

Scientists want to bring mammoths back to life

16th September, 2021



Scientists are working on bringing back the woolly mammoth. The giant creature is an ancestor of the Asian elephant. It became extinct over 4,000 years ago, but scientists and entrepreneurs want to bring it back to life. The idea is like something from the movie Jurassic Park.

Scientists will use the DNA from the bones of a mammoth found in Siberia to revive the mammoth. They will also use cloning techniques. It would be the first time since the Ice Age for a mammoth to walk on the earth. The lead scientist is professor George Church, a geneticist from Harvard Medical School. He is an expert in gene editing. An entrepreneur, Ben Lamm, said: "Our goal is to have our first calves in the next four to six years."

Ben Lamm is founder of a technology and software company called Colossal. He has provided \$15 million for the research to move forward. He said he has big plans to bring the mammoth back to life and to revive other species. He said he hoped to "rapidly advance the field of species de-extinction" and "to restore the woolly mammoth to the Arctic tundra". Mr Lamm believes the research will result in innovations that will benefit biotechnology and health care. Lamm compared the project to the Apollo missions to the moon. He said they made people excited about space. They led to the development of everyday products like freeze-dried food, and of technology such as GPS. Mr Lamm believes genetics will improve our lives.

Sources: theguardian.com / cnn.com / usatoday.com

Writing

Bringing extinct species back to life is dangerous. Discuss.

Chat

Talk about these words from the article.

scientists / giant / creature / extinct / entrepreneur / DNA / technique / earth / goal / technology / software / species / Arctic / missions / moon / products / genetics

True / False

- 1) The Asian elephant is the ancestor of the woolly mammoth. T / F
- 2) The woolly mammoth died out more than 4,000 years ago. T / F
- 3) The woolly mammoth was the star of the movie Jurassic Park. T / F
- 4) Woolly mammoths could return to Earth within the next six years. T / F
- 5) An entrepreneur helped the research by giving \$50 million. T / F
- 6) The entrepreneur wants to bring back more species from extinction. T / F
- 7) The Apollo moon missions led to the creation of GPS technology. T / F
- 8) The entrepreneur said genetics will improve freeze-dried food. T / F

Synonym Match

(The words in **bold** are from the news article.)

- | | |
|-------------------------|--------------------|
| 1. bringing back | a. quickly |
| 2. extinct | b. method |
| 3. entrepreneur | c. make better |
| 4. technique | d. wiped out |
| 5. expert | e. changes |
| 6. founder | f. reviving |
| 7. rapidly | g. specialist |
| 8. innovations | h. journeys |
| 9. missions | i. business person |
| 10. improve | j. creator |

Discussion – Student A

- a) What do you know about woolly mammoths?
- b) Do you think bringing the woolly mammoth back is a good idea?
- c) Why do you think scientists want to bring it back?
- d) What are the dangers of reviving the woolly mammoth?
- e) What do you think of cloning?
- f) How much like Jurassic Park is bringing back the woolly mammoth?
- g) What do you know about the Ice Age?
- h) How important is the job of a geneticist?

Phrase Match

- | | |
|--|----------------------------|
| 1. Scientists are working on bringing | a. improve our lives |
| 2. The giant creature is an ancestor | b. techniques |
| 3. It became extinct | c. to the moon |
| 4. They will also use cloning | d. over 4,000 years ago |
| 5. He is an expert | e. biotechnology |
| 6. rapidly advance the field of | f. back the woolly mammoth |
| 7. result in innovations that will benefit | g. species de-extinction |
| 8. the Apollo missions | h. of everyday products |
| 9. They led to the development | i. of the Asian elephant |
| 10. genetics will | j. in gene editing |

Discussion – Student B

- What do you think about what you read?
- What do you think of woolly mammoths?
- Would you like scientists to bring back the dinosaurs?
- What do you think of the idea of de-extinction?
- How might this research benefit our lives?
- What extinct animal would you like scientists to bring back?
- What three adjectives best describe this story?
- What questions would you like to ask the scientists?

Spelling

- The giant ueearrct
- an ocaetsrn of the Asian elephant
- It became xtctnei over 4,000 years ago
- They will also use ngocinl techniques
- a steiintegc from Harvard Medical School
- He is an pxerte in gene editing
- revive other eecpsj
- he hoped to rapidly enadacv the field
- the research will result in nitoannvois
- etenbif biotechnology and health care
- the Apollo imnssois to the moon
- irepomv our lives

Answers – Synonym Match

1. f	2. d	3. i	4. b	5. g
6. j	7. a	8. e	9. h	10. c

Role Play

Role A – De-extinction

You think de-extinction is the best use of genetics. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least useful of these (and why): GM food, growing organs or personalised medicine.

Role B – GM Food

You think GM food is the best use of genetics. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least useful of these (and why): de-extinction, growing organs or personalised medicine.

Role C – Growing Organs

You think growing organs is the best use of genetics. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least useful of these (and why): GM food, de-extinction or personalised medicine.

Role D – Personalised Medicine

You think personalised medicine is the best use of genetics. Tell the others three reasons why. Tell them what is wrong with their things. Also, tell the others which is the least useful of these (and why): GM food, growing organs or de-extinction.

Speaking – Genetics

Rank these with your partner. Put the best uses of genetics at the top. Change partners often and share your rankings.

- | | |
|--------------------|------------------------------|
| • De-extinction | • Increasing intelligence |
| • GM food | • Personalised medicine |
| • Growing organs | • Ending hereditary diseases |
| • Partner matching | • Choosing eye colour |

Answers – True False

1 F	2 T	3 F	4 T	5 F	6 T	7 T	8 F
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Answers to Phrase Match and Spelling are in the text.