Rewilding

What is rewilding?

Officially, rewilding is: 'the return of an environment to its natural state, through the reintroduction of native species that may have been previously lost to the area'. This basically means bringing back species of plants and animals that used to live somewhere, but have died out or been killed off. There are lots of amazing examples of rewilding happening around the world, and there are lots of benefits to nature and people!

Why is rewilding being suggested in Scotland?

Scotland has famously empty landscapes; tourists travel to see the huge rolling hills and moorlands populated by deer and grouse.

We think of these as a very natural environment, however it has been made this way by humans! Read this quote from Trees For Life, which describes what the ancient Caledonian Forests of Scotland used to be like, before becoming the grazing areas for deer that exist today:

'Wildlife flourished. Lynx prowled the denser forest, packs of wolves hunted deer, giant wild cattle grazed open glades, while boar rooted through leaf litter. Bears scooped salmon from the rivers and elk grazed in the willow meadows created by the dams of beavers. Woodlands covered a large area of the land and the forest was rich and diverse.'

Count how many different species were mentioned in that quote? How many of those species still exist in the wild in Scotland today?
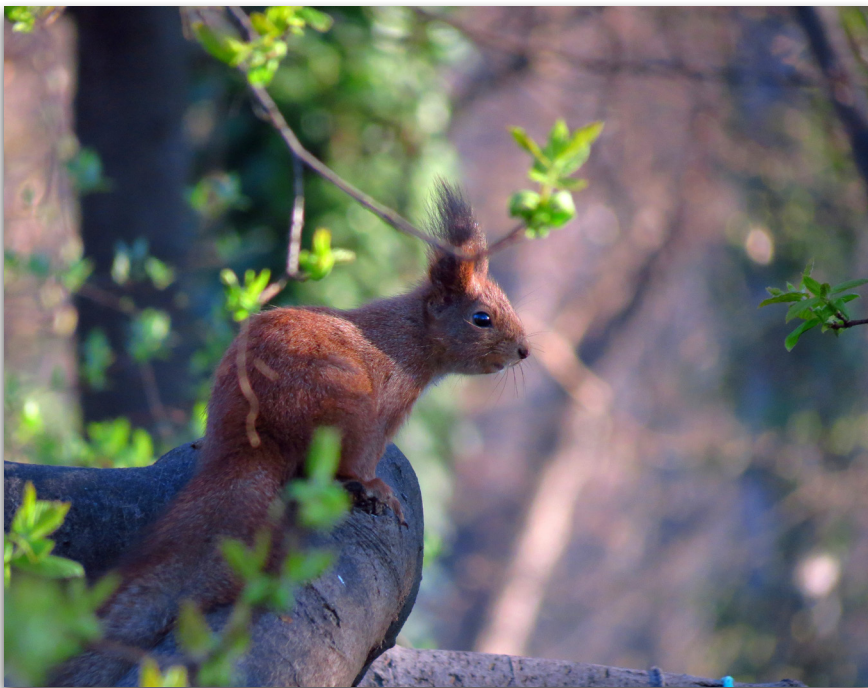
Sadly, we no longer have wolves, boar, bears or elk roaming wild in Scotland as the landscape has been massively changed by humans. Humans have cut down lots of trees, farmed the land and killed off some of the more dangerous predators over the years and this has left us with lots of deer, but not many other large animals.

Deer like to eat saplings (young trees) which means that when we have lots of deer, it is very difficult for woodlands and forests to grow. Without all the trees, other species like red squirrels, have fewer places to live and they struggle to survive as well. Each species has a huge 'knock-on effect' on all the other species around them.

So, if we were to reintroduce wolves in Scotland, as part of a rewilding project, for example, this would change the landscape again! Wolves would eat lots of the deer, reducing the overall deer population. There would be more trees surviving for longer as fewer of them would be eaten by deer, so woodlands and forests would become more established. Gradually, more plant and animal species would repopulate the area and we'd have much higher biodiversity in our landscapes. There are also benefits to the climate, thanks to there being more trees! Trees are 'carbon sinks' meaning they can trap carbon and reduce the amount in the atmosphere. Less carbon in the atmosphere means that less warming of our climate will happen!

There are some arguments against reintroducing large predators, like wolves, back into our landscapes. Can you think about what some of those arguments might be? On a planetary scale, more species diversity seems like a very positive thing, however for local people like sheep farmers, or people who own estates with lots of deer, the thought of introducing lots of wolves might not be very appealing!

