United Nations Environment Programme

MADMUN XV

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Letter From the Chairs

Welcome delegates to the United Nations Environment Programme. The UNEP was founded in 1972, shortly after the UN Conference on the Human Environment. More than fifty years later, the UNEP continues its mission to coordinate international responses to environmental issues, uniting 193 member countries to find solutions concerning climate change, nature and biodiversity loss, and pollution and waste. For this conference, we'll be focusing on the issues of rehabilitation of endangered animals, and minimizing the effects of war on climate change.

It is important to speak in a respectful manner about the topics because these are real issues, and we want to be conscientious of delegates' personal experiences. As with any Model UN committee, it's also important to be respectful of other delegates, especially because this committee will have a lot of beginners. With this in mind, please keep an open mind about other delegates and their positions, remembering that they are representing the government of an assigned country and not their personal standings.

As this is a beginner committee, this may be the first time that some of you are going to be at a conference. This may seem to be a stressful situation, but remember that everyone else is a beginner too. Please feel free to reach out to us any time you want to, and we will do our best to help you in any way possible. Our goal is to make sure that everyone is enjoying this conference, and that you'll be able to grow your public speaking and debate skills through this experience. It's also a great opportunity to meet new people in your community.

If you have any committee specific or general questions about Model UN, please reach out to us! We're here to help.

Sincerely,

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Committee Guidelines

Remember delegates, in order to qualify for the Best Delegate award, Outstanding Delegate award, or the Honorable Mention award, you must turn in position papers by the conference. To receive the Best Position Paper award, position papers must be submitted by October 26.

We also expect that all work is your own, with no plagiarism, including the use of generative AI. Your position paper should be professional and respectful, with a bibliography. Please use proper grammar and spelling.

Because this is a beginner committee, the chairs will be more than happy to address points of order regarding how to properly use parliamentary procedure. That said, the expectation at this and other Model UN conferences is that to the best of your ability, you maintain the rules of order and use parliamentary procedure. To that end, please avoid crosstalk and other breaches of the rules during committee sessions, and when not in an unmoderated caucus.

Topic 1: Rehabilitation of Endangered Animals

Since the beginning of the industrial revolution, hundreds or thousands of species have become endangered or gone extinct due to anthropogenic climate change, human hunting, and other environmental impacts. Now, it is the job of the United Nations Environment Program to develop a framework to protect endangered species, and to hopefully stem the tide of extinctions as Earth enters its sixth mass-extinction event: that caused by humans.

Background:

Since the beginning of global human expansion some time in the last 100,000 years, our expansion into new regions has brought major ecological shifts to the regions we inhabit. Amongst these shifts are changing pressures on the animals that inhabit these regions, as humans have sought to alter our environments to better suit our needs. Some scientists believe that the extinction of non-African megafauna, such as Mammoths, Mastodons, and Giant Ground Sloths was driven by hunting during the expansion of humans into their habitats during the last ice age. More recently, the extinction of the dodo bird and several related species during the period of European colonialism brought attention to the fact that humans can play a central role in the endangerment and extinction of animals.

This problem has only been exacerbated by the industrial revolution, and the massive increase in the human population since the 18th century. Many scientists now warn that Earth is undergoing its sixth mass extinction event, sometimes referred to as the Holocene Extinction, emphasizing the role of human activity and economic processes in harming animal populations.[1] Some go so far as to say we are entering a new geological time period, the Anthropocene, in part

[1] "Warning: A Sixth Mass Species Extinction Is on the Cards," UNEP, accessed August 15, 2024, https://www.unep.org/news-and-stories/story/warning-sixth-mass-species-extinction-cards.

defined by the massive impact of humans on Earth's wildlife populations. Either way, scientists agree that the current rate of extinction of Earth's animal species is hundreds or even thousands of times higher than the natural baseline level of extinction would be.[2]

In response to the massive increase in endangered and extinct species currently facing Earth, the last century has seen an evolving perspective amongst scientists, activists, and policy makers regarding how humans should intervene to preserve and bolster these species. Especially in the last fifty years, "Wildlife Conservation" has emerged as a field of academic discussion, government policy, and public consideration.[3] Proponents of wildlife conservation advocate that humanity should take active steps to reduce our impact on wildlife, and to prevent further detrimental effects to wild populations when and where we can.

One branch of the fight to conserve Earth's biodiversity is efforts aimed at rehabilitating populations of endangered animals. This process, because each species faces unique pressures, looks different in every location and for every species, but can be broadly defined as efforts to increase the size, stability, and viability of endangered animal populations.

Rehabilitation in Human Captivity:

For some of the most endangered animals, rehabilitation of wild populations may be impossible due to those populations already being severely degraded. In such cases, human captivity may be the only lifeline for endangered species, as it was for the Northern White Rhinoceros. The Northern White Rhinoceros is considered critically endangered, and may already be extinct in the wild. In captivity, as of 2018 the species had been reduced to two female

