Recipe for a Resurrection

Bringing extinct species back to life is no longer considered science fiction. But is it a good idea?

By Tom Mueller

Collection: Tasmanian Museum and Art Gallery

Each new woolly mammoth carcass to emerge from the Siberian permafrost triggers a flurry of speculation about resurrecting this Ice Age giant. Researchers have refined at least some of the tools needed to turn that hope into reality. Last November, when a team led by Teruhiko Wakayama, a reproductive biologist based in Kobe, Japan, reported it had cloned mice that had been frozen for 16 years, the scientists conjectured that the same techniques might open the door to cloning mammoths and other extinct species preserved in permafrost. Talk of cloning surged again a few weeks later when a group at Pennsylvania State University, led by Webb Miller and Stephan C. Schuster, published 70 percent of the mammoth genome, laying out much of the basic data that might be required to make a mammoth.

“I laughed when Steven Spielberg said that cloning extinct animals was inevitable,” says Hendrik Poinar of McMaster University, an authority on ancient DNA who served as a scientific consultant for a film about the making of *Jurassic Park*. “But I’m not laughing anymore, at least about mammoths. This is going to happen. It’s just a matter of working out the details.”

Today the thorniest questions about cloning extinct species may be less technical than ethical. “Mammoths, like elephants, were intelligent, highly social animals,” says Adrian Lister, paleontologist and mammoth expert at the Natural History Museum in London. “Cloning would give you a single animal, which would live all alone in a park, a zoo, or a lab—not in its native habitat, which no longer exists. You’re basically creating a curio.” Tom Gilbert, an expert in ancient DNA at Copenhagen University who with Schuster and Webb pioneered the harvesting of mammoth DNA from hair, admits that as a student of mammoths, he’d be the first to go see one trundle across a paddock. But he questions both the utility and the wisdom of cloning extinct species. “If you can do a mammoth, you can do anything else that’s dead, including your grandmother. But in a world in global warming and with limited resources for research, do you really want to bring back your dead grandmother?”

http://ngm.nationalgeographic.com/2009/05/cloned-species/mueller-text#close-modal

1. What do you think about cloning animals?
2. Do you agree to clone extinct animals ?
3. For academic research, do you agree to clone extinct animals?
4. What will happen if cloning animals were legal in Taiwan ?
5. In order to solve food crisis problems, do you agree to clone animals?
6. What do you think about cloning human?
7. What do you think about ethical criticism of cloning human?
8. In order to transplant organ or to improve work efficiency, are you willing to clone yourself ?
9. Do you want to bring back your dead intimate person?
10. What do you want to clone if you had much money ?