

What is wilding? Definitions

Wilding as defined in Wilder Somerset 2030 "managing land in a way that mimics how nature works when left uninterrupted."

Human intervention has shaped the landscape and habitats of the UK for millennia and as such, humans are part of dynamic processes and much of the landscape has been modified. This means that some human intervention may be necessary to enable natural processes to be restored or mimicked.

A spectrum

We are not trying to return land to a historic or pre-existing, pre-defined state; when we are taking a wilding approach we are aiming to restore natural processes, including restoring missing species, and see what species and habitats form. This is in contrast to the traditional conservation approach where an outcome is pre-determined and land is managed to achieve this.

Wilding is a spectrum. It can be delivered at all scales, with varying degrees of required intervention from humans depending on the space available for nature.

At one end of the spectrum is what can be achieved in communities. These will be small scale and will still require human intervention, although less than traditional management requires and hopefully reducing over time. Examples include:

- Turning parts or whole gardens to nature including ending chemical use, allowing it to be untidy with dead wood, uncut grass etc, dandelions for early pollinators etc
- Communities reclaiming public spaces and allowing them to wild amenity grassland, 'unused' scrubbed up land/corners of industrial estates etc
- Councils allowing grass verges to become wilder without constant mowing and certainly no spraying

At the opposite end of the spectrum are large scale rewilding projects, at such a scale that natural processes can truly be restored and minimising intervention from humans; such as:

- Knepp, 951 hectares
- Geltsdale Farm, 2445 hectares
- Purbeck Heath Super NNR. 3,292 hectare
- Danube Delta, Europe, 580,000 hectares



Wilding types

One of the common perceptions of Wilding is that land is abandoned with no management and with no potential for income generation, food production or agriculture. This is not true, although this is part of the spectrum.

Wilding is not about leaving the land alone entirely, it is about initial management interventions that will allow natural processes to be restored; and monitoring to see what this means for habitats, species and biodiversity in general. Other wilding and rewilding projects show this approach results in increased biodiversity and bio abundance.

Some examples of natural processes that can be restored through a Wilding approach include:

- Mega-herbivore grazing (A massive driver of species diversity)
- Natural flood management / flood plain reconnection
- Peatland restoration creating peat forming habitats
- Natural afforestation including with some scrub and dead wood

To restore natural processes a Wilding approach will usually require grazing and browsing animals. A range of native herbivores would have been present in ecosystems that formed thousands of years ago, and are required to create ecological dynamism and complexity. Conservation grazing has long been used to manage habitats, and we need to consider the density and type of stock we use to mimic those natural grazing processes.

There are a range of ways Wilding can take place that involve grazing animals that can continue to provide food and farming opportunities, albeit requiring a rethink of outputs, inputs, and management. The agricultural outputs will be achieved via a slower, less intensive process and will usually be higher quality and able to sell at a premium price, but will likely be lower quantities of produce.



Initial interventions

The Wilding approach will usually require some interventions up front to allow natural processes to be restarted; it is essential to create the right conditions for nature to thrive in the context of landscapes that have been heavily managed by humans for centuries. These interventions could include:

- Blocking up drainage ditches to restore peatland
- Taking grass cuts initially where there is a high nutrient load in grassland previously in agricultural production
- Bringing back missing species to create a resilient ecosystem
- · Removing dams so fish can move more freely
- Reconnecting rivers with floodplains and restoring their natural course

Once these interventions have taken place we will watch and see what happens with very limited interventions.

Wilding and nature conservation

There are two main differences between wilding and traditional nature conservation.

- 1. Land that is taken on for wilding purposes is usually poor quality for biodiversity and bioabundance, in contrast to land that is taken on for traditional nature conservation which is usually a surviving remnant of good quality habitat that is to be protected.
- 2. Using the Wilding approach there are no set goals in mind for species or habitats, the focus is on restoring ecosystems and natural processes. Traditional nature conservation sets out to manage a site for a particular assemblage of species; these are often species that are threatened and risk being lost in that landscape if action isn't taken to protect them.

Natural processes

The aim of wilding is to restore natural processes. What do we mean by this?

Natural processes are dynamic. They can be huge and catastrophic (volcanoes, tidal waves) or tiny and every day (soil microbes). Natural processes can happen at a large scale with herds of animals grazing landscapes, or at a small scale such as pollinators working in a garden.

Restoring natural processes means allowing nature to lead and direct change, and to create dynamic systems where species can move easily through the landscape and where an interconnected web of species that depend on each other naturally regulate distribution and abundance.

