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#### A COMMENTARY ON REWILDING IN EUROPE

# Peter Jones and Daphne Comfort

### **Abstract**

As relationships between people and nature are being reassessed, not least as concerns about climate change gather increasing momentum, so a range of environmental and conservation themes are moving up public and political agendas. Rewilding, simply defined as increasing the role of natural processes within landscapes, is one such theme. This commentary paper outlines the variety of definitions and origins of the concept of rewilding, illustrates some of the elements of rewilding within Europe and offers some general reflections on the rewilding process. The paper suggests that while many benefits have been claimed for moves to increase the role of natural processes within landscapes and environments, rewilding faces several challenges, in that it means different things to different people, public perceptions of rewilding can generate unease, hostility and concern and it has only limited scientific support. At the same time, there is no clear statutory policies to guide the rewilding process. As such rewilding organisations may increasingly look to communication and public relations to garner public and financial support for their cause.

**Keywords:** rewilding; natural processes; policy frameworks; communication, Europe.

### Introduction

As relationships between people and nature are being reassessed, not least as concerns about climate change gather increasing momentum, so a range of environmental and conservation themes are moving up public and political agendas. Rewilding, simply defined as increasing the role of natural processes within landscapes, is one such theme. Souter (2019), claimed 'the rewilding movement has been gaining momentum over the last few years, propelled into the wider public eye by books such as Feral by George Monbiot (2013) and later Wilding by Isabella Tree (2018).' Jepson and Schepers (2016) claimed 'rewilding expresses a new appreciation of wild nature' and 'it represents a growing movement in Europe of people seeking a counterweight to our increasingly regulated lives, society and landscapes.' At the same time, Brown et al. (2012) suggested that rewilding was 'receiving a great deal of practical and political attention', though it has also been described as a 'relatively new but contested discourse' (Pellis and de Jong 2016). With these thoughts in mind, this commentary paper outlines the variety of definitions and origins of the concept of rewilding, illustrates some of the rewilding projects within Europe and offers some general reflections on the rewilding process.

# The Concept of Rewilding

For some people the term rewilding conjures up images of wolves, wildcats and bears and to a lesser extent, golden eagles, beavers and wild pigs but there are a wide range of rewilding opportunities. Reduced management alone may achieve the restoration of natural processes, or the process maybe actively developed. At one end of this spectrum, where seed sources no longer exist in an area, trees can be planted to facilitate vegetation

succession and rivers can be restocked with fish. At the other end the introduction and reintroduction of carnivores and herbivores can also help to restore natural processes.

That said, there is little consensus on the definition of the term rewilding. Lorimer et al. (2015), for example, claimed 'the term rewilding has been applied to diverse concepts and practices' and Jepson (2015) suggested 'the term rewilding is gaining traction in conservation science and policy but lacks easy definition.' Jorgensen (2015), noted 'the term rewilding sounds as if it should have a straightforward meaning "to make wild again." But in truth the term has a complex history and a host of meanings have been ascribed to it.' Wentworth and Alison (2016) defined rewilding as 'reinstating natural processes that would have occurred in the absence of human activity' while for Nogues-Bravo et al. (2016) rewilding is 'the proposed restoration of ecosystems through the re-introduction of species.'

More expansively, Rewilding Britain (2019a) suggested 'rewilding is the large-scale restoration of ecosystems where nature can take care of itself. It seeks to reinstate natural processes and, where appropriate, missing species – allowing them to shape the landscape and the habitats within.' Brown et al. (2012) defined 'rewilding is a strategy for the conservation of complete, self-sustaining ecosystems, primarily involving the protection and, where necessary, reintroduction, of populations of keystone species in large, connected reserve networks.' In a similar vein, for Shepers and de Bruin (2015), 'rewilding ensures natural processes and wild species play a much more prominent role in the land- and seascapes, meaning that after initial support, nature is allowed to take more care of itself.'

