are directly dependent on forests for their livelihood, including 60 million members of indigenous and tribal groups. The projected annual cost of illegal logging and the collection of forest products is \$15 billion USD. Local extinction of rare tree species and those with high values for wood or non-timber forest products is a serious concern.

Loss of biodiversity

Biodiversity loss could have a substantial impact on human health if ecological services are no longer sufficient to meet social requirements. Changes to ecosystem services have an indirect impact on local migration, livelihoods, income, and occasionally even the onset or escalation of political conflict.

¹¹ All about Ecotourism in Japan, JRPASS. July 22, 2023

https://www.jrpass.com/ja/blog/all-about-ecotourismin-japan#:~:text=Ecotourism%20is%20officially%20 defined%20as_and%20involves%20interpretation%2 0and%20education.

¹³ "Biodiversity - Our Strongest Natural Defense against Climate Change." United Nations, United Nations

www.un.org/en/climatechange/science/climate-issues/biodiversity.

<u>Health</u>

The many products and services that biodiversity offers are important to human survival on Earth. Environmental stewardship can help communities become more resilient and provide for stable livelihoods. The absence of these resources can lead to the development of conditions that increase morbidity or mortality.¹⁴

Climate change

Climate variability has an impact on terrestrial biodiversity because extreme weather events (such as drought and flooding) have a direct impact on ecosystem productivity and the availability of ecosystem goods and services for human use. Longer term climate changes have an impact on ecosystem viability and health, including changes in the distribution of pathogens, animals, plants, and even human settlements.

Global temperatures could rise by more than 1.5°C (2.7°F) in comparison to before the industrial revolution by 2030 if current rates of warming continue. The intensification and recurrence of fires, storms, and dry spells are two key effects of climate change

¹⁴ "Biodiversity and Health." World Health Organization, World Health Organization, <u>www.who.int/news-room/fact-sheets/detail/biodiversi</u> <u>ty-and-health</u>.



on biodiversity. At the end of 2019 and the beginning of 2020, significant fires in Australia devastated 97,000km² of forest and nearby habitats. It is now established that climate change has made these fires worse. The threat to biodiversity, which is already under attack from other human activities, is increased by this. The fires are reported to have raised the number of threatened species in the region by 14%.¹⁵

<u>Sustainability</u>

Unsustainable use and overexploitation continue to pose serious threats to biodiversity in a number of industries, including forestry, agriculture, and fisheries. According to the 2010 Living Planet Report, since 1966, humanity's ecological footprint has increased by more than twice as much. Humanity used the resources of 1.5 planets to support its activities in 2007, the most recent year for which data are available.¹⁶

At the 1992 Rio Earth Summit, 150 states signed the Convention on Biological Diversity, which establishes goals for halting

¹⁵ "How Does Climate Change Affect Biodiversity?" Royal Society,

https://royalsociety.org/topics-policy/projects/biodive rsity/climate-change-and-biodiversity/#:~:text=If%20 current%20rates%20of%20warming.storms%20or%2 0periods%20of%20drought

¹⁶ "Living Planet Report 2010", WWF,

https://wwfint.awsassets.panda.org/downloads/lpr_su mmary_booklet_final_feb_2011.pdf

biodiversity loss. We have witnessed an astonishing expansion in protected areas around the world during the past 25 years.

Case Studies

Subtopic I: Biodiversity and Climate Change

An increase in wildfires, insect outbreaks, invasive species, and storms, which are all caused by climate change, are factors that increase deforestation.¹⁷ Here, climate change issues, which humans provoke, directly lead to deforestation. An important issue to consider is that climate change and the loss of biodiversity are closely related to deforestation. The major reason for the loss of biodiversity is habitat loss.¹⁸ As the demand for timber, fossils, and other natural resources continues to grow, deforestation will become more and and more serious and perhaps incurable. This leads to the dire consequence of animals losing their habitats. Since forests are home to more than 80% of all terrestrial species of animals, plants and

[,]https://earth.org/biodiversity-loss-definition-and-exa mples/



insects on the planet, millions of species have lost their natural habitat and will continue to lose areas to find shelter from prey and for reproduction. It will also lead to increased food competition, causing population decline for many animals and plants. The enormous impact deforestation brings to climate change supports how both issues are happening for the same reason and are connected to each other. Deforestation is caused not only by climate change but also by ice melting in the Atlantic ocean and the spread of desertification, which also results in habitat loss and extinction.