There are lots of brilliant examples of where else in the world rewilding has worked though, check out a couple of them here:

Jaguars in Argentina
Wolves in the USA

How to make your own Stop Motion rewilded landscape

Watch this video and then learn how to make your own!
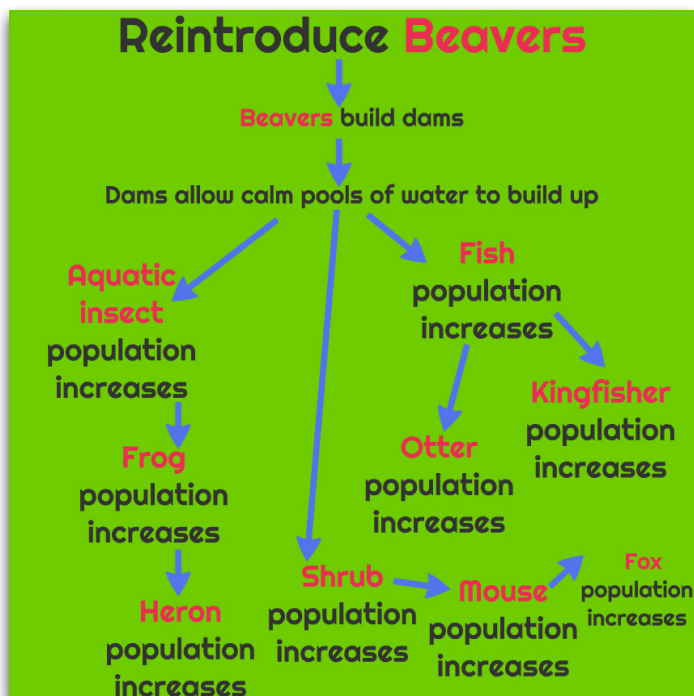
You will need:
- A smartphone or tablet
- Stop Motion Studio app (free to download and use)
- An A3 piece of plain paper
- Coloured paper
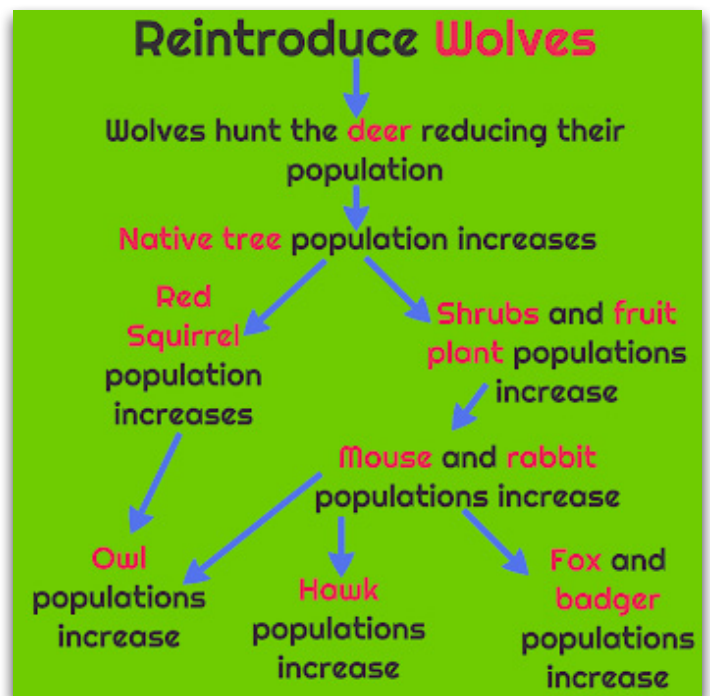- Photos or drawing of animals

What to do:
1. Choose animal flow chart A or B below, or make up one of your own!

Flow Chart A

Reintroduce Beavers

Beavers build dams

Dams allow calm pools of water to build up

Aquatic insect population increases

Frog population increases

Heron population increases

Fish population increases

Otter population increases

Kingfisher population increases

Shrub population increases

Mouse population increases

Fox population increases

Flow Chart B

Reintroduce Wolves

Wolves hunt the deer reducing their population

Native tree population increases

Red Squirrel population increases

Shrubs and fruit plant populations increase

Mouse and rabbit populations increase

Owl populations increase

Hawk populations increase

Fox and badger populations increase

2. First choose which key species you would like to reintroduce into your landscape. It is important to choose one at first, as that animal will adapt the landscape and allow lots of other new animals to return to the land. For example in our Stop Motion video, we chose to reintroduce wolves and then followed the pattern set out in Flow Chart B.

3. Draw out a landscape on your A3 piece of paper. For Flow Chart A, reintroducing Beavers, you will want a landscape with lots of space for a pool or pond and a river. For Flow Chart B, you'll need a hillside with lots of space for trees!

4. Now it is really time to get creative! You will need to either draw and cut out pictures of all the animals and plants listed on your chosen flow chart, or you can find photos of them online and print them out.

5. Set up your smartphone or tablet in a place that means you can easily take photos of your landscape picture. You need to keep the camera as still as possible in between each photo you take to make the finished Stop Motion video look as effective as possible! Maybe you could rest your device on top of a pile of books or get someone to help you and hold it very still!

6. Open up the Stop Motion studio app on your device. Press the '+' button that says 'New Movie'.

7. Start with a very bare landscape with only a few trees and plants. Make sure your device is secure and take the first photo using the app.

8. Put the first animal from your chosen flow chart onto the landscape and take another photo.

9. Do this for each new animal until you have completely 'rewilded' your landscape.

10. You can customise this as much as you want and do close up photos of some animals or add in text or arrows.

11. You can choose to add music, sounds or a voiceover to your video and also change the speed that it plays at in the settings.

12. Once you have finished your video, please share it with us on social media using #DynamicEarthOnline