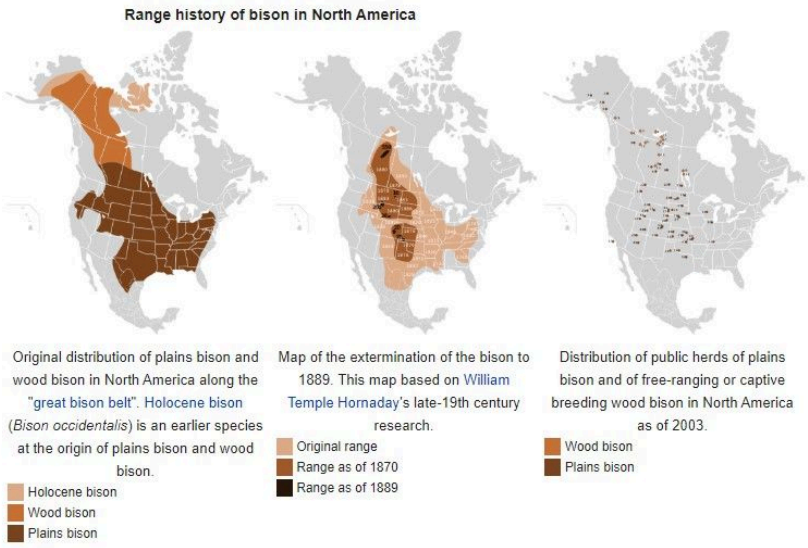
[2] "Extinction over Time," Smithsonian National Museum of Natural History, accessed August 15, 2024, https://naturalhistory.si.edu/education/teaching-resources/paleontology/extinction-over-time.
[3] Rachel Love Nuwer, "History of Wildlife Conservation: An Open Eyed Account," Conservation Mag | Wildlife, Nature and Travel Magazine, accessed August 15, 2024, https://conservationmag.org/en/wildlife/an-open-eyed-history-of-wildlife-conservation.

cows, and a single aging male bull. In March of that year, the last male Northern White Rhinoceros died, leaving human-induced pregnancy using preserved genetic material from the bull as the only possibility for the species' survival.[4]

By the time the last bull died, he had been placed under 24 hour armed guard in order to prevent poachers from targeting the individual. In many cases, animals such as rhinoceros face pressure not just from changing environments, but because poaching those animals can be an incredibly lucrative opportunity for individuals in countries and regions where economic opportunities are few. Poaching of rhinoceros (and some other species) is driven by the use of their horns in traditional East Asian medicine, particularly in China and Vietnam.[5] Given the lucrative incentives for poachers, and the increasing demand for these traditional folk-remedies as China and Vietnam become wealthier and ever-more integrated into the global economy, preventing poaching is a major reason for some animals to be brought into human captivity.

On the more successful end of the spectrum for captive population rehabilitation are American bison. As part of the American government's efforts to suppress and destroy the lifestyle of Native American populations, the American bison was hunted nearly to extinction during the period of Western Expansion. Prior to American eradication efforts, bison populations are estimated to have been between thirty and forty million. At the turn of the 20th century, less than 1,000 bison remained.[6]

[4] "Last Male Northern White Rhino Is Put Down," The Guardian, March 20, 2018, https://www.theguardian.com/environment/2018/mar/20/last-male-white-rhino-is-put-down?CMP=fb_gu.
[5] "Poaching: Rhino Threats: Save the Rhino International," Save The Rhino, February 22, 2023, https://www.savetherhino.org/rhino-info/threats/poaching-rhino-horn/.
[6] "Bison by the Numbers," National Bison Association, February 26, 2024, https://bisoncentral.com/bison-by-the-numbers/#:~:text=400%2C000%3A%20Estimated%20herd%20size%20in,in%20the%20U.S.%20in%202023.



Wikipedia

Today, conservation efforts have brought bison populations back to roughly 400,000, though the range that bison inhabit has been reduced massively, and the vast majority of bison now live in captivity, many on private farms which raise them for meat. Additionally, almost all surviving bison populations include some amount of genetic mixture with domesticated cattle, which raises the question of how much the species has truly been saved, and why.[7] If we only save a species in order to raise it for meat, many conservationists would argue that our efforts are insufficient and misguided. On the other hand, raising bison for meat has provided a profitable business, which has incentivized investors and entrepreneurs to aid in the species' numerical rehabilitation.

In species which are so degraded that no wild populations remain, multiple questions face conservationists and policy makers.

- How best can we preserve these most-endangered species?

[7] "American Bison," Visualizing climate and loss: Extinction, accessed August 15, 2024, https://histecon.fas.harvard.edu/climate-loss/extinction/bison.html.

- How do we best allocate resources to ensure that we save species we can, without wasting resources on species that are beyond our ability to save?
- Is that distinction worth making, or should we treat every species, regardless of practicality, as a concern for preservation?
- If a species is brought back from the brink of extinction in captivity, what are the next steps to rehabilitate that population?
- How do we combat poaching and other human factors which require certain species to be held in captivity for their own protection?
- How do we contend with species which are successfully rehabilitated, but only in captivity, or in a way which is largely oriented towards human use of those animals?

Wildlife Preserves and Sanctuaries:

Other species, which are not so far gone may require less overt or extensive intervention. For many of these species, rehabilitation may be possible while the species remains outside of captivity, but still within a semi-controlled environment. The system of National Parks in the United States, or wildlife sanctuaries and preserves in various countries in Africa serve in part to create environments where wildlife can thrive without active human intervention because the regions are kept free of human settlement and influence. On the other hand, attempts to maintain these sanctuaries and national parks can lead to controversy, both with local human populations, and with international activists.

The most well known of the United States' National Parks is Yellowstone, which has become an important testing ground for conservation and rehabilitation efforts. Some of the most important, but simultaneously most controversial of these efforts have been efforts to reintroduce and bolster populations of endangered species to the park, particularly wolves. Scientists agree

that the reintroduction of wolves to Yellowstone was an unmitigated success not only for the wolves, but for the park as a whole. The reintroduction of wolves had several secondary, tertiary, and even quaternary effects that led to a revitalization of the park's ecosystem on multiple levels.