Figure 1: Loss of habitat¹⁹

¹⁷ *Deforestation,National Geographic*.Retrieved July 8, 2023,

https://education.nationalgeographic.org/resource/de forestation/

¹⁸ Biodiversity Loss Definition and Examples, EARTH ORG, Retrieved July 8, 2023, from

¹⁹Biodiversity - our strongest natural defense against climate change. United Nation Organization. Retrieved July 8, 2023, from

https://www.un.org/en/climatechange/science/climate -issues/biodiversity#:~:text=The%20risk%20of%20s pecies%20extinction_destroy%20almost%20all%20re maining%20reefs.

Case Study 1: Australia

During Australia's devastating "Black Summer" bushfire season of 2019-2020, more than 24 million hectares (59 million acres) burnt.²⁰ The biggest reason for this bushfire is known to be climate change. Due to the warm weather caused by serious climate change humans are facing, the landscape dries out very quickly. The drier grasses, brush, and trees get, the more likely they are to both catch fire and to stay burning. Therefore, climate change, also known as global warming, has a direct and obvious effect on this risk by raising temperatures, which will dry out vegetation more quickly and more thoroughly.²¹ Statistics say that over the "Black Summer," 21% of the nation's temperate broadleaved forests burnt.²² This fact means that various

reevaluated.MONGABAY,Retrieved July 8, 2023, from

²² Australia's 'black summer' bushfires showed the impact of human-wrought change, The



animals have lost their habitats. The Kangaroo Island dunnart (a mouse-sized carnivorous marsupial) is a prime example. With just a few hundred surviving in isolated islands, they have lost 95% of their habitat by the "Black Summer" fires. Due to this situation caused by the self-centeredness of humans, not only were the dunnarts put in danger of becoming extinct, but also the animals related in the food chain, such as the Kangaroo Island foxes, were about to lose their important food resource to sustain life. This case shows how climate change leads to the loss of biodiversity.

Case Study 2: The Arctic Ocean

Polar bears rely heavily on the sea ice environment for hunting, mating, resting, and in some areas, maternal dens.²³ Polar bears also use floating sea ice platforms for travel, and pregnant polar bears build snow dens for giving birth. Therefore, ice melting in the Arctic ocean due to climate change will lead to habitat loss for polar bears and

²⁰ As Australia faces new fire reality, forest restoration tactics

https://news.mongabay.com/2022/02/as-australia-face s-new-fire-reality-forest-restoration-tactics-reevaluate d/#:~:text=More%20than%2024%20million%20hect ares,larger%2C%20more%20intense%20forest%20fr es.

²¹ *Forest Fires and Climate Change*, Climate Atlas of Canada, Retrieved July 8, 2023, from

https://climateatlas.ca/forest-fires-and-climate-change #:~:text=Warm%20weather%20can%20dry%20out,m ore%20quickly%20and%20more%20thoroughly.

Guardian.Retrieved July 8, 2023, from https://www.theguardian.com/environment/2020/jul/3 1/australias-black-summer-bushfires-showed-the-imp act-of-human-wrought-change-aoe

²³ POLAR BEARS AND CLIMATE CHANGE, worldwildlife.org, *Retrieved July 8, 2023,* from

https://www.worldwildlife.org/pages/polar-bears-and -climate-change

other Arctic animals and species.²⁴ This will bring about a negative impact on maintaining biodiversity.

