8. De-extinction

The possibility of reviving extinct species is often explored in science fiction, perhaps most famously in *Jurassic Park*. Although there is still a long way to go before humans can bring back dinosaurs, scientists have had a considerable amount of success bringing back more recently extinct species. In 2003, a team of Spanish and French scientists brought the bucardo, or Pyrenean ibex, back from the dead, only to see it go extinct once again minutes after being revived due to organ deformities. The bucardo was brought back by injecting nuclei from preserved bucardo cells into goat eggs emptied of their own DNA and implanting them into surrogate mothers.[1] Since then, there have been promising projects that aim to bring back other extinct species such as the passenger pigeon and the gastric brooding frog.

Proponents of de-extinction argue that humans have an obligation to bring back species that were driven to extinction by human activities, such as the dodo bird. In addition, they argue that bringing back extinct species would significantly benefit ecosystems by increasing biodiversity and, in some cases, restoring important environmental balances. Bringing back extinct species, and the process of learning how to do so, might also yield new scientific insights. The "wonder" factor of bringing back extinct species might itself be enough justification to put more funding into the cause—or so some proponents argue.[2]

Opponents of de-extinction point out that de-extinction will draw away resources and attention from other scientific efforts to preserve biodiversity. Why devote money and scientific effort to bring back lost species when there are so many endangered species on the brink of extinction? Additionally, some critics point out that if brought back, previously extinct species could pose unknown threats to the livelihood of existing habitats and species.[3] Furthermore, if many factors brought about the extinction of a given species, why should we intervene to artificially reverse the process?

STUDY QUESTIONS:

1. What, if anything, is problematic about the loss of a given species? Are species valuable for their own sake? Or are they valuable for some other reason?
2. Should humans prioritize species on the brink of extinction over species that are already extinct if de-extinction is undertaken?
3. What is the most morally significant criteria in deciding whether to revive an extinct species?

[1] https://www.nationalgeographic.com/magazine/2013/04/species-revival-bringing-back-extinct-animals/

[2] https://news.stanford.edu/news/2013/april/greely-species-deextinction-040413.html

[3] http://e360.yale.edu/features/the_case_against_de-extinction_its_a_fascinating_but_dumb_idea