

Hook ✓

Imagine bringing plants, animals, and more back from extinction and bringing them back to life. This process is called

Background ✓

De-extinction, in which "scientists are using Biotechnology and DNA Samples to clone extinct species from the ~~ancient~~ ancient past."

Claim ✓

~~I believe~~ <sup>believe</sup> that De-extinction is <sup>put claim at end</sup> a positive impact on the world. This

is a vital process to bring organisms back to Earth. Many people believe that de-extinction

Counterclaim ✓

is a negative process, but it is ~~beneficial~~ beneficial because it would be repaying them by bringing them back <sup>and</sup> taking <sup>and</sup> precautions to keep them safe <sup>and</sup> healthy.

Some may ~~incorrectly~~ incorrectly believe that De-extinction is a negative ~~effort~~ effort

rephrase

to the world. many may use the <sup>lines 34-36</sup> example found in text 1 when it states

"It is important that it not reduce the urgency with which we ~~address~~ address the causes of ~~extinction~~ extinction and that ~~it~~ it not divert resources from efforts to conserve currently existing species"

This ~~is~~ ~~would~~ be explaining how the efforts put into deextinction would take away attention from currently existing species.

which ones in particular?

defeat?

Another piece of evidence the opposing side may use is in text 2, ~~line~~ line 43, where it said "~~biotechnology~~ biotechnology is expensive when it's first developed. This means that the technology used to bring hum back would be too expensive. People who believe that ~~this is~~ <sup>are</sup> the right side to choose, ~~is~~ wrong. In text one, lines 26-29 it states "Finally it may be

that the biotechnologies and techniques involved can be used to help conservation biologists in their efforts to preserve highly endangered species. For example, it could help increase genetic diversity of small populations & those in captive breeding programs..."

This ~~would~~ defeat how it would not reduce the attention of currently existing species but more help ~~it~~ it. Also, in text 2, line 43 it said "It has a way of becoming very cheap very fast" This would refute the claim that it would be too expensive when it has way of becoming cheap. So De extinction would be ~~very better than~~ more beneficial than

1) Put defeat with the evidence it is responding to  
2) Don't use quotations from evidence from texts in your defeat  
This should be your response to their ideas + identifying flaws

Overall it becomes clear that de-extinction ~~has~~ a more positive impact on the world. For example, in text 2 and line 26-27, it states "In recent years we humans were the ones who wiped them out, by hunting them, destroying their habitats and spreading diseases." This means ~~we~~ by bringing them back, ~~we~~ we would be repaying them for the bad we have done to make them go extinct. This suggests another reason for bringing them back. Another significant reason is in text 1, line 28, it said ~~it~~ it would "help increase genetic diversity." This means that ~~the~~ the process of De-extinction would bring more animals in the community and make it more diverse in many ways. This piece of evidence could also be used to defeat the claim about the food needed for the extinct species. Last but not least, in text 1, line 18, it states "It would be an incredible scientific accomplishment to be able to create organisms of a species that has been extinct for some time." This means that De-extinction would be a major achievement/goal to do. This proves that De-extinction would benefit the world even more. All my evidence support my claim of how de-extinction is a beneficial process to go through with. De-extinction ~~is~~ a very positive impact.

Why is this important?

How? Explain

is this your #1 reason?

In conclusion, the de-extinction process would be a vital accomplishment for scientists to achieve. Not only would

it be a break through, the effect of it would have a major impact. ~~De-extinction~~

~~The~~ The de-extinction process would help many animals and the world. Now, efforts should be put towards the de-extinction process and be supported. This process would be an amazing sight. For the people that disagree, is luerative and has the incorrect point of view.

†

Text 1

E "It would be a great  
L19 Scientific accomplishment"

25 "Help make up for the wrong  
L20 extinction"

L28 "Help increase genetic  
diversity"

Text 2

E "In recent years we humans  
were the ones who wiped  
them out, by hunting them,  
destroying their habitats  
and spreading disease. This  
suggests another reason for  
bringing them back" L26-27.