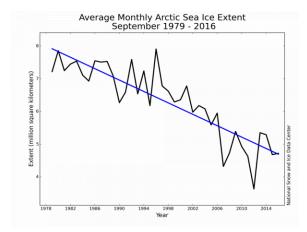


Figure 2: Average Monthly Arctic Sea Ice Extent²⁵

Case Study 3: The United States of America

According to the UN, more than 24 billion tonnes of fertile soil disappear every year. In fact, today two-thirds of Earth is undergoing a process of desertification, which is often the result of deforestation, despite the fact

https://alaskapublic.org/2017/06/09/the-future-for-pol ar-bears-and-other-arctic-marine-mammals/



that these lands play a main role in maintaining biodiversity. The mechanism of desertification is that the whole of the Earth is warming faster than we have seen before due to climate change, and declining rainfall allows soil to dry out and become more likely to erode.²⁶ China is one country facing desertification. Here, even humans are made to leave their community as climate refugees because they are unable to stay in their house.

Subtopic II: Biodiversity and Sustainable Development

Biodiversity refers to the variety of life on Earth, including plant and animal species, while sustainable development refers to the development that meets the needs of the present for a better future socially and environmentally.²⁷ Biodiversity has a significant impact on sustainable development in a way that it is crucial to maintain lives on Earth including our own. It is what provides people with clean water, oxygen, and other food supplies, as well as clothing and shelter. The biggest threats that

²⁴ Climate Change Causes Habitat Loss and Species Extinction, environment ecology.com, Retrieved July 8, 2023

http://environment-ecology.com/climate-change/818climate-change-causes-habitat-loss-and-species-extin ction.html

²⁵ *The future for polar bears and other arctic marine* mammals, Alaska Public Media. Retrieved July 8, 2023, from

²⁶ What is desertification? Discover its causes and consequences, Iberdrola, Retrieved July 8, 2023, from https://www.iberdrola.com/sustainabilitv/desertificati on

²⁷ Biodiversity and Sustainable Development- UPSC (2021 February 13)

https://lotusarise.com/biodiversity-and-sustainable-de velopment-upsc/

biodiversity faces today are habitat destruction and fragmentation, direct harvest, and various forms of pollution including carbon dioxide. Although biodiversity is at a huge threat due to climate change and many human activities, protected habitat areas such as national parks and wildlife reserves can help to promote biodiversity and provide ecosystem services.²⁸

Case Study 1: Costa Rica

Costa Rica serves as a great example of effective policies to combat the issues that biodiversity faces.²⁹ Costa Rica prides itself on being the "Green Republic." 28% of the country's territory is protected by national parks, having a wide variety of parks from tropical dry and cloud forests to wetlands. There has also been a lot of reforestation in Costa Rica, in part because of their decision to have an ecosystem services law to tax gasoline and use the revenue to benefit reforestation. As a result, Costa Rica is the first tropical country to have stopped and reversed deforestation; over half of its land is covered by forest, compared to 26% in

²⁸ Why biodiversity is essential for sustainable

https://unfoundation.org/blog/post/biodiversity-essent

https://www.rickshawtravel.co.uk/costa-rica/inspirati

1983. Costa Rica also has several policies today that make the country one of the most sustainable countries in the world. They have banned the use of single-use plastics and established a significant growth in sustainable tourism and renewable energy, as can be seen from the fact that almost 100% of the country's electricity is created by renewable sources.³⁰

Case Study 2: Botswana

Botswana is home to a high concentration of animals. In fact, it has the highest number of wild dogs and elephants, and is also known for its big herds of buffalo and incredible birdlife. Botswana outlawed the hunting of lions and other trophy hunting due to the fact that its wilderness and wild animals are a great source of economic benefit. Because of this, the country has a thriving ecotourism industry and the revenue reinforces the economic growth and well-being of the people in the region.³¹