The origin of the term rewilding is generally acknowledged to have occurred in the US but its first use is contested. Macmillan's Dictionary (2019) suggested that Dave Foreman, the co-founder of Earth First, the radical environmental protection society, coined the term in 1990. Jepson (2015) attributed the origins of the term to Soule and Noss (1998), almost a decade later. That said, Jorgensen (2015) suggested that the concept of rewilding is also linked to the concept of wilderness, seen as a 'conservation target' and which has 'a long history' with the idea of wilderness having intrinsic value, being traced back to the nineteenth century.

In a similar vein, different origins are claimed for rewilding in Europe. In outlining a 'Short History of Rewilding in Europe', Shepers and Jepson (2016), for example, suggested two factors played a major part in developing rewilding. Firstly, the growing interest in functional ecology, which exposed 'the extent to which we in Europe have come to accept degraded ecosystems', and secondly, large scale abandonment of land in some regions of Europe, with the attendant wildlife revival, provided 'a historic opportunity for nature conservation and to build new rural economies on wild values.' Further, Shepers and Jepson (2016) reported that in 2008, a number of nature conservationists in the Netherlands, Sweden and the UK began to explore the possibilities of steering abandoned landscapes towards a wilder future, and this, in turn inspired the creation of Rewilding Europe in 2011. At the same time, Jepson (2015) suggested that the emergence of ecological network planning and a growing interest in 'naturalistic grazing', in the first decade of the twenty first century, generated 'a suite of principles that inform contemporary rewilding.'

## **Rewilding Projects**

The scale and intensity of rewilding varies across Europe. Rewilding Europe (2019a) reported on a number of 'rewilding areas' where 'we are selecting large pioneering areas in Europe, where we are working with our local partners to make our vision a reality' in the hope that 'this provides inspiration for hundreds of other rewilding initiatives, all across the continent.' The Danube Delta, which covers 580,000 hectares, is one such area and as 'one of the least populated areas in Europe' it offers 'a unique opportunity to restore a whole spectrum of biodiverse habitats – from open estuarine systems, naturally grazed grassland and vast reed beds through to freshwater marshes, coastal lagoons, shallow lakes and riverine forests' (Rewilding Europe 2019b).

This area is home to a variety of waterbirds including pelicans, herons, storks, and cormorants and the wintering area for many species of waterbirds from the steppes, boreal forests and tundra. It includes some of Europe's remaining grazed mosaic forest landscapes and here beavers, golden jackals and white tailed eagles are becoming increasingly commonplace. The delta also habours the largest number of fish species anywhere in Europe, including four species of sturgeon, and the area is seen to have tremendous potential for wetland restoration, with former polders and lakes that could be reflooded and linked into the dynamics of the River Danube.

In outlining the rewilding vision' for the Central Apennines, Rewilding Europe (2019c) claimed that it 'provides opportunities for truly Mediterranean wilderness experiences in the Apennines – the Wild Heart of Italy. Further, Rewilding Europe (2019c) described the area 'as a true biodiversity hotspot, with real wilderness at the very heart of bustling Italy only 1.5 hours from Rome.' Here there is 'a majestic range of limestone peaks reaching an altitude of almost 3,000 meters, concealing caves, deep canyons, some of Europe's oldest beech forests and a wide range of grasslands – inhabited by the Marsican brown bear, gray wolf, Apennine chamois, red deer, golden eagle, vultures and an astonishing set of endemics' (Rewilding Europe 2019c). Rewilding Europe is working to develop 'coexistence corridors' by 'connecting the local economy with wilder nature in five corridors collectively covering more than 40,000 hectares' and to offer a range of hiking, trekking and wildlife watching opportunities for visitors.

