Questioning the ethics of de-extinction

Description

If science was successful in resurrecting extinct species, what would be the point?

By **Georges R. Dupras**

In late March of 2013, scientists met at a conference in Washington DC, sponsored by the National Geographic Society, to consider ‘de-extinction’. They discussed the how, why and ethics of bringing species back from the abyss.


Dodo bird – Illustration: Roelandt Savery

They have already established a preliminary list of some twenty-four species that they believe can be brought back from history. These include: the mastodon, woolly mammoth, Caribbean monk seal, great auk, Carolina parakeet, Cuban Macaw, aurochs, dodo, Dusky seaside sparrow, Labrador duck, heath hen, ivory-billed woodpecker, imperial woodpecker, moa, elephant bird, passenger pigeon, Pyrinian ibex, quagga, smilodan, baiji, thylacine (Tasmanian tiger), Stellar sea cow, hula, and maho (genus).

I believe that science has the required DNA as well as expertise to, at the very least, begin work on this rather ambitious project. The question is why? If the scientific community were to be successful in resurrecting a mastodon or woolly mammoth, what would be the point? The free ranges that these animals once counted on no longer exist. Where would we put them? If the answer is in a zoo, then I think we should discuss why we're doing this in the first place.

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As for the dodo, Caribbean monk seal or the great auk, among others, are we bringing them back just to satisfy the discriminating pallets of a few self-pampered foodies? I seriously doubt that we're doing this for the sake of atonement; so that leaves self-serving motives.


Passenger pigeons – Illustration: Barry Kent MacKay

There are those who have serious reservations about this initiative. Many have worked against incredible odds, trying to convince the public that there are values that go well beyond profit or self-gratification in our relationship with other species. There is little doubt that frozen specimens, of now extinct animal species, lie in the depths of arctic crevasses, encased in glaciers or buried under tons of pre-historic snow. These remains represent a wealth of opportunity for the scientific community that should be developed. Genetic research has wonderful potential, particularly in the field of medical science; however, where there is a positive there is an equal or greater negative. If our ultimate objective in bringing back lost species is self-indulgence, I believe we have an ethical responsibility to open this discussion up to a wider audience.

I would be very disappointed if the scientific community moved forward in the same covert fashion they did in developing genetically modified foods, or now with species enhancement. This is a discussion that involves and impacts on all of us. A strong argument could be advanced that we don't deserve to co-exist with species we eradicated in the first place.

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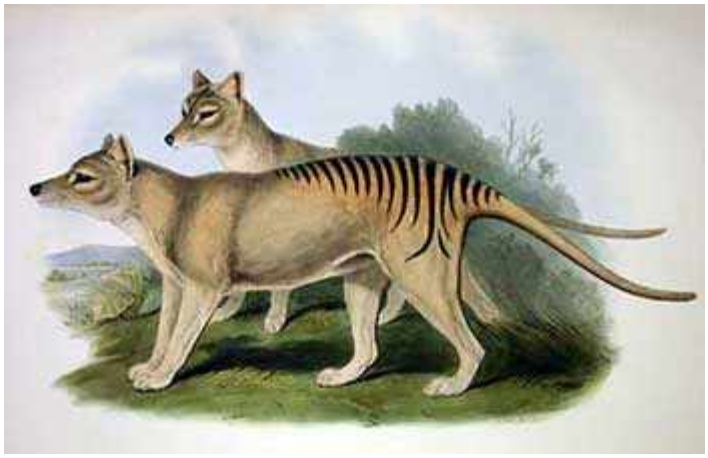
Tasmanian Tiger – Illustration: John Gould

Another consideration is who will finance this research? Will it be private interests, and will these include corporations such as Monsanto? If so, will they claim patent ownership to a genetically reproduced life form? Should any government or corporate entity own the patent on a genetically altered life form?
I fear that this new course, though not without scientific merit, will only encourage centuries of conditioning – bolstering habits fuelled by greed and rationales that have brought us to this point in the first place.

What of the sanctity of life if we can simply discard one model in favour of a new one having greater capital value?On a recent trip I was asked by a climatologist from South America, what my views were on the subject of species enhancement? He informed me that such research was being conducted in Massachusetts, using the genes of an elephant and those of a chimpanzee. This isn't our first attempt at improving nature. We have produced the 'Frankenfish', a genetically modified salmon, and of course the killer bee.

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Pyrinian ibex – Illustration: Joseph Wolf

The killer bee was an effort to create a stronger and more resilient honey bee. Unfortunately, along with other miscues, this experiment went terribly wrong. We were told that work on a genetically altered bee was fashioned to allow the pollinator to fly further distances, collect more pollen and become more resistant to the elements and possibly even neonicotinoids. Since that time and because of pesticides, seven different species of bees have been placed on the endangered species list.

Approximately two thirds of the food crops consumed by humans require pollinators such as bees to successfully reproduce crops. Over 80% of the honey bee colonies in France have been wiped-out. There are many factors, but an increasing body of scientific evidence points to the use of neonicotinoids as a major contributing factor. Nionicotinoids or neonics, are systematic pesticides that are absorbed into plant tissues and invade the organism. They are used on corn, soy, wheat and canola seed and can kill bees directly. Could it be that science anticipated this occurrence?

Rather than address the problem of chemical pesticides, genetically modified foods and fertilizers, we are now trying to re-invent nature to accommodate pesticides. When we try to improve on nature it might be a good idea to keep in mind that old American adage: “If it ain’t broke, don’t fix it”

Feature image: Mesohippus fossil – Royal BC Museum

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*For over fifty years **Georges R. Dupras** has advocated for animals. He is a member of the International Association for Bear Research and Management (IBA), a Director of the Animal Alliance of Canada (AAC), Quebec Representative of Zoocheck Canada and past Board member of the Canadian SPCA. He worked on the original Save the Seal campaign in 1966 that culminated in the founding of the International Fund for Animal Welfare (IFAW) in 1969. He has published two books including Values in Conflict and the eBook Ethics, a Human Condition. Georges currently lives in Montreal, Canada.*

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