Japan Metropolitan Model United Nations March 23-24, 2024 jmmunadmin@senzoku.ac.jp

development (2018, May 21)

ial-sustainable-development/

²⁹ Costa Rica Ecotourism

³⁰ International Monetary Fund, Costa Rica to Tackle Climate Change with New Resilience and Sustainability Facility

https://www.imf.org/en/News/Articles/2022/11/14/cfcosta-rica-to-tackle-climate-change-with-new-resilien ce-and-sustainability-facility#:~:text=We%20already %20have%20relatively%20low,electricity%20is%20f rom%20renewable%20sources

³¹ The Sustainable Development Goals in Botswana https://botswana.un.org/en/sdgs/15

Case Study 3: Latin America and the Caribbean

Latin America is one the most biodiverse regions in the world. According to the United Nations Environment Program (UNEP), around 60% of global terrestrial life, diverse freshwater and marine species can be found within Latin America and the Caribbean.³² However, Latin America has experienced 94% loss of biodiversity since 1970. This region has seen a sharp fall in biodiversity due to hunting, poaching, and harvesting, as well as the ongoing destruction of grasslands, forests, and wetlands for large-scale farming. Habitat loss has had a significant effect on reptile populations, while the number of freshwater fish have declined due to overexploitation. However, the UNEP notes some significant ways that Latin American countries have innovated to preserve biodiversity. Among those, the region has implemented a range of low carbon sustainable development approaches, increased protected area coverage, and reined in illegal trade in wildlife.

Subtopic III: Biodiversity and Human Health

Case Study 1: Africa

Africa has extensive tropical forests, and in recent years, deforestation for timber production and agriculture has caused deforestation. The edges of tropical forests are the source of human viruses. Loss of 25% of original forest cover increases the possibility of human and their livestock contact with wild animals. Wild animals spread infectious diseases. For example, bats often have viruses of Ebola, Nipah, SARS, and COVID-19.

According to WHO, there has been a 63% increase in the number of zoonotic outbreaks by deforestation in Africa (particularly in the Democratic Republic of Congo and Nigeria) in the past decade from 2012-2022 compared to 2001-2011.³³

Case Study 2: Southeast Asia

In Southeast Asia, a number of conferences have highlighted the need for an integrated

AMUN NORTH

³² A Warning Sign: Where Biodiversity Loss is Happening Around the World https://www.worldwildlife.org/magazine/issues/sum mer-2021/articles/a-warning-sign-where-biodiversityloss-is-happening-around-the-world

³³ Africa Center for Strategic Studies (2022, December 7). *African Biodiversity Loss Raises Risk to Human Security*.

https://africacenter.org/spotlight/african-biodiversity-l oss-risk-human-security/

comprehension of the environment and health issues for a long time. The Association of Southeast Asian Nations (ASEAN) created the ASEAN Secretariat Working Group for One Health in charge of the coordination of diverse health-related initiatives to target the issues linked with the animal-human-environment interface. ASEAN refers to an institutional coordination to maintain security in the case of a pandemic.³⁴

Case Study 3: The United States of America

Changes in biodiversity may play a role in the transmission of infectious diseases, and the EPA (US Environmental Protection Agency) has started a new research initiative.^{35 36} EPA develops and enforces regulations, gives grants, studies

³⁶ Pongsiri, M. J., & Roman, J. (2007). Examining the links between biodiversity and human health: An interdisciplinary research initiative at the U.S. Environmental Protection Agency. Ecohealth. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7087 626/



environmental issues, teaches people about the environment, expands partnerships and publishes information to protect human health and the environment.³⁷

Educational institutions that teach the interrelationship between biodiversity and health are essential, and more than half of them are in America. Latin America and Brazil are conducting localized surveys to improve One Health education services.³⁸

Past Actions

Earth Summit in Brazil in 1992

The Convention on Biological Diversity (CBD) was first agreed on in Brazil in 1992. This was a landmark agreement in which all the signatories committed to a sustainable use of biodiversity in their regions. Before this, in November 1988, the United Nations Environment Programme (UNEP) convened the Ad Hoc Working Group of Experts on Biological Diversity in order to build an international convention on biological diversity. Soon after, in May 1989, it established the Ad Hoc Working Group of