When wolves were reintroduced, their role as a predator helped to quell elk populations in the park, which had grown larger than their natural level due to the lack of predation. With elk populations reduced, stands of willow trees were able to rebound under reduced grazing pressure. With these stands rebounding, beaver numbers began to climb as they gained access to a reliable food source.[8] Other research shows that beaver populations make regions more resilient to wildfire, and that they too can create a series of knock-on effects that bolster the ecosystems they live in. All of these effects stemmed from the reintroduction of gray wolves, going to show the immense success that reintroduction of wolves to regions they previously inhabited can have.

More broadly, the example of gray wolves shows that rehabilitating and reintroducing some species, known as "keystone species" can play an outsized role in revitalizing whole ecosystems, as the effects of a single species' reintroduction reverberate through the many species they interact with. From a scientific and conservation perspective, the reintroduction of wolves is inarguably a massive success.

On the other side of this issue, however, are many local populations. Most commonly, ranchers and hunters heavily resist efforts to reintroduce or rehabilitate populations of predatory animals, such as wolves. When Colorado reintroduced five gray wolves to begin rebuilding their population in the state, ranchers and hunters pushed back, arguing that wolves would damage

[8] "Under the Willows: Yellowstone's Resilient Beavers," Under The Willows | Yellowstone's Resilient Beavers, accessed August 15, 2024, https://www.nationalparkstraveler.org/2023/01/under-willows-yellowstones-resilient-beavers#:~:text=Steadily%20driving%20beaver%20numbers%20upward,began%20to%20climb%2C%20he%20explained.

cattle herds and reduce the size of big game herds that hunters target.[9] While data on the actual economic effects of predator rehabilitation is sparse, actual concrete data often has little bearing on issues where emotional reactions guide decision making.

Whether or not wolves actually harm cattle herders or hunters on a large scale is immaterial to locals who hear individual horror stories. A single ranch near a wolf den might suffer tens of thousands of dollars in losses due to hunting by reintroduced predators. While this may be a unique situation, the fear that their individual farm could suffer a similar fate galvanizes other ranchers to resist rehabilitation of predator populations. Because wolf kills are difficult to confirm, these cattle losses might be completely unrelated, but still stoke fears of wolf reintroduction amongst other ranchers.

A similarly irrational, but emotionally impactful fear may come from local populations who are not engaged in ranching or hunting. Many suburban families are anxious about the prospect of wild wolf reintroduction out of a fear that large predator animals might harm them or their children. Politicians who oppose the rehabilitation of predator species may rely on this fear, such as they did when wolves were reintroduced to Yellowstone in 1995. However, more than 25 years later, no fatal wolf attacks have occurred in the tri-state area around Yellowstone.[10]

Ultimately, the fears of those opposing rehabilitation of predator populations are often unfounded, but that does not stop their political opposition from being an important obstacle to conservationists and those seeking to rehabilitate wild animals. Beyond implementing a policy that will allow for populations to be rehabilitated, this body must consider how it can effectively

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[9] "Colorado Releases 5 Wolves under Controversial Reintroduction Program," CBS News, accessed August 15, 2024, https://www.cbsnews.com/colorado/news/colorado-releases-5-wolves-under-controversial-program/#:~:text=Part%20of%20that%20support%20came,these%20first%20five%20were%20released.

[10] Orlinda Worthington and Seth Wyberg, "Wolf Reintroduction Program Still Controversial 25 Years Later," KECI, accessed August 15, 2024, https://nbcmontana.com/news/local/wolf-reintroduction-program-still-controversial-25-years-later.

communicate with and be responsive to anxieties amongst local populations. While saving endangered species may be a globally recognized goal, it will be impossible to effectively conduct these efforts in the face of resistance amongst local populations.

In Africa, a very different set of controversies arises around wildlife conservation and sanctuaries. While America's National Parks are common tourist destinations, they derive funding from a variety of sources, including money appropriated by Congress for the National Parks Service, entrance fees, and charitable donations. In Africa, lower access to government funding means that many sanctuaries and conservancies are significantly more reliant on tourists for funding, including on tourism from trophy hunters.

The issue facing African conservationists is that in the absence of available funding, tourism and trophy hunting are lucrative ways to support their conservation efforts. One study suggests that trophy hunting has allowed conservationists to conserve 340 million acres of land in sub-Saharan Africa, more land than has been set aside from National Parks in the same region.[11] National Parks tend to focus their tourism efforts on photo tourism, where tourists may visit in order to see and photograph wildlife, while staying in facilities managed by the park. Academic literature, reports generated by the International Union for Conservation of Nature, and a US Congressional report all support the finding that trophy hunting can and does lead to more successful conservation efforts overall.[12]

There are, however, situations where trophy hunting has damaged populations, such as it did for lions in regions of Zimbabwe and Tanzania.[13] On the other hand, conservationists who employ trophy hunting to fund their programs argue that the money gained by allowing a single

[11] Brian Child Amy Dickman, "Misinformation about Trophy Hunting Is Wrong. Dead Wrong.," The Hill, February 17, 2021, https://thehill.com/changing-america/opinion/539071-misinformation-about-trophy-hunting-is-wrong-dead-wrong/.
[12] Ibid.
[13] Ibid.

animal to be hunted may be enough to save several more animals from dying due to environmental degradation, or non-hunting conflict between those animals and local populations. Much of the outrage against trophy hunting is generated by activists outside of the regions where trophy hunting occurs, leading to accusations that these activists are concerned for animals in the abstract, but offer no practical solutions which would allow for effective conservation without trophy hunting.

