The article I chose was an article from BBC titled “How extinct animals could be brought back from the dead.”.I found this a very interesting topic because recently I've heard news of scientists bringing back the extinct species the dire wolf. The article covers how scientists are closer than ever to being able to bring back extinct species. There are certain steps to beginning this process. The steps involve things we are familiar with thanks to this class. Steps such as sequencing DNA, overlapping it with other species DNA, and gene editing.

Thylacines are the species that scientists are attempting to bring back into existence.They were put into extinction in the 1920’s due to humans. CRISPR is a big piece of technology needed in the de-extinction process. “CRISPR is a technology that research scientists use to selectively modify the DNA of living organisms.”(Smith, 2024) Using CRISPR scientists working on this project are able to work with genes from a similar animal, the Dunnart. Dunnart and Thylacine share very similar DNA. With this similar DNA scientists use CRISPR technology to tweak genes of Dunnart to match the genes of a Thylacine.

This will create a Thylacine cell. Then the Thylacine cell is created into an embryo. The embryo will need to be placed in a similar relative to the Thylacines womb which can be a very difficult process on its own. Discovering how to implant the embryo to the womb can take several years. Since this is still a very new idea, bringing animals out of extinction, it can take several years to complete the process. There are still limitations in this technology.

This process we just went through is called the genome reconstruction process. Although it is still being worked on actively in order to truly bring animals back from extinction. Alast there is another form of technology that may be able to bring back animals from extinction as well. Ideas of cloning nucleus and back-breeding have also been attempted on extinct species.

Now there is a question of ethics when it comes to de-extinction efforts. Is this even ethical to attempt to reintroduce these species back into our present world. The world has done alright without some of these animals for so long. Could it do more harm than good to bring some of these animals back?

There is a lot of what ifs when it comes to this topic. What if reintroducing these animals hurts our ecosystem. It will undoubtedly have some effect on the ecosystem. How can we know if this effect will be good or not? Could these animals being brought back even survive in the natural world?

I believe there is always a healthy middle ground when it comes to new technologies in Science. I think this technology can be great to help animals who are nearing extinction. Though I do not think our world would receive any benefit from having wooly mammoths roam the earth again. I don't think bringing back animals at that length of extinction from our planet is nesara and worth the risk.

Although de-extinction efforts are very much real and growing stronger everyday several are unsure of it. Blanck states “almost all de-extinction programs so far proposed do not yet satisfy a sufficient array of criteria (IUCN, 2016) to be clearly accepted as biodiversity conservation tools. On the contrary they might even negatively affect efforts to safeguard biodiversity, as we have noted above, and disrupt natural evolutionary trajectories” (Genovesi & Simberloff, 2020)

This led me to believe yes this technology can be a wonderful thing but rules and regulations for it must be implemented. It is a very exciting idea to have these distant animals from our knowledge roam our earth once again. We must have unbiased views and not get caught up within the excitement. Those with this technology in their hands must use it wisely to propose something that will benefit our society.

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