UNESCO

Topic: **"Reviving Extinct Species: Exploring the Possibilities of De-Extinction"**

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I. COMMITTEE BACKGROUND

UNESCO is the United Nations Educational, Scientific and Cultural Organization. It seeks to build peace through international cooperation in Education, the Sciences and Culture. UNESCO's Constitution was adopted in London in 1945, it entered into force in 1946. After two World Wars in less than thirty years, UNESCO was born of a clear vision: to achieve lasting peace, economic and political agreements among States are not enough. We must bring people together and strengthen the intellectual and moral solidarity of humankind, through mutual understanding and dialogue between cultures. UNESCO gave rise to global centers of scientific research, from CERN (1952) to SESAME (2017), and developed a global tsunami early warning system. UNESCO brought together experts and scholars to write the first ever general history of Africa and all five continents.

II. HISTORY OF THE TOPIC

a. Introduction of the topic

For many years it was rumored that scientists were trying to revive extinct species. This has gotten the world crazy. Is it possible to revive dinosaurs, mammoths, dodo birds, and more extinct animals? The idea of reviving extinct species, known as de-extinction, has intrigued scientists and the public for many years. It began in the 19th century with Charles Darwin discussing evolution and extinction. In the 20th century, breakthroughs in genetics, such as the discovery of DNA and the cloning of Dolly the sheep in 1996, sparked interest in bringing back extinct animals. The 2000s saw more organized efforts, like the "Revive & Restore" project, which aimed to bring back species like the Woolly Mammoth and the Passenger Pigeon using advanced genetic techniques. However, these efforts raise important ethical questions about the consequences for existing ecosystems and whether resources would be better spent on protecting endangered species. As technology advances, the potential for de-extinction remains a hot topic, balancing the desire to correct past mistakes with the need to conserve current biodiversity.

b. Evolution of the topic

Scientists are exploring ways to bring back animals that have disappeared from our planet, such as the Woolly Mammoth and the passenger pigeon. The interest in this topic is driven by advances in

technology, especially in genetics, that allow researchers to potentially recreate these species by using DNA from preserved remains. Supporters of de-extinction argue that it could help restore ecosystems and combat biodiversity loss, while critics raise concerns about the ethical implications, ecological balance, and the resources required for such efforts. As we consider our responsibility towards nature, the debate around de-extinction challenges us to think about the consequences of bringing back species that may not have a suitable environment or could disrupt current ecosystems. Understanding both the scientific possibilities and the ethical dilemmas is crucial as we navigate this exciting and complex topic. It has been rumored that by the end of 2027 the Woolly Mammoth will come back, and if it is successful it will start a new era, the era where scientists will bring back dinosaurs, dodo birds and many other species.

c. *Relevant Events*

The Woolly Mammoth Project (2015-Present):

It began in 2015, when scientists embarked on an ambitious undertaking: bringing back the Woolly Mammoth, that symbolic species that went extinct as long ago as 4,000 years ago. Applying the newest of new approaches-CRISPR gene editing-Harvard researchers are attempting to transfer mammoth genes into the DNA of their closest living relatives, Asian elephants. The mission is aimed at generating a hybrid with the characteristics of the Woolly Mammoth, for example, thick fur, and cold-resistant. This project is very significant as it will not only revive a lost species but also study the potential ecological benefits of the Arctic ecosystem due to the revival of a major herbivorous animal.

The Passenger Pigeon Project (2014-Present):

The Passenger Pigeon went from being one of the most common birds in North America to extinction early in the 20th century, due to over-hunting and habitat loss. In 2014, the "Revive & Restore" organization began efforts for the revival of this bird using advanced genetic technologies. This will entail sequencing the passenger pigeon genome from preserved specimens for use in bringing it back with techniques similar to those being used for the Woolly Mammoth. The project underlines the important role biodiversity plays, where lessons to be learned from the extinction of the passenger pigeon give a serious warning based on human influence and consequences for species survival.

The Tasmanian Tiger (Thylacine) Efforts (2021-Present):

The Tasmanian tiger is a type of thylacine that was declared extinct during the 1930s as a result of hunting and habitat destruction. In 2021, it was announced that a team of scientists had teamed up in the hope of bringing back the thylacine using the process called de-extinction. Genetic material taken from preserved specimens could be used in an attempt to recreate the species with gene-editing

techniques. The initiative therefore brings up a number of ethical debates on de-extinction: what effects might occur should such a predator be released in an ecosystem which is now modern, and responsibilities of humans toward conservation.