Beyond the specific issue of trophy hunting, the use of tourism to fund conservation efforts at all remains a controversial question. Though not as controversial as trophy hunting, some conservation activists argue that tourism as a method to generate conservation funding is flawed because it makes contact with humans a regular part of animals' lives, and incentivizes conservation efforts to favor human needs. These opponents argue that in a truly natural state, animals would not be in constant contact with humans, and that such contact negatively impacts these animals' instinct to avoid humans. Because poaching remains a prevalent threat throughout sub-Saharan Africa, some activists argue that degrading endangered animals' fear response to humans is dangerous.

Another criticism of both tourism and trophy hunting as funding sources is that it incentivizes conservation efforts to target charismatic animals, such as elephants, giraffes, and other well known megafauna, potentially at the expense of animals which are less popular, but more endangered. Conservationists use funds garnered from tourism and hunting for all of their conservation efforts, but there remains a danger that these indirect incentives might mean some species face extinction because humans don't find them cute enough.

Finally, conservation efforts in Africa face an inverse of the problem faced in North America. In North America, the presence of comparatively wealthy, vocal, and politically

connected local populations mean that conservation efforts may face resistance that is largely political. It is unlikely that such opposition would pose direct danger to the animal populations beyond the threat that some ranchers might kill wolves that they find on their property. In Africa, vastly different economic incentives are at play. As conservation has expanded to encompass up to 30% of Africa's terrestrial land area, this expansion comes at the cost of dispossessing some local populations.[14] Some scholars worry that mainstream conservation efforts in Africa, by dispossessing subsistence farmers and pastoralists, incentivize those groups to become resistant to conservation efforts, potentially even violently.

In addition to provoking resistance, the economic effects of dispossession on human populations are themselves problematic. Dispossessed farmers and pastoralists are often forced to migrate to urban population centers, and removing their pre-existing ways of life may encourage some former-subsistence farmers to turn to poaching as a way to make money. Another difficulty in addressing this problem is that state infrastructure and information access is less reliable in many of the regions where these problems arise, presenting another hurdle to effectively addressing local community needs.

Unlike with the example of wolf reintroduction, controversy surrounding the methods of conservation in Africa are much less about emotion and resistance amongst local populations, but instead about the opposition of distant observers and local economic incentives. To effectively support conservation in regions that are not as rich as the United States, the UNEP must contend with a variety of major challenges. Different availability of financial backing means that the UNEP must either secure reliable sources of funding from outside the affected regions, or commit to the continued use of tourism and trophy hunting as methods of funding

[14] "Conservation, Land Dispossession, and Resistance in Africa," Academic.oup.com, accessed August 15, 2024, https://academic.oup.com/edited-volume/44609/chapter-abstract/386739758?redirectedFrom=fulltext.

generation. The UNEP must also contend with different economic incentives, which make poaching a major concern which is difficult to address effectively. Finally, because local populations are unable to rely on the same type of media attention and political support that opponents of conservation use in the United States, the UNEP must be aware of the risk that haphazard efforts to rehabilitate populations may lead to violent resistance, or increased human costs in surrounding regions.

At this middle stage of rehabilitation, where species are secure enough not to be entirely captive, but are still under some amount of human oversight, the UNEP must deal with two very different sets of circumstances. Rehabilitation of these populations is taking place at both extremes of our world's economic distribution, in the wealthiest country on the planet, as well as in some of the poorest. An approach that satisfies both extremes may be difficult to develop, but both require the UNEP's attention to some degree.

In these complicated and varied circumstances, numerous difficult questions must be answered:

- What keystone species are most important to rehabilitate and bolster?
- How can the rehabilitation of predator species be conducted without facing political backlash from local human populations?
- How can the UNEP effectively contend with a need to rehabilitate species in nations with high levels of wealth, as well as regions which are comparatively poor?
- How can the UNEP balance the need to garner funding for conservation efforts against the possible negative effects of tourism and trophy hunting?

- How can the UNEP, a body which does not directly deal with economic development, avoid the potential negative economic ramifications of some conservation efforts on local populations?

Bolstering and Protecting Wild Populations of Endangered Species:

