

Siberian rewilding activity sheet

39 Ways to Save the Planet

What is rewilding?

This is a resource linked to the BBC Radio 4 programme *39 Ways to Save the Planet*. Listen to the 14-minute episode [Siberian rewilding](#) before embarking on the tasks below.

George Monbiot recently brought this term into the public consciousness after the publication of [his seminal book](#) *Feral* in 2013. The term 'rewilding predates Monbiot but his book on 'rewilding the land, sea and human life' struck a chord with many people. Monbiot explains in chapter 1 that he is 'ecologically bored' by the smallness of life, and he resolves to rewild it. To him, rewilding is both the rewilding of the natural world, especially unproductive 'uplands' in the UK, and the re-involvement of people with nature. The rewilding movement argues that the reintroduction of lynx, wolverines, beavers, boar, moose, bison, wolves and even elephants would improve earth's living systems.

Siberian rewilding

Russian scientist Nikita Zimov states that Siberia once had woolly mammoths, woolly rhinoceros, bison, horses, and reindeer. He explains that, without herbivores grazing and maintaining grasslands, vegetation has been outcompeted by the unrestricted growth of trees, shrubs, mosses, and lichen. Grasslands have disappeared, and he claims the Siberian ecosystem has collapsed as a consequence.

Dr Marc Macias-Fauria from St Peter's College, Oxford, explains that open tundra with low vegetation like the Central Siberian Plateau is surprisingly very effective at reflecting incoming solar radiation, with around 80% albedo. The Siberian albedo rates change from the winter into the summer due to different landcover types. In comparison Siberian forests only reflect back into space 40% of incoming solar radiation. There is less reflectivity due to tree cover. As a result, it is thought that there are large regions of the northern latitudes where planting trees might lead to a *warmer* climate and continued permafrost melting.

The removal of these Siberian forests would occur naturally with the rewilding of the Siberia argues Dr Macias-Fauria. This would be achieved by the reintroduction of large animal herds which would trample and disrupt both tree growth and the thick blankets of Siberian snow which, counter-intuitively, actually warm the soil beneath (leading to further permafrost melting). Dr Tasmin Edwards offers the counterargument that grazing 10% of the permafrost with these animals might only prevent 1% of our future greenhouse gas emissions.

Rewilding in the UK

The Eurasian beaver was successfully reintroduced to the UK in 2009 after being hunted to extinction in the 16th Century. The beaver has been reintroduced to west Scotland in Argyll and along the river Otter in Devon. The River Otter Beaver Trial (ROBT) has been coordinated by Devon Wildlife Trust and Exeter University and has proven, over a 5-year period from 2015-2020, that few conflicts are created from this species. As a result, BBC news reports that 2020 has [been good for England's beavers](#) and has spurred other small-scale efforts such as the [Cabilla Beaver Project](#) in Cornwall.

Similarly, there are now calls for the return of the lynx to the remote UK countryside of Kielder Forest, Northumberland, the largest manmade woodland in England. In this [BBC Teach class clip](#) Faith, a student from Tyneside, discusses the pros and cons of releasing such an animal.

The FT article [Rewilding — does it need a rethink?](#) sets out the complexities surrounding the idea of turning land back over to nature, raising both the issue of food security (as the UK only produces half of the food it consumes) and the strong objection of upland sheep farmers (which is wrapped up in keeping the Welsh language alive, and the general concern of empty rural communities).

Using the BBC Teach class clip video, answer the following questions.

1. What is the argument from Dr Paul O'Donoghue, chief scientific advisor for The Lynx Trust?
2. What is said about lynx reintroduction in Germany?
3. How often 'does the scientific information say a lynx kills a sheep'?
4. How many lynxes do the Lynx Trust want to release, and into what size of area?

Further reading

- Rewild the world [For more wonder, rewild the world | George Monbiot - YouTube](#)
- Rewilding success stories [Rewilding success stories | Conservation | The Guardian](#)
- Beaver reintroduction in the UK [Beaver Reintroduction in the UK - The RSPB](#)

Suggested questions for Siberian rewilding

- a. What happened when the Pleistocene ended, and the Holocene began?
- b. What type of animal herd might help to 'the properties of that [snow] blanket' to be lost?
- c. What counterargument is put forward emphasising the importance of trees and shrubs?

Answers

1. The lynx 'should be here', they belong here as much as a hedgehog or a badger. Our forests are less healthy without them.
2. They are a big driver of tourism. In Germany they generate about £12 million per year.
3. Once every two and a half years.
4. The Lynx Trust want to release 6 lynxes into the 250-mile² Kielder Forest.

An RGS-IBG expert

Go to [What our expert says](#) to hear further analysis from Professor Vincent Gauci on the Siberian rewilding methods in *39 Ways to Save the Planet*.