³⁴Lajaunie, C. (2022, June 8). The link between health and biodiversity in Southeast Asia through the example of infectious diseases. Environmental Justice.

https://www.academia.edu/23991212/The_Link_Bet ween_Health_and_Biodiversity_in_Southeast_Asia_ Through_the_Example_of_Infectious_Diseases ³⁵EPA 生物多様性と病気との関係について研究事業 に助成

https://www.eic.or.jp/news/?act=view&serial=18951 (2008, August 4)

³⁷ U.S. Environmental Protection Agency | US EPA. (n.d.). https://www.epa.gov/

³⁸ U.S. National Library of Medicine. (n.d.). Home -PMC - NCBI. National Center for Biotechnology Information. https://www.ncbi.nlm.nih.gov/pmc/

Technical and Legal Experts to prepare an international legal instrument for the conservation and sustainable use of biological diversity. By February 1991, the Ad Hoc Working Group had become known as the Intergovernmental Negotiating Committee. Its work culminated on 22 May 1992 with the Nairobi Conference for the Adoption of the Agreed Text of the Convention on Biological Diversity. The Convention was opened for signature on 5 June 1992 at the United Nations Conference on Environment and Development (the Rio "Earth Summit"). It remained open for signature until 4 June 1993, by which time it had received 168 signatures.

Overall, the Earth Summit had many great achievements: the Rio Declaration which builds upon the basic ideas concerning the attitudes of individuals and nations towards the environment and development, first identified at the United Nations Conference on the Human Environment (1972), and its 27 universal principles, the United Nations Framework Convention on Climate Change (UNFCCC), the Convention on Biological Diversity; and the Declaration on the principles of forest management. The UNFCCC is an environmental treaty that sets an international framework on the issue of global warming open for signature during this conference. The Earth Summit in Brazil



played an enormous role in setting up various treaties and organizations.

<u>Cop15</u>

COP15 is shorthand for the 15th meeting of the Conference of the Parties to the UN Convention on Biological Diversity. From December 7 to 19 in 2022, a two-week summit took place in Montreal, Canada. It was the biggest biodiversity conference in a decade and countries struck a historic deal on protecting and restoring the natural world. At COP15, nations adopted the Kunming-Montreal Global Biodiversity Framework, agreeing to conserve and manage at least 30 percent of the world's lands, inland waters, coastal areas and oceans, with emphasis on areas of particular importance for biodiversity and ecosystem functioning and services. Currently only 17 percent and 10 percent of the world's terrestrial and marine areas respectively are under protection. There were targets for protecting vital ecosystems such as rainforests, wetlands, grasslands and coral reefs, and the rights of indigenous peoples. The agreement also presented targets to reform USD 500 billion of environmentally damaging subsidies and agreed on urgent action to halt human-caused extinctions of species known to be under threat and to

promote their recovery.



Tips from the Chairs

As stated at the beginning of this background guide, research is key when it comes to MUN. The more a delegation understands the country they are representing, the better. Please bear in mind that you are participating as representatives of your assigned countries, and your ideas should reflect your country's stance, not your own.

Having a general understanding of MUN procedures will make your experience at the conference a more enjoyable one. We are

https://www.zurich.com/en/media/magazine/2022/wh at-is-cop15-and-how-does-it-differ-to-cop27#:~:text =At%20COP15%2C%20nations%20adopted%20the, and%20ecosystem%20functioning%20and%20servic



<u>es</u>.

more than happy to answer any questions that should arise during the conference, but having a good grasp on the procedures beforehand will allow you to focus more on what is being discussed. Please attend our chair events to learn about MUN procedures.