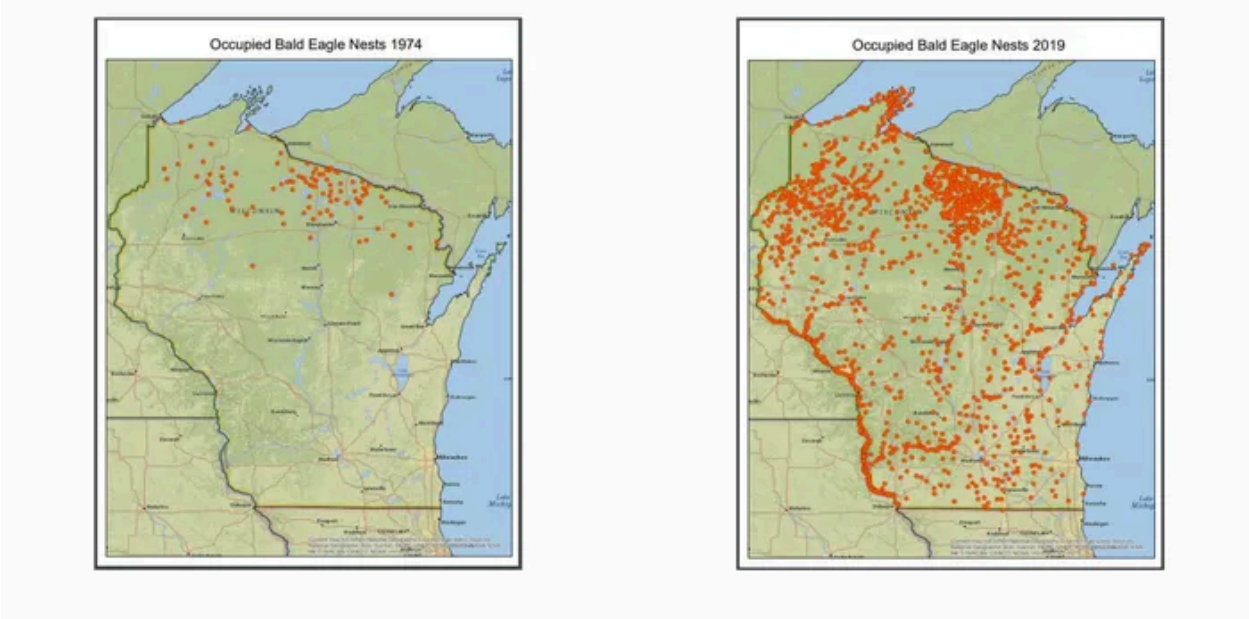
The most difficult, and perhaps most important segment of rehabilitation and conservation efforts is the effort to preserve species which are under threat in completely wild areas. In these situations, human intervention is much less extensive than it can be on captive populations, and may often involve more legal protections and establishing protected areas than it does direct actions taken on a specific population.

The most common example of this style of rehabilitation in the United States is the rehabilitation of wild animals for release back into the wild. When wild animals, particularly raptors and other large birds are injured or sick, it is common for raptor sanctuaries and other rehabilitation centers to take these animals into their care. In some cases, rehabilitation may be possible quickly, and animals are released back into the wild. In other cases, animals are too injured or lack wild instincts, and remain in these institutions' care as educational aids indefinitely.

One of the most impressive examples of endangered animal rehabilitation was that of the Bald Eagle. From an estimated population of 100,000 nesting eagles in the late 1700s, human hunting and loss of habitat threatened wild eagle populations beginning in the 1800s. The major reduction in eagle populations, however, began in the 1940s when the chemical pesticide DDT entered common use against mosquitos and other insects. The pesticide washed into waterways, accumulating in the fish that wild eagles eat. Eagles poisoned by DDT saw weakened shells on their eggs, and very few of their eggs survived to hatch. By 1963, only 417 nesting pairs of bald

eagles remained in the United States.[15] In 1978, the Bald Eagle was considered to be endangered in all of the contiguous United States except for Michigan, Minnesota, Oregon, Washington, and Wisconsin where it was listed as threatened.

The recovery of the Bald Eagle from this low point required a robust and multifaceted program of policies, beginning with the ban of DDT as a chemical pesticide. From there, captive breeding programs, efforts to reintroduce the eagle to its native range, and strict protection of eagle nesting sites all contributed to the recovery of the Bald Eagle, which is no longer considered endangered or threatened in any of the United States.



Milwaukee Journal Sentinel

The story of the Bald Eagle's danger and recovery highlights that for animals which cannot effectively be cared for in a captive or controlled environment, more comprehensive systems must be developed to rehabilitate wild populations. Not every species needs this level of intervention, but for those that do, the UNEP must consider how it can effectively support the

[15] "Bald Eagle (Haliaeetus Leucocephalus): U.S. Fish & Wildlife Service," FWS.gov, accessed August 15, 2024, https://www.fws.gov/species/bald-eagle-haliaeetus-leucocephalus.

rehabilitation of endangered species which require a more comprehensive set of interventions than mere captive breeding.

Not every animal has the political clout and importance to national identity that the bald eagle did to the United States, and the UNEP must contend with the fact that banning popular pesticides and heavily protecting animal habitats will likely face stiff opposition from local populations that use that land, or which rely on those chemicals. Either way, the UNEP must be cognizant that not every animal can be rehabilitated in a controlled environment, and must develop plans and systems accordingly.

The UNEP must address the following questions if it intends to pursue rehabilitating wild populations which cannot be effectively rehabilitated in captivity:

- How can the UNEP support the implementation of potentially unpopular public policy for animals that do not have the cultural importance of the bald eagle?
- How can at-risk species which are resistant to being studied in captivity be identified as being in need of protection and rehabilitation?
- How can we develop systems to create and implement plans to rehabilitate species as newly at-risk species are discovered?

Rewilding:

Rewilding is the name of a radical and nascent type of endangered species rehabilitation. Where the previously mentioned methods of rehabilitation have been concerned with preserving and expanding existing wild populations, or reintroducing species to still-wild areas, rewilding proposes that some portions of the world which have been taken over for human use should be intentionally rebuilt into natural environments in order to expand the range of threatened or

endangered animals. Because this field is relatively new, there have been few large-scale experiments with rewilding.

