Jurassic Conservation?

Malcolm Tait

Elements of the Essay

Calling cloning a "scientific gimmick" and "a classic case of lazy science that will spare us all the bother of preventing extinction," Malcolm Tait challenges the scientific community's argument that cloning could serve as a form of conservation, particularly of endangered species. The purpose of his essay is clear—to point out the dangers of cloning for conservation and to make readers question it, not just accept it blindly.

About the Writer

Malcolm Tait is managing editor of *The Ecologist*, a British magazine based in London.

RECENTLY, A COW IN IOWA named Bessie gave birth to a gaur, an endangered oxlike animal native to Asia. This miracle was achieved by injecting gaur cells, complete with their DNA, into hollowed-out cow eggs, then electrically fusing the eggs and DNA together.

Already there are plans afoot for more cross-species surrogate motherhood. The bucardo, a Pyrenean mountain goat, became extinct in January 2000, when the last of its kind was put out of its lonely misery by a falling tree. Cells were taken from the corpse, and the Massachusetts-based company Advanced Cell Technology is planning to clone the creature back to life. The panda is next on the list for rejuvenation, and there's talk of trying to bring back the Tasmanian tiger, a wolflike animal that lost its last grip on survival in the 1930s. Even the prehistoric mammoth is being considered for a possible comeback. It's a fascinating scientific gimmick, a perfect example of doing something because we can. We should leave it at that.

But we won't. There's excited talk of cloning and genetic engineering offering a marvelous boost to wildlife conservation, a high-tech solution to our tendency to drive plant and animal species to extinction. This is

tripe, for the cloning of endangered species completely contradicts the spirit and practice of conservation. Conservation isn't just about saving a particular species, it's about reducing our destructive impact on natural systems that are in increasing danger of being unable to sustain themselves, and ultimately, of sustaining us.

Wildlife conservation is a precarious affair, because failure is forever. 4
It has, quite literally, a deadline. Sometimes that deadline is easy to see, other times it's not. In the 1980s, it became clear that whales were struggling to survive and new laws were put into place. In the early 1990s, the plight of the elephant came to the world's attention and was reasonably successfully dealt with. We've recently discovered that the tiger is in even more danger than we'd previously thought, and wheels are beginning to turn to keep them going. Yet for every headline species that captures our heart, there are many more that don't make it.

But conservation takes time and money. It requires careful management 5
and planning, and it involves sacrifices. It demands that the long-term view take precedence over, or is at least built into, the short term.

Which brings us back to Bessie. Suddenly, for the first time ever, 6
we've got an alternative to conservation. It's only a tiny crack at present, but science will work to widen it. What's the point in putting all that effort into looking after ecosystems if we've got the ability to clone extinct species back into existence? Just think of what this makes possible—we can keep on crashing our way across the planet, doing what we want, and whenever some species starts to disappear as a result, we've got the technology to keep the species going.

Cloning endangered species is a classic case of lazy science that will 7
spare us all the bother of preventing extinction. However much its supporters may protest that cloning will only be used to complement conservation, to step in when conservation has failed, the day will come when the financial benefits of, say, clearing a rainforest will outweigh the costs of cloning the endangered species within. Someone will be prepared to pay for it, and the rot will have begun.

And what will we do with these phoenixlike creatures? If their habitat 8
is no more, where will we put them? Perhaps we will create reservations for them—but to save space, we'll need to make sure we only hang on to the species that benefit ourselves. We'll need to recreate habitats that suit them, and if the new cloned versions of once-wild animals require special diets, or develop viruses or illnesses that their originals never encountered, then we can genetically modify their surroundings to suit.

9 None of this is to say that genetic scientists and those who fund them are power-mad seekers who want to remake the whole world according to their whims. Science is the discipline of discovery, of finding out, of increasing knowledge. And so it is that, generally, each new step forward is taken with the honest and sincere desire to benefit humankind. Yet it's curious how often genetic scientists, nudging the process onward, tend to see their own work in isolation from the overall results of these new technologies.

10 "The prospect of human cloning causes us grave misgivings," writes Ian Wilmut, co-cloner with Keith Campbell in 1996 of the famous sheep, Dolly, in his book *The Second Creation: Dolly and the Age of Biological Control.* "It is physically too risky, it could have untoward effects on the psychology of the cloned child, and in the end we see no medical justification for it. For us, the technology that produced Dolly has far wider significance."

11 Wilmut is fully convinced of the benefits of his own work; he knows that he has paved the way for future cloning, yet is distancing himself from any responsibility for it. It's rather like the work of atomic scientists in the 1930s—everyone involved spoke of the possible positive benefits in their own specific research, but never mentioned the obvious potential for the destruction of the entire planet.

12 Which is why, ultimately, we should not be fooled by the arguments about cloning as boon to endangered species. Let's honestly admit to ourselves what we're getting into. Cloning is a brand-new chapter in the history of humankind, but it has nothing, absolutely nothing, to do with conservation.

"Jurassic Conservation?" by Malcolm Tate.

1. List and define any unfamiliar words.

2. Clearly explain the following:
   - The specific scientific activity the writer is describing in this essay
   - The stated motives for the scientific projects described
   - The reason why the writer is against this use of science.

3. Explain why the author might have chosen this title for the article.

4. What did he mean, and reference was the author summoning , when he described creatures as "phoenixlike"?

5. Explain, in detail, why Conservation is a precarious affair" (par.3)

6. What's the writer's main argument or *thesis* in this essay?

7. Is the main argument identified in question 6 based on fact or opinion? Give reasons (evidence from the article) for your opinion.

8. Does the writer have strong feelings about the argument he's making in this essay? How do you know? Find examples of language choices in this article that support your answer.

9. Who are the intended readers of this essay? Give reasons for your answer.

10. What other "real world" examples illustrate this thesis?