In nature, without human intervention, or other large-scale interruption, ecosystems will succeed towards a 'climax community' that is often quite stable; they function effectively and are balanced. Healthy natural ecosystems provide air, water, food and shelter to support a range of species. Human intervention over millennia has reduced and fragmented ecosystems so that they no longer function. A key example of this is where we have hunted apex predators such as lynx and wolf to extinction resulting in the next trophic level of species (deer for example in the UK) to expand their population to levels that damage the ecosystem. Where this has occurred in order to try and maintain a healthy ecosystem, humans have to intervene.

Humans have reduced the available space for nature to such an extent that most ecosystems can no longer function effectively; areas with real biodiversity and abundance are small and fragmented, preventing dispersal over landscapes and requiring significant human intervention to protect these species. This is what conservation organisations have been doing for decades to prevent species from extinction. We know we now need to do more, to create more space for nature to allow natural processes to be restored; or we face a loss of millions of species worldwide.



(Re)wilding, wilder grazing, and conservation grazing

It is now commonly agreed that using large herbivores and other native species or their proxies to help manage habitats has a benefit over and above what we are able to create with machinery. The closer we get to replicating a range of dynamic native herbivore actions, the more that nature responds in a positive way. Dunging, seed dispersal, bark stripping, wallowing, dust bathing, targeted foraging, rubbing, shedding and breeding all have unexpected positive benefits to wildlife. Reptiles basking in short, dry turf; Birds nesting safe from predators in scrub patches made more thorny by the bushes reaction to summer grazing; Buzzards and sky larks hunting in pig rootled soil.

As evidence becomes stronger for the biodiversity benefits this type of management can have, the interest in developing these types of projects grows. There are three main ways we can implement grazing based 'wilder' solutions to mechanical management.

1. (Re)wilding

One external fence or barrier around as big an area as possible. A mixture of wild or feral cattle, horses, ponies and pigs are added alongside deer, elk, beaver, lynx and wolf depending on the location, country and the presence of a Dangerous Wild Animal (DWA) license. The aim is to create or retain permanent, breeding family groups of these animals interacting with their habitats and each other in a balanced but dynamic way, creating wildlife rich mosaics of habitat as they move around the landscape. Minimum size would usually be based on the normal range size of the apex predator or the largest range of the herbivores involved and ideally would be as large as possible. Rewilding project examples exist from several hundred hectares in size. In the UK, we have lost our apex predators through hunting and persecutions, so humans mimic the Apex predators where there are none in the system through management interventions.

2. Wilder Grazing

Using domesticated and/or feral breeds of grazing, browsing and rootling species across a variety of habitats to mimic natural processes as far as possible. Fences and boundaries reduced to the minimum necessary. Numbers of grazing animals are chosen and maintained by the land manager based on best knowledge of approximate wild population densities of that habitat and the approximate desired habitat outcome. This can include species such as sheep, goats and other large domesticated herbivores where they have proven bio-diversity benefit. Animals should still remain on site all year round as far as practical as behaviour changes with seasons. They should be in stable family groups with elderly or young animals removed from time to time if the group is breeding to maintain average wild type stocking density. Minimum size is the carrying capacity needed for the smallest viable unit of the species used, around 2-3ha for breeding sheep or non breeding stock where there is a high percentage of grass in the mix.

3. Conservation grazing

Using domesticated, native and hardy stock to manage vegetation structure in targeted ways. Animals can be brought in at specific times of year and in any numbers or life stages to meet the prescribed target for that habitat. Often only one species is used or one type of habitat with others fenced off. Native breed types are preferred as they reduce the need for artificial inputs which can affect the habitat such as supplemental feed or medications. The animals used here are a conservation management tool, as such, fenced enclosures can be virtually any size and are usually defined by the management needs of the habitat and not by the animals being used. Conservation grazing has been and continues to be vital to protect fragile and often isolated populations and communities of rare plants and animals that require specific niches that no longer occur naturally or in sufficient quantities in the wider landscape.

4. Abandonment/Non-intervention

Non-intervention is putting a line on a map around something (or possibly an exclusion fence) and letting nature 'do her thing'. Where ecosystem engineers (such as a broad range of native

herbivores?) are able to recolonise, this is the best option for rewilding. However, across much of Britain, there are currently limited opportunities for this to happen and for this to succeed it needs to be at a larger scale to enable natural and dynamic processes to take place. Without dynamic processes being embedded early wildlife gains from ceasing management in intensive systems are lost as one or two species or vegetation structures begin to dominate in the medium to longer term. Until we address the bio-diversity poverty of this country, and at scale, this form of management alone is not an effective solution to the crisis we face.

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