In addition to its relatively untested nature, Rewilding faces the problem that land which has been taken over for human use is often still owned and used by humans in some capacity. These tensions are once again prevalent when looking at the plight of the American bison.

Proponents of rewilding argue that the next and most important step in restoring bison populations, and indeed restoring the historic great-plains ecosystem is to reintroduce bison to portions of their massive historic range. Currently, bison are largely confined to isolated sections of grazing land, while they once had populations stretching from Alaska to Northern Mexico, and from California to the Appalachian Mountains. While there are no serious proposals to reintroduce bison to that entire range, proponents of rewilding argue that the bison is a keystone species, and that reintroducing it to much larger, more connected stretches of the great plains will help to restore that region's traditional ecosystem.

Opposing this effort are land owners, who are reluctant to sell their farms and ranches for this purpose, as well as politicians and activists who argue that advocates of rewilding are arguing based on little more than speculation. Though there is some scientific evidence to the impact that expanding the range of bison would have, there are many other rewilding projects which some claim are unfounded. Chief amongst these are a subset of rewilding advocates who want to see wooly mammoths or European aurochs artificially recreated or revived from extinction.

These activists dream of releasing these species into regions such as Siberia to recreate ice-age ecosystems that have since disappeared, but scientists remain skeptical of their approach. Opponents are quick to point out that recreating these species has never proven to be possible,

that the environments advocates hope to recreate likely disappeared because of environmental factors beyond human hunting, and that there are many species currently facing extinction which should be focused on before dreams of reviving long-extinct mammoths are taken seriously.

For the purposes of this body, many of those questions are irrelevant, but several important questions must be answered regarding rewilding:

- Should the UNEP consider rewilding a legitimate form of wildlife conservation and rehabilitation?
- Should the UNEP support efforts to reintroduce animals to their native range if that range has since been converted to other use, and if so, what criteria should be used to select species and locations to do so?
- If a stable population of a creature exists in captivity or in a limited range, should reintroducing that species be a priority for rehabilitation efforts?
- Should rehabilitation efforts give special attention to keystone species, such as the American bison, over other species which are currently endangered?

Rehabilitation in the Ocean:

The rehabilitation of marine species is a particularly difficult question for conservationists to address. By their nature, marine species are harder to track than terrestrial species, and interventions to protect their habitats are difficult to enforce, both legally and practically.

Because humans are terrestrial mammals, we do not have direct access to the habitats of many marine species. Though some semi-aquatic mammals, such as seals, sea lions, or walruses are relatively easy to track when they spend time on land, species such as whales, fish

populations, or crabs are hidden by the fact that they live in the open ocean, and by the fact that it is difficult for humans or technology to consistently penetrate deep ocean waters.

Additionally, because the oceans form one interconnected marine habitat, pollution and other issues impacting water quality are difficult to address via the actions of any one country. Without global action, pollutants may simply shift from one country to another, and continue to impact marine populations. Similar to the aforementioned case of the bald eagle, rehabilitation efforts in the ocean may require more indirect and comprehensive systems to be developed and implemented, though these methods must go beyond even a single country, and be multinational efforts at species conservation.

The UNEP must consider the following concerns with regards to the ocean:

- How can at-risk species be identified and tracked given the difficulties of cataloging maritime species?
- How can the UNEP overcome international divisions in order to protect marine species?
- What other unique challenges does the UNEP face in attempting to protect and rehabilitate marine wildlife populations?

The Unknown: Extinction and Preservation of Undiscovered Species:

A final concern that the UNEP must address is the vast number of endangered species which are currently unknown to science. Regions such as the Amazon Rainforest, or the rainforests of Indonesia are major centers of global biodiversity, housing hundreds of species not found in any other environment. However, the remote nature of these habitats and the difficulty of penetrating them mean that many of these species remain unidentified, and even for those which have been identified, it is difficult to discern how endangered those species may be.

Additionally, the regions where these animals live are some of those which are most threatened by habitat destruction and human exploitation. In the Amazon, unchecked and often illegal agricultural expansion, illegal gold mining operations, illegal logging, and a lack of sufficient governance have led to accelerating deforestation,[16] which threatens to destroy species' entire habitats without humans ever knowing they existed.

Meanwhile, in Indonesia, similar deforestation is an ongoing threat as land is cleared to grow cash crops, such as palm oil, coffee, and cocoa.[17] In this case, as in Brazil, the major force driving deforestation and habitat destruction is that there are economic incentives for impoverished landowners and workers to destroy habitat because other economic opportunities are lacking, or because preserving rainforest land will not earn them as much money as destroying that land will.

To address the loss of these unidentified species, the UNEP must consider several questions:

- How can the UNEP create better systems for finding and identifying endangered species in rainforest areas?
- How can the UNEP encourage conservation by working with local communities who are incentivized by economic need to damage wildlife habitats?
- Should the UNEP prioritize unidentified species when there are so many already identified species which require conservation and rehabilitation?

[16] "Deforestation in the Amazon," Amazon Conservation Association, April 30, 2020, https://www.amazonconservation.org/the-challenge/threats/.
[17] "Deforestation Causes in Indonesia," Sustainable Palm Oil Choice, July 18, 2024, https://www.sustainablepalmoilchoice.eu/deforestation-causes-in-indonesia-palm-oil/#:~:text=The%20reason%20why%20forests%20are,can%20be%20linked%20to%20poverty.