We encourage all delegates to submit their Position Papers. It will help you prepare for the conference, and it will help us, the chairs, understand what direction the committee will be headed. When making speeches, whether it be Opening Speeches or for Moderated Caucuses, it is crucial to make your points and solutions clear. Make sure the structure of your speech is easy for other delegates to understand, and speak clearly when presenting them. The more specific your solution is, the easier it will be for you to form blocs with other delegates. During the conference, don't be apprehensive about raising your placards. Making motions and speeches in front of a room full of people can be nerve-wrecking, but the speeches you make during this time will lead to note-passing and discussions during Unmoderated Caucuses. For the duration of the Unmoderated Caucuses, you are free to walk around and talk to whoever you like. Take advantage of this and exchange opinions with many delegations, even those you may not agree

³⁹ What is COP15 and what did it

achieve?,ZURICH,*Retrieved July 8, 2023, from Ju;y 12,2023, from*

with. These discussions will eventually lead to the formation of blocs, where you will write your resolutions.

Finally, keep your discussions civil and friendly. Discussions can get heated at times, but don't forget to show respect to your fellow delegates.

Questions to Consider

- What biodiversity treaties have your countries signed?
- What are the main reasons for the decline of biodiversity in your country?
- What are the problems caused by the decrease of biodiversity in your country?
- Does your country have biodiversity laws or regulations?
- What action has your country taken to prevent endangered animals?
- Does your country have measures to combat climate change?
- How much biodiversity has been lost in your country due to development?

• Does your country have biodiversity hotspots?

Guidelines for Position Papers

Position papers must clearly articulate the current situation of your country, briefly explain the past actions it has taken, and further denote possible solutions. Papers may also include international resolutions and strategies to combat the issue discussed in your committee; however, the main focus must be on your country. When developing your position papers, please focus on information that directly relates to the topic. General information about your country, such as its geographical location, major cities, or major trade exports, should not be included to lengthen your report. Remember that delegates and chairs do not have a lot of time during the conference to read the position papers. If you want to successfully press the case of your country, you want your position papers to get to the point quickly and persuasively.

Closing Remarks

We would like to thank you again for your participation in JMMUN. Please keep in mind that this background guide is only a



brief introduction to the conference. We highly recommend every delegate to research in depth and consider multiple possible solutions to tackle the loss of biodiversity. Again, please feel free to contact us if you have any questions or concerns! We are looking forward to seeing you all in March.

Works Cited

Africa Center for Strategic Studies (2022, December 7). *African Biodiversity Loss Raises Risk to Human Security.*

https://africacenter.org/spotlight/african-biodiversity-l oss-risk-human-security/

"All about Ecotourism in Japan." JRPass.Com, 6 June 2023,

www.jrpass.com/ja/blog/all-about-ecotourism-in-japa n#:~:text=Ecotourism%20is%20officially%20defined %20as,and%20involves%20interpretation%20and%2 0education

Amt, Auswärtiges. "International Commitment to Biodiversity ." German Federal Foreign Office,

www.auswaertiges-amt.de/en/aussenpolitik/themen/-/229622.

"As Australia Faces New Fire Reality, Forest Restoration Tactics Reevaluated." Mongabay Environmental News, 15 Mar. 2022,

https://news.mongabay.com/2022/02/as-australia-face s-new-fire-reality-forest-restoration-tactics-reevaluate d/#:~:text=More%20than%2024%20million%20hect ares.larger%2C%20more%20intense%20forest%20fi res

"Australia's 'Black Summer' Bushfires Showed the Impact of Human-Wrought Change | Tim Flannery."



Japan Metropolitan Model United Nations March 23-24, 2024 jmmunadmin@senzoku.ac.jp The Guardian, Guardian News and Media, 31 July 2020,

www.theguardian.com/environment/2020/jul/31/austr alias-black-summer-bushfires-showed-the-impact-ofhuman-wrought-change-aoe.

