

Writing Assignment #4

Tiffani Simms

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Professor Rinehart-Kim

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In the article “Have Researchers Really ‘De-extincted’ the Dire Wolf? No, but Behind the Hype Was a Genuine Breakthrough,” published by *The Guardian*, on April 10, 2025 the author unpacks the bold claim made by Colossal Biosciences that they have “de-extincted” the dire wolf, which is an ancient species that disappeared over 10,000 years ago. While headlines sparked excitement and controversy, the article clarifies that scientists actually achieved the genetic modification of modern grey wolves to express specific characteristics of dire wolves, rather than bringing the extinct species back in its original form. This means the wolves are not actual dire wolves, but hybrids with some genetic similarities.

Despite the sensationalism, the article emphasizes that the project marks a real scientific milestone. The work done by Colossal represents significant progress in genetic engineering since their work demonstrates the ability to isolate, edit, and reintroduce genetic traits that have been lost over time. Although the primary focus has been on the dire wolf, this technology has broader implications, particularly for the current conservation efforts. For example, the same gene-editing techniques could help protect the critically endangered red wolf by enhancing its genetic diversity and resistance to disease. The article praises the technological progress while remaining cautious about the public's misunderstanding of what has been achieved.

Ethical and ecological concerns are also explored. Critics argue that the excitement surrounding de-extinction could overshadow the urgent need to conserve currently endangered species and ecosystems. There are also worries about what might happen if genetically altered animals are released into modern habitats that are very different from those their ancestor once inhabited. Despite these concerns, the article concludes that while the dire wolf has not been resurrected, the science behind the project holds great promise for the future of wildlife presentation and genetic innovation.

One of the most compelling points made in the article is how advances in genetic editing, such as CRISPR, are revolutionizing the way scientists think about conservation. Instead of simply trying to protect species in the wild, researchers are now considering how they might improve or even “upgrade” specific populations by editing their DNA. This shift reflects a growing belief that human intervention may be necessary to preserve biodiversity and help species adapt to a rapidly changing environment caused by climate change and habitat destruction.

However, the article also underscores the importance of public education in science. While the notion of “de-extincting” the dire wolf makes for an exciting headline, it can be misleading and may contribute to unrealistic expectations about what science can currently achieve. The author stresses that clear communication between scientists and the public is essential to ensure that innovation in genetics is understood and used responsibly. Without this clarity, there is a risk that such technologies could be misused or overhyped, leading to ethical dilemmas and public backlash.

References

Pilcher, H. (2025, April 10). *Have researchers really “de-extincted” the dire wolf? No, but behind the hype was a genuine breakthrough.* The Guardian; The Guardian.
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