Conclusion:

The United Nations Environment Programme is faced with a number of challenges in the fight to rehabilitate endangered animals. Firstly, the sheer number of species and variety of possible approaches mean that this body must deftly and carefully select where, when, and how to support rehabilitation efforts. Secondly, this body is tasked with developing a framework to rehabilitate these populations which can be implemented successfully, especially in the face of economic and political incentives for local populations to resist some efforts at rehabilitation. Finally, this body is tasked with navigating these tasks in the face of vastly different socio-political realities in different regions of the world. Approaches that work in the United States and Canada may be laughably inadequate in the Brazilian Amazon, and strategies that work in the Amazon may be completely useless in Sub-Saharan Africa. Ultimately, the task of this body is to sift through the various approaches available, and develop a political and environmental program which can successfully rehabilitate the many endangered species of our world.

Reflection Questions:

1. What type of rehabilitation is most common in your assigned country? Is there local resistance to that policy? Is your country involved in any international agreements regarding wildlife rehabilitation?
2. What is the most important issue your country thinks the UNEP should address, either because addressing that problem would help your country, or because addressing a different problem might indirectly create problems for your country?

3. Does your country think any action should be taken at all? Should the UNEP take bold steps to propose multilateral actions, or should it confine itself to mostly advising countries on best practices?
4. Are there any approaches that your country thinks should be encouraged to rehabilitate animal populations? Are there any that they think should be discouraged, or even banned?

Topic 2: Minimizing the Effects of War On Climate Change

Key Terms

Environment - the natural world, as a whole or in a particular geographical area, especially as affected by human activity

Greenhouse gasses - gasses in the atmosphere that trap heat and raise the surface temperature of planets. Carbon dioxide, methane, nitrous oxide, and various synthetic chemicals are all greenhouse gasses

Carbon sink - anything that absorbs more carbon from the atmosphere than it releases. Important part of the natural carbon cycle

Carbon dioxide equivalent (CO2e) - a unit used to measure the number of metric tons of CO2 or other greenhouse gasses with the same warming potential

Fossil fuels - carbon compounds that are used as fuel, like coal, natural gas, and oil, which were originally living organisms

Introduction

The UN refers to climate change as “long-term shifts in temperatures and weather patterns . . . the main driver of climate change is primarily due to the burning of fossil fuels (like coal, oil, and gas) which produce heat-trapping gasses.” Over 5.5% of global greenhouse gas emissions are caused by militaries, and while some military emissions are not necessarily specific to wartime, they increase significantly during combat. A study found that a third of wartime emissions come from direct military activity, with the manufacturing of explosives and fuel used. Another third is attributed to all the materials necessary for reconstruction, because the production and use of materials such as cement, steel, and aluminum have a significant carbon footprint. It is

undeniable that wars and armed conflicts have catastrophic negative impacts on the environment and can have long term effects on climate change.

Unexploded bombs and landmines can not only be dangerous to people, but also to animals and other wildlife. Munition dumps and remnant bombs can detonate after long periods of high temperatures. As more greenhouse gasses fill the air and the world heats up, more of these unexploded bombs will go off. All matter of explosives release CO and CO2 into the atmosphere when detonated, providing more greenhouse gasses. After conflicts, munitions and chemical weapons are often dumped into oceans and other water sources. Occasionally they will explode, harming the ecosystem and polluting the water. Fishers and other people who use the area can also be affected. Environmental exploitation such as illegal logging or diamond mining can accelerate during wartime, and profits can be used to buy weapons to incite more fighting. Many times, this is because the vacuums of power created by war can lead to illegal competition over natural resources, like fossil fuels. Environmental destruction becomes fuel for more war, as it deprives people and communities of essential resources and ways of life. While many buildings and communities get destroyed during conflicts, explosives can start forest fires. Most emergency personnel are focused on the fighting, so fires can easily get out of hand, burning thousands of acres of carbon sinks. This releases large quantities of carbon dioxide as well as other greenhouse gasses into the atmosphere and destroys valuable natural resources.

Current Situation

Russia’s invasion of Ukraine has generated at least 175m tonnes of carbon dioxide equivalent (tCO2e) from the first two years of war. This is greater than the annual greenhouse gas emissions generated individually by 175 countries, as found by The Guardian. As militaries are extremely secretive, and there isn’t much access for researchers on the frontlines, the actual amount of greenhouse gasses produced during wars could be a lot higher.

The conflict in Gaza has also exacerbated the climate emergency, with over 200,000 tonnes CO2e produced in the first 60 days of conflict, and potentially more than 60 million tonnes CO2e necessary for reconstruction. Gaza is highly vulnerable to climate change. While global temperatures have risen 1.1°C since pre-industrial times, temperatures in Israel and Palestine have risen by 1.5°C, and are expected to continue rising 20% faster than the rest of the world.

Previous Actions on Climate Change

The United Nations Framework Convention on Climate Change (UNFCCC) is the UN entity tasked with supporting the global response to the threat of climate change. The UNFCCC provides a framework for future agreements and policies, but it doesn't establish specific targets. The UNFCCC’s main work currently is focusing on implementing the Paris agreement. Its ultimate goal is to stabilize greenhouse gas concentrations and to combat "dangerous human interference with the climate system."

The Kyoto Protocol was the first treaty to set legally binding targets for reducing emissions. Adopted in 1997, it is an agreement that requires industrialized countries to drop emissions by

5% over a period of years. While it was effective for some countries, it only covered about 18% of global emissions, and was eventually superseded by the 2015 Paris Agreement.