Swedish Lapland, which spans northern Norway and northern Sweden and covers 30, 000 square kilometers (3 million hectares), has been described as 'Northern Europe's untamed land' (Rewilding Europe 2019d), and includes mountains, taiga forests, glaciers, rivers and extensive wetlands and 'there is no other place in continental Europe with such vast, uninhabited, road-less and original landscapes.' Here the traditional ecosystems are still functioning and the large-scale migration of reindeer and the river systems shape the ecology of the landscape. Within this vast area, Rewilding Europe has been working with a range of partners, to create a corridor linking the mountains with the Baltic Sea and to the migration of fish, notably salmon, sea trout and grayling, by spawning ground restoration and the removal of barriers to movement. Rewilding Europe and its partners are also working to secure guided reindeer migration through protected forests and to promote the co-existence of wildlife and indigenous communities.

Within the UK rewilding is still in its infancy, but Rewilding Britain (2019b), founded in 2015, reported on several projects that they described as having 'elements of rewilding.' Carrifan Wildwood, owned by the Borders Forest Trust, was a bare glen in the Scottish Borders, where centuries of heavy grazing by sheep and goats had left it in a barren state. The 650 hectare valley was purchased in 2000 by a group within the local community, who raised the necessary finance from public donations, with the aim of restoring it to a wild and largely wooded area, 'evoking the pristine countryside of six thousand years ago' (Rewilding Britain 2019c). During the first decade, over half a million trees were planted in the lower valley and in subsequent years thousands of shrubs and trees have been planted in the high hanging valleys to recreate montane scrub and the natural tree line. Volunteers have been involved in tree planting and the maintenance of fences to keep out sheep and goats and there has been significant culling of Roe deer.

The Cambrian Wildwood project, in the northern part of the Cambrian Mountains in West Wales, is a community initiative, designed to restore natural habitats and return lost native animals, including pine marten, red squirrel, and eventually wild boar and beaver, initially to some 300 hectares of degraded upland valley and moorland. Over time, the aim is to extend the project to 3,000 hectares, through a mixture of land purchase and partnerships with neighbouring landowners. Another goal will be 'to reconnect people with nature by providing rich experiences in wild landscapes' and 'to create trails and wild camping zones' and to organise 'programmes for schools and groups who don't normally engage with nature' (Rewilding Britain 2019d).

Wild Ennerdale, 'a nature first minimalist approach', is 'helping to create a wilder valley in England's Lake District' (Rewilding Britain 2019e). The remote valley on the northwestern edge of the Lake District National Park has been evolving more naturally for over a decade, due to less intensive human intervention and more reliance on natural processes. The project, established in 2003, which is a partnership venture, involving the Forestry Commission, United Utilities, Natural England and the National Trust, has brought a number of changes. The conifer forest is becoming more diverse as planting and the natural regeneration of native broadleaves is diversifying the former conifer forest. Sheep numbers have been reduced as areas of intensive valley bottom and forest grazing have been increasingly given over to native Galloway cattle, which has in turn enabled the valley bottom to become more open and wilder. Further, the Marsh Fritillary butterfly, formerly extinct throughout Cumbria, has been reintroduced into the Valley and the removal and reengineering of bridges has allowed fish passage and gravel movements and has helped to restore natural aquatic processes.

While many of the rewilding ventures outlined above are on a smaller scale than their counterparts in continental Europe, there are some larger ventures within the UK. On the one hand, Rewilding Britain (2019f) reported that it is working with a range of partners to 'make large scale rewilding a reality' and here the focus will be on allowing nature to be the driver. More specifically, Rewilding Britain plans to establish at least three major pioneering rewilding pilot projects over the next 10 years. The focus will be on offering an opportunity to demonstrate a workable model for rewilding, that will be developed with, and for, the benefit of local communities. On the other hand, a small number of large projects within the UK have some elements of rewilding. Cairngorms Connect (2019), for example, is a partnership of neighbouring land managers, committed to a 200-year vision to

enhance habitats, species and ecological processes across a vast area within the Cairngorms National Park. Cairngorms Connect covers some 600 square kilometers (60,000 hectares), and it includes a wide range of landscapes including a central mountain massif, woodlands, lakes, blanket bogs and wetlands and provides habitats for a wide range of rare plant and animal species.

