



Rewilding - a good idea?

Rewilding is the reintroduction of locally extinct species. This Factsheet:

- Explains why rewilding has its supporters and opponents.
- Gives examples of species that have been reintroduced and some species that are being suggested.
- Describes the possible ecological impacts of rewilding.

Many species of both plants and animals have become locally or even totally extinct in the UK. There is increasing support for the reintroduction of these species to the areas where they were found (rewilding).

Supporters of rewilding argue that it increases diversity of both fauna (animals) and flora (plants) and helps people reconnect with nature.

Case Study 1: Wolves on the Alladale estate Scotland



Elk and wild boar have been successfully reintroduced to the estate. The elk provide a source of hunting revenue. The boar disturb the soil, encouraging seed germination and increasing floral biodiversity. The estate owner has now suggested that large areas of his estate and a few surrounding estates would be fenced before two packs of about 5 wolves each and bears (!) would be reintroduced at the same time.

The wolves would prey on deer that are causing huge economic damage to forests. They would reduce the need for expensive deer culls and would accelerate the reintroduction of the native Caledonian pine.

By reducing deer populations, the wolves may also reduce the incidence of Lyme disease which is carried by ticks on the deer and increase grouse populations by reducing the fox population.

Local householders remain unconvinced, arguing that some wolves would inevitably escape - heavy snow building up against the fence could enable this.

Walking and hiking groups point out that they have every right to cross the estate without fear of being attacked. They also argue that there would be damage to the landscape because it would require a road to be built around each fenced area.

Farmers are concerned that the wolves will prey on their sheep.

When wolves were reintroduced to Yellowstone National Park in the US, there were the expected benefits of reduced tree damage but the wolves did spread out of the designated areas and had to be tagged, trapped and returned and this monitoring and management proved more expensive than expected.

However, the costs of this were far outweighed by the income generated from ecotourism stimulated by the reintroduction – people like watching wolves!

Case Study 2: Rewilding the lynx



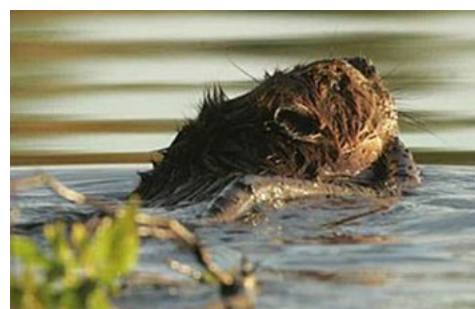
Lynx pose no threat to humans and it is proposed to reintroduce them to parts of Scotland and the Forest of Dean.

One of the justifications for this is that the deer population in many habitats exceeds the carrying capacity and top predators are missing. Damage to trees means economic loss and possible loss of jobs.

Supporters of the idea argue that a top predator is needed as a first step, lynx are seen as more preferable than wolves, which stimulate more fear amongst the local population.

Supporters argue that the lynx is a solitary, secretive predator and most people would never see them. Deer populations would be controlled and tree damage reduced.

Case Study 3: Beavers



Four hundred years after being hunted to extinction for its fur, four families of European beavers have been successfully reintroduced in Knapdale on the west coast of Scotland. It wasn't easy – it took 11 years!

The beavers have successfully created lodges and dams, increasing the size of lochs and creating good habitat for waterfowl, otters and amphibians. In other words, they have acted as a **keystone species**.

Devon Wildlife Trust explain why they regard beavers as a keystone species:

- There was no static water before the beavers were reintroduced there
- Many ponds have been created
- Frogspawn has increased by a factor of 30
- Insect populations such as butterflies and dragonflies have increased
- Thinning of the forest has led to increased invertebrate populations that, in turn, have led to increased populations of birds such as herons, spotted flycatchers, snipe and woodcock
- Gaps in the tree cover has led to the emergence of orchids, pond weeds and purple moor grass

Scientists at the University of Exeter are measuring the height of water levels to assess whether the beavers may be reducing flood risk and collecting water samples to investigate whether the habitat the beavers create filters that clean the water by removing phosphates and other pollutants.

Opponents of beaver reintroduction such as the National Union of Farmers and Anglers Associations argue:

- Farmland will be damaged
- Half-gnawed trees pose a danger to anglers
- There is a danger that dams will breakflooding farmland

Rewilding native trees

Case Study 4: Rewilding native trees

A native tree in Britain is a species that been here since 1650. Many of the native broadleaves in northern England and Scotland were replaced between 1940 - 1970 with exotic conifers such as Sitka spruce.

Trees for Life in Scotland have now planted 1.2 million trees, mostly Scots pine. It is hoped that this will provide a suitable habitat for species such as red squirrel and pine marten.

Conclusion

Rewilding is controversial. Supporters argue that we would simply be restoring the ecological relationships that existed before humans caused species extinction. Biodiversity could be increased and there could be significant economic gains – reduced tree damage, reduced flooding and greater ecotourism. Opponents argue that conditions have changed too much and that there are dangers to people e.g. via wolves, farmland and anglers e.g. beavers.

Activity

Choose one species that is being reconsidered for rewilding. List all the possible benefits and problems that may result. Consider how, if it were your call, you would make the decision Yes or No.

References

Wolf reintroduction to Scotland: public attitudes and consequences for red deer management. Erlend B Nilsen, E J Milner-Gulland, Lee Schofield, Atle Myrsetrud, Nils Chr. Stenseth, Tim Coulson. Proceedings of the Royal Society B, 2007

Practice Question

Outline:

- the potential benefits of reintroducing wolves to Scotland (3)
- the potential problems caused by reintroducing wolves to Scotland (3)

(i) Predation on deer;
 Less damage to trees/reduced economic damage;
 Increased grouse population as foxes preyed upon;
 Reduction in Lyme disease;
 Job creation;
 Ecotourism;
 (ii) Predation on sheep;
 Danger to humans;
 Unforeseen ecological effects e.g. reduction of fox population leading to increased damage from rabbits etc;
 Increased costs e.g. monitoring;
 Damage to landscape through fencing/roads needed;

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