

# Experts urge extreme caution on 'rewilding' to save wild places

February 8 2016

---

European bison imported from Poland now roam Denmark's Baltic island of Bornholm in places where the animals haven't lived for thousands of years. Meanwhile, in a far corner of Siberia, scientists are attempting to reconstruct an ecosystem that was lost many thousands of years ago along with the woolly mammoth by introducing bison, musk oxen, moose, horses, and reindeer to a place they call Pleistocene Park.

These efforts to "rewild" the landscape have become increasingly popular in some corners, but researchers writing in the Cell Press journal *Current Biology* on February 8 say that scientific evidence supporting the potential benefits of this form of restoration is limited at best. As history has shown, the introduction of species into new places is often met with unexpected, [negative consequences](#) for the environment.

"Implementation of rewilding in the field is already occurring," says David Nogués-Bravo of the Center for Macroecology, Evolution, and Climate at the University of Copenhagen. "However, scientifically we are in the dark about the consequences of rewilding, and we worry about the general lack of critical thinking surrounding these often very expensive attempts at conservation. Practitioners mustn't assume that scientists are able to predict the full consequences of introducing novel species to dynamic and ever-evolving ecosystems."

Nogués-Bravo and his colleagues say that before implementing rewilding in the field as a major conservation approach, more basic research is needed about the consequences of modifying ecosystems. They argue

that, for now at least, conservation efforts should focus instead on protecting biodiversity and on reducing major threats to the environment, such as deforestation, climate change, and invasive species.

"We don't know what the consequences of rewilding may be, and rewilding may also bring de-wilding in the form of local and global extinctions," says Carsten Rahbek, also a co-author. He and Nogués-Bravo note the potential also that rewilding might draw down already limited funds available for less splashy, but more scientifically supported, conservation projects.

Daniel Simberloff, a co-author from the University of Tennessee, says that the reintroduction of wolves to Yellowstone National Park is often highlighted as a success story through its cascading effects on the landscape. But the influence of such reintroductions can be highly variable and hard to predict.

"Only in some cases do you find evidence of strong cascading effects of large mammals, while other examples show only weak effects or even unexpected, but dramatic, negative consequences," Simberloff says. "Therefore, we advocate caution and careful consideration both for the animals that are rewilded and the ecosystems they are placed into."

While hard work, vigilance, and creativity on the part of scientists, conservation practitioners, and policy makers are required to face the world's sixth [mass extinction event](#), the researchers write, "our hope is that the [hard work](#) is grounded in detailed ecological theory and offers clear conservation benefits to all of biodiversity and not just the opportunity to see large, wild beasts roaming the landscape."

The researchers say that they are now exploring the feasibility, adequacy, and risks of rewilding by studying fossil remains and their DNA in museums around the world. Their goal is to understand changes

in ecosystems that occurred in past "natural experiments" that resemble rewilding.

**More information:** *Current Biology*, Nogués-Bravo et al.: "Rewilding is the new Pandora's box in conservation"

[dx.doi.org/10.1016/j.cub.2015.12.044](https://doi.org/10.1016/j.cub.2015.12.044)

Provided by Cell Press

Citation: Experts urge extreme caution on 'rewilding' to save wild places (2016, February 8)  
retrieved 19 April 2024 from

<https://phys.org/news/2016-02-experts-urge-extreme-caution-rewilding.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.