The 2015 Paris Agreement, also known as the COP21 or 21st Conference of Parties, has several goals to limit global warming and its effects on the climate. Some of those goals include global temperature, climate finance, and emission reductions. The aim is to hit Net Zero - only expel as much greenhouse gasses as carbon sinks (like trees, marshes, oceans, and soil) can absorb naturally. To do this, emissions need to be reduced by 50% by 2030.

COP26 reaffirms the goal to reduce greenhouse gas emissions, to prevent the world's temperatures from rising more than 1.5 ℃ by the end of the century.

The 17 Sustainable Development Goals, founded by the UN in 2015, focus on how to make the world a better and more sustainable place. Goal 13, titled "Climate action" is introduced as, "Take urgent action to combat climate change and its impacts." As these goals are meant to be met by 2030, just like the Paris Agreement, actions presented must be taken to reduce the amount of CO2 and CO2e in the atmosphere.

CEOBS

CEOBS is a UK based charity, and was created in 2018 to increase awareness of the environmental and humanitarian consequences of conflicts and military activities. They believe that access to reliable environmental information is essential in relation to armed conflicts, and

seek to provide openness and transparency regarding how military activities can affect climate change and the environment. Their overarching aim is to ensure that the environmental consequences of armed conflicts and military activities are properly documented and addressed, and that those affected are assisted.

CEOBS has been in Consultative Status with UN ECOSOC since 2023, and accredited to the UN Environment Assembly (UNEA) of the UN Environment Programme since 2018. CEOBS has observer status at the UNFCCC (2023). While accreditation is not necessary for UNEP partners, or participation in projects, it can be advantageous, as they have the right to participate in UN bodies and activities. Accredited NGOs are expected to make contributions to UNEP's governing bodies and take action with opportunities available. CEOBS and UNEA worked closely over the last year to create a resolution that aims to continue the work the UNEP has done regarding environmental dimensions of armed conflicts.

- PERAC Principles

  CEOBS has started advocating for implementation of the PERAC Principles, as there is no formal implementation vehicle included in the principles, and member states would be in charge of implementation of their own.

The PERAC principles - Protection of the Environment in Relation to Armed Conflicts - are meant "to enhance the protection of the environment in relation to armed conflicts" before, during, and after conflicts. They are meant to fill an obvious gap, as international environmental

law largely ignores war and military in regards to environmental protection. The UN International Law Commission developed these over a period of years and the UN general assembly adopted them in 2022.

UNEP Actions

- UNEA

  The United Nations Environment Assembly (UNEA) is the world's highest-level decision-making body for matters related to the environment. The decisions and resolutions made by UNEA designate the work of UNEP, and can help identify some possible solutions. They develop international environmental law, and are the main governing body of UNEP.

  UNEA-6. At the sixth UN Environment Assembly, they adopted a consensus resolution that aims to continue the work the UNEP has done regarding the environmental effects of armed conflicts, and to help it be more responsive to environmental challenges around the world. If implemented, the resolution will guide UN stakeholders on how to measure environmental damage. CEOBS worked closely on this resolution, as well as Ukraine, since they originally proposed the idea.

- IPCC

  The Intergovernmental Panel on Climate Change (IPCC) is the UN's body used to evaluate climate science. It was created in 1988 by UNEP and WMO (World Meteorological Organization) to "provide regular assessments of the scientific basis of climate change, its impacts and future risks, and options for adaptation and mitigation."

While they do not conduct their own research, they indicate if more research is needed, and if it's transparent and unbiased.

UNEP has worked hard over the last 25 years, conducting over 25 post-conflict assessments to see some of the environmental impacts of war. They have worked with their partners to identify gaps and weaknesses in international laws to protect the environment - of which there are many. On 8 July 2019 the International Law Commission adopted 28 draft legal principles, which address the causes and consequences of war and armed conflict on the environment. The UNEP has noted that in order to reach the Sustainable Development Goals, we need to “act with greater urgency and coherence to reduce the threats armed conflicts pose to our environment and ultimately our health and livelihoods.” UNEP and member states have demonstrated they understand that more laws and resolutions must be put in place to protect the environment and climate from armed conflicts and militaries.

Conclusion

It is necessary that we can understand and minimize emissions from societal endeavors, especially as climate change is accelerating. Though when it comes to militaires, at war or during peacetime, this still remains a distant goal. Militaries are very dependent on fossil fuels. As they continually receive more and more money, fossil fuel use rises. Despite efforts to start military decarbonisation, effective decarbonisation is nearly impossible without understanding the scale of emissions. Some militaries have set vague emission reduction goals, though they are never completely accountable. Nato has created a procedure for counting emissions. While this may

seem like a good step, it doesn't apply to its members, and it excludes any Nato-led operations. To meet the Sustainable Development goals and the Paris Agreement, countries must be accountable for their military's production of greenhouse gasses. More initiatives must be taken to promote sustainable energy, and give militaries clear targets regarding emissions. A military-free world is unlikely to happen for some time, so in order to protect our planet we must work to minimize their effects on the climate, especially when at war.

Guiding Questions

1. Has your country done anything to minimize the effects of your military? Is it possible to make militaries less dependent on fossil fuel?
2. Is your country accountable about counting emissions? (especially from the military)
3. When might your country feasibly make it to net zero?
4. Why were previous UN actions regarding climate change not implemented well?
5. What can the UNEP do to help individual countries? What should the UNEP's next step be?

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