
REWILDING
Dr Beverley Adams-Groom

Rewilding is also known as Wilding

- **Why is wilding needed?**
- **Definitions and basic principles of wilding**
- **Film: Why Not Scotland?**
- **Refreshments**
- **How much wilding is currently occurring?**
- **Examples of wilding**



All photos taken by Beverley Adams-Groom unless otherwise stated.

Why do we need to rewild?

Most natural ecosystems are degraded to some extent due to human activity over millenia.

Increase biodiversity globally, UK especially

Climate change mitigation through carbon sequestration

Flood risk mitigation

Soil quality improvement, peatland restoration

Nature-based tourism & associated businesses & jobs

Enhanced environment better for people too



Scotland's highlands are largely managed as heather moor for grouse shooting, with original vegetation zones absent in most areas.



Wilding is a big and complex topic but, in a nutshell, it's the

'**Large-scale restoration of ecosystems to the point where nature can take care of itself'** (Rewilding Britain, 2024).

Wilding at landscape scale, to be most effective, requires:

Cores

Carnivores

Connectivity

Communities

Cores: nature-rich habitats that wildlife can spread out from.

In the UK, we only currently have small isolated areas of quite good habitat that could be considered as cores.



Carnivores: top predators and keystone species to drive the ecosystem into balance, allowing greatest biodiversity of plants and animals.

In UK, many of these are absent (wolves, lynx) or close to extinction (wild cat) but reintroductions such as beavers, pine martens and white-tailed eagles are well underway.

- Wolves and lynx are spreading across Europe – more on this in the film



Connectivity: establishing corridors along which animals and plants can move freely from one nature-rich site to another.

- Limited attempts have been made so far. There are voluntary actions in the UK, such as Severn Treescapes, for example.

Grazing

Grazing animals have always been a major element of fully functioning ecosystems. They maintain a mosaic of habitats and associated biodiversity.
Large herbivores are selective grazers, allowing plants to flower, whereas sheep graze uniformly. Ponies and cattle perform most of this role in the UK but other species could too (bison, boar, water buffalo, elk).
The balance must be right though.



Ponies and cattle grazing on Dorset heathland



Restored montane willows at Ben Lawers ***(Image: Sarah Watts/University of Stirling)***

Montane scrub regeneration:

Overgrazing by deer and sheep denuded Scottish mountains of this alpine woodland habitat

30 yrs of planting to bring back this habitat from the brink of extinction at Mar Lodge NNR (Cairngorms) and Ben Lawers (Tayside) NNR: 2639 ha to date

Stabilizes steep slopes, reduces avalanche risk, slows water movement

Still a rare habitat!

Difference between rewilding and conservation??

On same spectrum but rewilding should eventually be self-sustaining with very limited human involvement required.

Conservation tends to be targeting specific habitats and maintaining them, often for particular species. The management levels are higher.

The montane scrub restoration is an example of a rewilding project that requires kick-starting but moving forward the only maintenance will be to ensure correct-density grazing

Film: Why Not Scotland?
By:
The Scottish Rewilding Alliance
Available on licence.

Oostvarsdersplassen, NR, Nr Amsterdam, February 2024



Photo: Pim Jusling

An experiment in rewilding on reclaimed polder, started in 1968, covering 56km2

Over time it has become very wildlife rich and comprises wetland, grassland and woodland

A 'core' with no connectivity for land-based animals, although many birds over-winter there or arrive to breed in the Spring



Photo: Pim Jusling

Grazing animals were brought in to keep the area open for the many species of birds that found the site. Konik ponies, Heck cattle & Red deer

Grazing animals are allowed to behave naturally, with no supplemental feeding
In the absence of top predators, culling must be undertaken to ensure the correct ratio of food to herbivores. Wolves may arrive soon……..



Photo: Pim Jusling



White tailed eagles soar above the Oostvarsdersplassen

Photo: Pim Jusling

Rewilding Scotland – where are we now?

c.150 rewilding projects, some now decades old, others fledgling, land and a few marine

Context: Scotland land area 77, 900 km2, 23% private estates.