III. CURRENT ISSUES

a. Panorama

This has become such a popular possibility in the last few years that every other scientist and leader seems to be discussing it. This committee will debate the pros and cons of trying to revive those lost animals and determine whether it would be beneficial or lead to further problems. If we feel that restoration of extinct species could be helpful, we will suggest ways in which this scientific work should be supported. This will involve funding research, working with scientists, and ensuring that the research is well conducted. Alternatively, if we feel that such a resurgence of those species is not such a bright idea, we shall be devising ways to shut the process down. It could be an explanation of ethical concerns, the possible negative impact on the environment, and why it should be at the forefront of saving endangered species that are still present. Throughout our discussion, we'll consider how de-extinction applies to nature, ecosystem health, and our roles as humans. We will take the decisions here and use them to help us make future moves and rules on this exciting yet complicated subject. Your insights and suggestions will be of great help as we ponder on.

b. Points of view

United States:

The U.S. has been at the forefront of de-extinction research, particularly through private initiatives and scientific advancements in genetic engineering. Many support the idea of reviving iconic species like the wooly mammoth, viewing it as a way to restore ecosystems. However, there is concern about the ethical implications and potential ecological impacts, promoting calls for regulations and guidelines to ensure responsible practices.

Brazil:

In Brazil, the focus is primarily on the conservation of the Amazon and its rich biodiversity- While some scientists are intrigued by the potential of the de-extinction, there is a strong emphasis on protecting existing ecosystems and combating deforestation. Brazilian viewpoints stress that any discussion of de-extinction must not overshadow the urgent need for habitat preservation and sustainable development.

Australia:

Australia has a unique perspective due to its history of species extinction, particularly among native fauna. The country sees de-extinction as a possible tool for restoring lost biodiversity, especially for species that have cultural significance to Indigenous peoples. However, there is caution about the ecological ramifications and the need to prioritize conservation of existing endangered species before pursuing de-extinction.

India:

India's perspective on de-extinction is influenced by its rich cultural and ecological heritage. While there is interest in reviving species that are culturally significant, there is significant skepticism regarding the feasibility and ecological implications of such projects. Indian authorities advocate for prioritizing conservation effort for existing species and ecosystems, emphasizing a holistic approach to biodiversity preservation.

European Union:

The EU has a mixed approach, balancing scientific curiosity with stringent environmental regulations. Countries like Sweden and Germany have expressed interest in de-extinction as means to enhance biodiversity. However, EU policymakers emphasize that ethical considerations, ecological integrity, and thorough impact assessments are essential components of any de-extinction effort, ensuring alignment with broader conservation goals.

IV. UN & EXTERNAL ACTIONS

a. *UN*

b. UNESCO, as a UN agency focused on culture, science, and sustainable development, addresses the complexities of de-extinction—reviving extinct species—by emphasizing the need for a robust ethical framework. While the potential to restore biodiversity and ecological balance is intriguing, it poses risks to existing ecosystems and must consider the cultural significance of extinct species, particularly for indigenous communities. UNESCO advocates for their involvement in discussions to integrate traditional knowledge into decision-making. Additionally, the organization underscores that de-extinction efforts should not overshadow the urgent need to protect endangered species and their habitats. By promoting global

collaboration and establishing governance frameworks, UNESCO aims to ensure that de-extinction is approached responsibly, ethically, and sustainably.

c. *External actions*

International Guidelines and Frameworks:

UNESCO works to establish global guidelines for de-extinction that emphasize ethical considerations, scientific rigor, and ecological integrity. This includes promoting collaboration among countries to develop standards for research and implementation.

Public awareness and educational:

UNESCO conducts outreach and educational programs to raise awareness about the implications of de-extinction. This includes workshops, conferences, and publications that inform policymakers, scientists, and the public about the ethical and ecological aspects of reviving extinct species.

Cultural Heritage advocacy:

By highlighting the cultural significance of extinct species, UNESCO advocates for the involvement of indigenous communities in de-extinction discussions. This ensures that their perspectives and traditional knowledge are respected and integrated into any revival efforts.

V. CONCLUSION

In conclusion, UNESCO recognizes the potential of de-extinction to contribute to biodiversity restoration and ecological balance, but it emphasizes the need for a cautious and ethically grounded approach. As discussions surrounding the revival of extinct species unfold, it is crucial to prioritize the involvement of indigenous communities and respect their cultural connections to these species. Moreover, the organization advocates for the protection of existing biodiversity and the preservation of endangered species as a primary focus. By fostering international collaboration, establishing clear guidelines, and promoting public awareness, UNESCO aims to ensure that de-extinction initiatives are conducted responsibly and sustainably, ultimately benefiting both ecosystems and cultural heritage.

VI. IMPORTANT QUESTIONS

- What ethical guidelines should govern de-extinction?

- How might reintroduced species affect current ecosystems?
- What technologies show the most promise for de-extinction?
- How do we balance funding for de-extinction and endangered species?
- How can we effectively engage the public on this issue?
- What laws are needed for de-extinction initiatives?
- How can de-extinction projects offer key lessons?
- How can countries collaborate on de-extinction?
- What cultural issues arise from reviving extinct species?
- How do we ensure the survival of de-extinct species?
- How might the-extinct species affect existing endangered ones?
- What are effective funding strategies for de-extinction**?**
- What are the next steps in de-extinction research?

VII. REFERENCES

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