"biotechnology is expensive  
when it's first developed"  
L43

Text 2

"many drugs were derived from  
plants and bringing them  
back would help"

"Air can cause pollution,  
health, habitat destruction, climate change"

Text 1

E "It is important that it not  
~~be~~ reduce the urgency with which  
we address the causes of extinction,  
and that it not divert resources  
from efforts to conserve currently  
existing species" Line-34-36.

Text 2

E "The disastrous consequences  
that follow have cast a shadow  
over the notation of de-extinction"  
L17-18

"It has a way of becoming  
very cheap very fast" L43

Text 3

"No right habitat  
or food for the animal."  
L8-10

"Hunters may keep  
Hunting the animal"

3

2

Text 2

Bringing Them Back to Life

... The notion of bringing vanished species back to life—some call it de-extinction—has hovered at the boundary between reality and science fiction for more than two decades, ever since novelist Michael Crichton unleashed the dinosaurs of Jurassic Park<sup>1</sup> on the world. For most of that time the science of de-extinction has lagged far behind the fantasy.

mountain  
5 2 good  
↑ Celia's clone is the closest that anyone has gotten to true de-extinction. Since witnessing those fleeting minutes of the clone's life, [Alberto] Fernández-Arias, now the head of the government of Aragon's Hunting, Fishing and Wetlands department, has been waiting for the moment when science would finally catch up, and humans might gain the ability to bring back an animal they had driven extinct. ...

attempt  
to de-extinction

10 I met Fernández-Arias last autumn at a closed-session scientific meeting at the National Geographic Society's headquarters in Washington, D.C. For the first time in history a group of geneticists, wildlife biologists, conservationists, and ethicists had gathered to discuss the possibility of de-extinction. Could it be done? Should it be done? One by one, they stood up to present remarkable advances in manipulating stem cells, in recovering ancient DNA, in reconstructing lost genomes. As the meeting unfolded, the scientists became increasingly excited. A consensus was emerging: De-extinction is now within reach. ..

15 In *Jurassic Park* dinosaurs are resurrected for their entertainment value. The disastrous consequences that follow have cast a shadow over the notion of de-extinction, at least in the popular imagination. But people tend to forget that Jurassic Park was pure fantasy. In reality the only species we can hope to revive now are those that died within the past few tens of thousands of years and left behind remains that harbor intact cells or, at the very least, enough ancient DNA to reconstruct the creature's genome. Because of the natural rates of decay, we can never hope to retrieve the full genome of *Tyrannosaurus rex*, which vanished about 65 million years ago. The species theoretically capable of being revived all disappeared while humanity was rapidly climbing toward world domination. And especially in recent years we humans were the ones who wiped them out, by hunting them, destroying their habitats, or spreading diseases. This suggests another reason for bringing them back. ...

+  
(Bringing them  
back because  
we killed them)  
Defeat - People  
are just gonna  
keep killing  
them.

20 Other scientists who favor de-extinction argue that there will be concrete benefits. Biological diversity is a storehouse of natural invention. Most pharmaceutical drugs, for example, were not invented from scratch—they were derived from natural compounds found in wild plant species, which are also vulnerable to extinction. Some extinct animals also performed vital services in their ecosystems, which might benefit from their return. Siberia, for example, was home 12,000 years ago to mammoths and other big grazing mammals. Back then, the landscape was not moss-dominated tundra but grassy steppes. Sergey Zimov, a Russian ecologist and director of the Northeast Science Station in Cherskiy in the Republic of Sakha, has long argued that this was no coincidence: The mammoths and numerous herbivores maintained the grassland by breaking up the soil and fertilizing it with their manure. Once they were gone, moss took over and transformed the grassland into less productive tundra. ...

<sup>1</sup>Jurassic Park = park in science-fiction novel, *Jurassic Park*, where dinosaurs are brought back to life