Largest rewilding estate: Mar Lodge (NT) - 293 km2, most much smaller.

Affric Highlands Project largest by far but very new:

- 30 yr initiative, started in 2021, aiming to rewild 2000 km2
- Large swathe of central Highlands
- Bringing together communities, businesses & landowners

Much of Scotland is a long way from being restored (3% of land, 1% of marine) , as the film indicated……..



Wildlife Trusts: 30 by 30

The UK Wildlife Trusts launched their ambition to protect 30% of land and sea for nature by 2030 in September 2020.

Fits with the UN Convention on Biodiversity (CBD) which proposes that at least 30% of the world's land and seas should be restored for nature by 2030.

At less than 30% cover, habitat patches are too small and isolated, and species richness abundance and survival rates decline. In 2020, the UK Government committed to the 30 by 30 target – but it's almost certain that won't be reached.

In 2023, the Wildlife Trusts committed £6 million of funding to rewilding/nature restoration but estimate c. £56 billion is needed to reach 30 by 30

Visits to Scottish Wilding Areas



Dundreggan Rewilding Centre, Trees for Life, Charity, April 2024

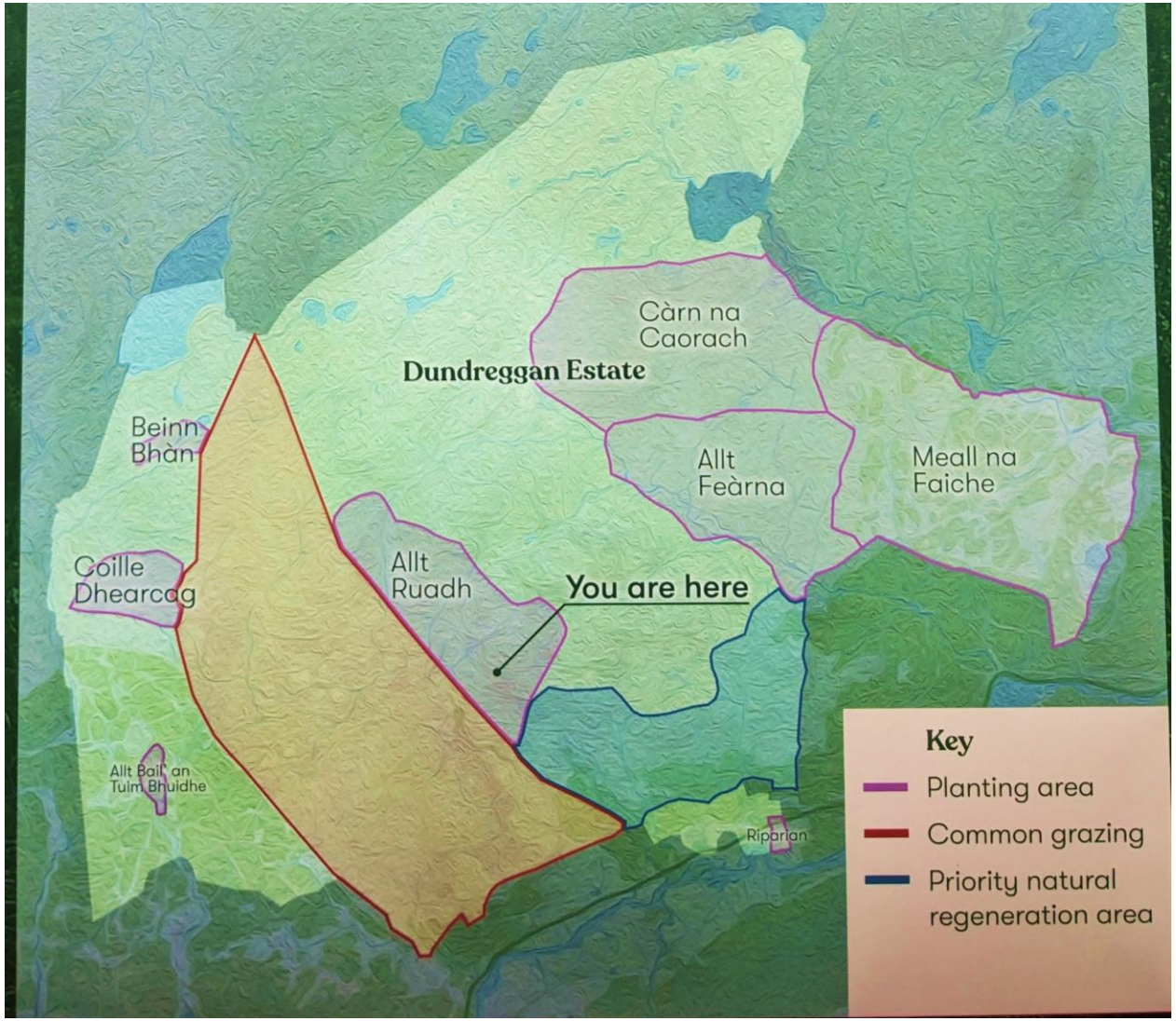
Trees for Life aim to rewild the Highlands and are involved in many projects