"Biodiversity - Our Strongest Natural Defense against Climate Change." United Nations, United Nations,

www.un.org/en/climatechange/science/climate-issues /biodiversity

"Biodiversity and Ecosystems | Department of Economic and Social Affairs." United Nations, United Nations, <u>https://sdgs.un.org/topics/biodiversity-and-ecosystem</u> <u>S</u>

"Biodiversity and Health." Federal Ministry for Economic Cooperation and Development, <u>www.bmz.de/en/issues/biodiversity/health</u>

Biodiversity and Sustainability - Wiley Online Library, https://onlinelibrary.wiley.com/doi/10.1002/97811194 34016.ch12

"Biodiversity and Sustainable Development - UPSC." LotusArise, 23 July 2022, https://lotusarise.com/biodiversity-and-sustainable-de velopment-upsc/

"Biodiversity Is Key to Building a Sustainable Future for All." United Nations, United Nations, <u>www.un.org/en/un-chronicle/biodiversity-key-buildin</u> <u>g-sustainable-future-all</u>

"Biodiversity." Biodiversity | UNEP Law and Environment Assistance Platform, <u>https://leap.unep.org/en/knowledge/glossary/biodiver</u> <u>sity</u> Bose, Dr. Priyom. "Importance of Biodiversity in Achieving the Sustainable Development Goals (Sdgs)." News-Medical.Net, 16 Aug. 2023, www.azolifesciences.com/article/Importance-of-Biod iversity-in-Achieving-the-Sustainable-Development-Goals-(SDGs).aspx

Cianfagna, Mark, et al. "Biodiversity and Human Health Interlinkages in Higher Education Offerings: A First Global Overview." Frontiers in Public Health, U.S. National Library of Medicine, 25 Feb. 2021, www.ncbi.nlm.nih.gov/pmc/articles/PMC7946966/.

"Climate Change." World Health Organization, World Health Organization,

www.who.int/health-topics/climate-change#tab=tab_2.

"Deforestation." Education, https://education.nationalgeographic.org/resource/def orestation/

"Ecological Resilience." Encyclopædia Britannica, Encyclopædia Britannica, inc., www.britannica.com/science/ecological-resilience.

Editors, BD. "Endemism - Definition, Species, Disease and Examples." Biology Dictionary, 5 Oct. 2019, biologydictionary.net/endemism/. Environment, UN. "UN Environment Programme." UNEP, www.unep.org/

EPA 生物多様性と病気との関係について 研究事業 に助成(2008, August 4) https://www.eic.or.ip/news/?act=view&serial=18951

"Forest Fires and Climate Change." Climate Atlas of Canada,

https://climateatlas.ca/forest-fires-and-climate-change #:~:text=Warm%20weather%20can%20dry%20out,m ore%20quickly%20and%20more%20thoroughly

Gaia. "Climate Change Causes Habitat Loss and Species Extinction." Climate Change Causes Habitat Loss and Species Extinction,



http://environment-ecology.com/climate-change/818climate-change-causes-habitat-loss-and-species-extin ction.html

"Habitat Loss / Restoration." Understanding Global Change, 8 Mar. 2022, <u>https://ugc.berkeley.edu/background-content/habitat-l</u>oss-restoration/

"Habitat Loss." National Wildlife Federation, www.nwf.org/Educational-Resources/Wildlife-Guide/ Threats-to-Wildlife/Habitat-Loss

"How Does Climate Change Affect Biodiversity?" Royal Society,

https://royalsociety.org/topics-policy/projects/biodive rsity/climate-change-and-biodiversity/#:~:text=If%20 current%20rates%20of%20warming.storms%20or%2 0periods%20of%20drought

"Invasive Species." Education, https://education.nationalgeographic.org/resource/inv asive-species/

Lai, Olivia. "Biodiversity Loss Definition and Examples." Earth.Org, Earth.Org, 15 Feb. 2022, https://earth.org/biodiversity-loss-definition-and-exa mples/

Lori Townsend, Alaska Public Media. "The Future for Polar Bears and Other Arctic Marine Mammals." Alaska Public Media, 13 June 2017, https://alaskapublic.org/2017/06/09/the-future-for-pol ar-bears-and-other-arctic-marine-mammals/.

