

De-extinction aspirations walk line between noble and selfish

The conceit of Beth Shapiro's disturbing and thoughtful new book, *How to Clone a Mammoth*, is that it is a how-to manual, a cookbook for wannabe lords of (re-)creation. Nine of its 11 chapters describe steps in the process of bringing an animal back from extinction, beginning with how to select an organism to resurrect, and ending with how to look after it once it has been released into the wild. Somewhere between wild, witty, speculative pop science and tediously technical genetics primer, the book is a bit of an uneven read but well worth the effort, because Shapiro knows whereof she speaks. At the "ancient DNA laboratory" at the University of California, Santa Cruz, she and her colleagues study, among other things, the genetics of the mammoth, a cold-adapted relative of the elephant absent from this planet for 37 centuries.

Shapiro's vision of de-extinction is focused entirely on the larger ecological benefits to be reaped from the exercise. For her, the goal is not to satisfy scientific curiosity or stimulate tourism, but to reintroduce keystone species in order to initiate a cascade of effects congenial to restoring prehuman levels of biodiversity. Some advocates for this "rewilding" argue for the release of exotic megafauna, such as Asian and African elephants, from American zoos, that they might inhabit the empty ecological niches of long-extinct species. Shapiro persuasively integrates de-extinction into the rewilding project, arguing that it makes more sense to genetically reengineer hairy mammoths to do the job than to hope against reason that tropical elephants will learn to enjoy winter snow.

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis. Read full, original post: [Can Science Go Back to the Future?](#)