Operational in wilding since 1997, loads of expertise, provide advice and trees

Dundreggan Estate was acquired in 2008 as the charity's centre

Volunteers can stay and work in the tree nursery and on planting projects

Lovely place to stay too!









Rare juniper woodland and old birches festooned in lichens. Most trees are c. 300 yrs old. Only now are new ones arriving with removal of sheep and control of deer.



Glen Affric, National Nature Reserve, Central Highlands, May 2024

One of the best examples of the Caledonian Pine Forest that once covered much of Scotland occurs here







Glen Feshie, Cairngorms NP, October 2024

Owned by Dutch business-man Anders Povlsen since 2006

172km2

Rewilding by reducing deer numbers to c. 2 per km2 entirely for nature restoration

Recreation and nature value



River Feshie, 2018.
Courtesy NatureScot.







Rothiemurchus Estate, August 2014, May and October 2024

Example of a privately owned forest estate (Grant family for almost 500 years).

Tourist activities such as kayaking, walking & cycling trails, fishing & camping

Other income: Grouse shooting and deer stalking (Farm to Fork)





Some of the best old Caledonian pine forest is found here.

Forest is being extended by wilding some of the adjacent moorland and excluding deer.

Beavers (keystone species) are being reintroduced.

Connects with Abernethy Forest NNR, owned by the RSPB









Crested tit (Source: BTO)



Siskin (Source: BTO)



Weasel (Source: Woodland Trust)

Rewilding in England

Nature depletion is high due to habitat loss and fragmentation.

Many projects - see Rewilding Britain for list - but most rewilding projects are quite small, some are 'cores' but lack connectivity.

Rewilding Britain > 900 members, 200 larger scale projects registered & 20 rewilding networks & many smaller scale projects. Offer rewilding grants & lots of advice.

Most ambitious: WildEast – East Anglia, since 2020. Aiming to rewild 250,000 ha by asking landowners to put 20% of land into cores and connectivity

Most well-known: The Knepp in Sussex, influential. Successful both economically and in terms of biodiversity.

Wild Ennerdale, Cumbria, October 2023 and previously in 1988

Wilding under partnership between local people, National Trust, Forestry England, National Utilities and guidance from Natural England (became NNR in 2022)

Grazing with cattle & wild Roe deer (managed as no top predators)

Farming continues in the valley and tourism supports local cafes, pubs and hotels.










Range of fish,
especially Arctic Char.
Migration upstream
possible since removal
of barrier at end of lake



Forestry Commission blanketed Ennerdale in commercial spruce in 1920s

Rewilding Coombeshead, Farm, Devon, September 2024









White storks



Wildcats





Thank you for listening!

Recommended websites:

- **Rewilding Europe**
- **Rewilding Britain**
- **Wildlife Trusts**
- **Scottish Rewilding Alliance**