Megha. "Biodiversity and Sustainable Development." GKToday, GKToday, 23 Mar. 2023, www.gktoday.in/biodiversity-and-sustainable-develo pment/#:~:text=Biodiversity%20refers%20to%20the %20variety.to%20meet%20their%20own%20needs.

Nature News, Nature Publishing Group, www.nature.com/scitable/knowledge/library/conserva tion-biology-16089256/.

Living Planet Report 2010", WWF, https://wwfint.awsassets.panda.org/downloads/lpr_su mmary_booklet_final_feb_2011.pdf.

"Polar Bears and Climate Change." WWF, World Wildlife Fund,

www.worldwildlife.org/pages/polar-bears-and-climat e-change.

Pongsiri, Montira J., and Joe Roman. "Examining the Links between Biodiversity and Human Health: An Interdisciplinary Research Initiative at the U.S. Environmental Protection Agency." Ecohealth, Springer-Verlag, 2007, www.ncbi.nlm.nih.gov/pmc/articles/PMC7087626/.

Ritchie, Hannah, et al. "Biodiversity." Our World in Data, 19 Dec. 2022, https://ourworldindata.org/biodiversity

"Role of Keystone Species in an Ecosystem." Education, https://education.nationalgeographic.org/resource/rol e-keystone-species-ecosystem/

"SDG15: The Essential Links between Biodiversity and Sustainable Development." SDG15: The Essential Links between Biodiversity and Sustainable Development | For Researchers | Springer Nature, www.springernature.com/jp/researchers/the-source/bl og/blogposts-communicating-research/biodiversity-a nd-sustainable-development/23736978

"Sustainable Development." Sustainable Development | UNEP Law and Environment Assistance Platform, <u>https://leap.unep.org/knowledge/glossary/sustainabledevelopment</u>

Sustainable Use of Biodiversity - Convention on Biological Diversity, www.cbd.int/undb/media/factsheets/undb-factsheet-s ustainable-en.pdf



U.S. Environmental Protection Agency | US EPA, www.epa.gov/.

Unit, Biosafety. "Biodiversity for Sustainable Development." Convention on Biological Diversity, Secretariat of the Convention on Biological Diversity, 5 Aug. 2022, <u>www.cbd.int/development/</u>.

Unit, Biosafety. "History of the Convention." Convention on Biological Diversity, Secretariat of the Convention on Biological Diversity, 1 Sept. 2023, www.cbd.int/history/.

"A Warning Sign: Where Biodiversity Loss Is Happening around the World." WWF, World Wildlife Fund,

www.worldwildlife.org/magazine/issues/summer-202 1/articles/a-warning-sign-where-biodiversity-loss-is-h appening-around-the-world

"What Are Biodiversity Hotspots?" Defenders of Wildlife,

https://defenders.org/blog/2023/05/what-are-biodiver sity-hotspots

"What Are the Differences between Endangered, Threatened, Imperiled, and at-Risk Species?" | U.S. Geological Survey,

www.usgs.gov/faqs/what-are-differences-between-en dangered-threatened-imperiled-and-risk-species.

"What Is Biodiversity and Why It Is Important?" Enel X,

https://corporate.enelx.com/en/question-and-answers/ what-is-biodiversity

"What Is Desertification? Discover Its Causes and Consequences." Iberdrola, Iberdrola, 22 Apr. 2021, www.iberdrola.com/sustainability/desertification.

"Why Biodiversity Is Essential for Sustainable Development." Unfoundation.Org, 22 May 2019, https://unfoundation.org/blog/post/biodiversity-essent ial-sustainable-development/

"Why Biodiversity Is Essential for Sustainable Development." Unfoundation.Org, 22 May 2019, <u>https://unfoundation.org/blog/post/biodiversity-essent</u> ial-sustainable-development/

Zurich.Com,

www.zurich.com/en/media/magazine/2022/what-is-c op15-and-how-does-it-differ-to-cop27#:~:text=At%2 0COP15%2C%20nations%20adopted%20the,and%2 0ecosystem%20functioning%20and%20services

