

Below are two opposing opinions on the issue of de-extinction. For more information, and the original arguments, go to the links under each opinion.

## Should We Bring Back Extinct Species? Yes!

Stewart Brand is an author, businessman, environmental expert, and president of *Revive and Restore*, a project dedicated to the revival of extinct species. He gives seven reasons for reintroducing extinct animals to our world.

- 1. We protect endangered species. For the same reasons, we should bring back extinct species. It is important that we keep the diversity of our planet. We also must learn how to prevent extinction from happening again and to fix the harm humans have already done.
- 2. The fact that humans can brings animals back is amazing. This will encourage imaginations and create more conservation.
- 3. Hope is a very powerful tool. People need to know there is hope for our planet. For this reason, the International Union for Conservation of Nature keeps a "Red List" of endangered species. The organization plans to add two "Green Lists." These lists will include species that are now growing and wild lands that are doing well because of good management. Bringing back extinct animals will also give people hope.
- 4. Bringing back these animals will provide new answers for science. Questions such as what happened to them and why similar species survived could be answered.
- 5. Some of the techniques scientists use in de-extinction can be used for living species. Genetic problems might be solved with cloning. For example, Tasmanian devils\*are animals only found in Australia. They have been dying out because of a type of face cancer. With the knowledge scientists gain from de-extinction, they could take the gene causing the cancer out of the next generation. Then all Tasmanian devils would be immune.
- 6. Many of the animals that are extinct are known as keystone animals. Without them, their habitat disappears. For example, wooly mammoths\* lived on the huge grasslands in the far north. Bringing them back would mean that less greenhouse gas would be released. Forests in Europe and Asia used to be mixed with meadows and grasslands, because of the aurochs\*.
- 7. These animals would serve as symbols to inspire people to conserve and protect the environment.

http://news.nationalgeographic.com/news/2013/03/130311-deextinction-reviving-extinct-species-opinion-animals-science/

## Should We Bring Back Extinct Species? No!

Stuart Pimm is the Doris Duke Chair of Conservation Ecology at Duke University.\* He is a writer, researcher, and expert on preventing extinctions. He lists six reasons why we should not try to bring back extinct animals.

- 1. Very few popular species would be brought back. However, there are already many living things becoming extinct many times faster than normal.
- 2. Many of the plants these animals would eat are also extinct or endangered. They may still grow in special gardens, but can we grow them in the wild today?
- 3. If we can still provide the plants, what would we do about their homes? Our land has changed so much in the 4,000 years since some of these animals lived. Pimm says that we must ask, "What changed in their original habitat that may have contributed to their extinction in the first place?"
- 4. How can we be sure they will survive? Zoo animals that are extinct in the wild are very difficult to place back in the wild. An example of this is the gray wolf\*. The gray wolf was reintroduced to Yellowstone National Park in the last decade. The wolves did well and helped return Yellowstone's natural balance. However, ranchers are now hunting them to keep their cattle and sheep safe. Other kinds of animals that have been placed back in the wild in different parts of the world have not survived, either because they cannot adjust or because they are hunted.
- 5. Today the issues of protecting animals and their environments involve the government and money. For example, the spotted owl\* is on the endangered list. This means that both it and the trees it lives in are protected by law. However, logging companies complain that they need to cut the lumber in the forests that are the owl's home. In the future, will we stop protecting animals in the wild and just keep a few in zoos, knowing we could always make more when we need them? Pimm worries that people will stop caring about endangered species if we think that we can always put them back if we have their DNA.
- 6. Research costs money and money is difficult to get. Universities often make their decisions based on how much money certain research will bring in, instead of the good the research can do for the world. If scientists focus on bringing extinct animals back, there will be less money and fewer scientists to study our current problems in ecology, conservation and the environment. Should we spend precious research dollars and research time on bringing back these few species, or to the saving of current ones now in danger?

\*See pictures on "Before You Read" page.

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