The work of the partnership currently has a twin focus, namely restoration projects and the predator project. The restoration projects embrace a range of activities including, restoring watercourses and floodplains to a more natural state, enhancing woodlands, restructuring Scots pine plantations, restoring high altitude woodland and montane scrub, managing deer populations to enable recovery of damaged habitats and restoring blanket bogs. The restructuring of Scots pine plantations involves thinning unnaturally dense plantations, diversifying the plantations by retaining more deformed and over-crowned trees and creating space around birch, rowan and juniper trees, and creating tangles of deadwood for wildlife habitats.

In recognising that predator species, including, golden eagle, hen harrier, peregrine and merlin, have been returning to the Cairngorms in recent decades, and that other species, such as capercaillie, are under threat, the predator project includes a number of elements. Namely, to ascertain baseline information on predator and prey species within the Cairngorms Connect area, to examine the ecology of predator-prey relationships, and to generate interest in predators and their behaviour. Within the predator project, several initiatives are underway including a Ph. D. programme at Aberdeen University designed to explore the changing predation interactions and pressures; the annual monitoring of voles, capercaillie and raptors; and a study of the predators that consume deer grallochs (entrails) after the animals have been shot

Two generic themes can also be identified within rewilding projects within Europe, namely a focus on the economic and social opportunities rewilding can generate and the role of rewilding in counteracting climate change. Rewilding Britain (2019g), for example, claimed that 'people, communities and livelihoods are key' and that 'rewilding embraces the role of people – and their cultural and economic connections to the land – working within a wider, healthy ecosystem.' Within the Carrifan Wildwood, for example, The Borders Forest Trust (2015) recognised not only 'the increasing range of economic opportunities arising from native woodland restoration', but also argued that 'if all native woodlands are unproductive in terms of income and jobs, they will suffer in the public's perception when seen in competition with other land uses that appear to be contributing more to the local economy.' Further, The Borders Forest Trust (2015) claimed 'appropriate restoration of native woodlands in the Borders will gradually increase the range of economic opportunities in rural areas and diversify income sources in remote areas through provision of forest goods and services.'

In a similar vein, in the belief that that 'there are economic opportunities in rewilding' (Rewilding Europe 2019e), many of the Rewilding Europe projects look to promote a nature-based economy. More specifically, Rewilding Europe wants to demonstrate that 'rewilding can generate new business opportunities, jobs and incomes' and by 'building this business case for the wild, we can provide new opportunities for rural economies – which are now often associated with declining economic productivity, rural

depopulation and land abandonment' (Rewilding Europe 2019e). The Danube Delta, for example, is an economically depressed area, with high levels of unemployment, low standards of living and rural depopulation. Here Rewilding Europe is looking to explore the potential for new nature-based business opportunities and is providing support to enterprises involved in fishing and otter watching on some of the region's rivers. At the same time, Rewilding Europe claim that rewilding can have an important cultural impact in that it encourages young people and families to return to the countryside and that it can reinvigorate the cultural heritage and traditional skills.

There are claims that rewilding can play an important role in mitigating the impact of climate change. Rewilding Europe (2019f), for example, claimed 'rewilding creates healthier, better connected and more resilient ecosystems. Applied on a far greater scale in Europe and beyond, it could play a vital role in climate mitigation and adaptation.' Rewilding Britain (2019h), argued that inter alia, 'another feature of rewilding could be of pivotal importance in the next few years – the sequestering of carbon from the atmosphere.' At the same time, Friends of the Earth and Rewilding Britain (2016) have claimed 'we believe rewilding has a crucial role to play in our efforts to reduce flood risk and adapt to the effects of climate change.' More specifically, three ways in which rewilding can reduce risks were outlined namely: land management practices, river restoration and the reintroduction of beavers.

# Reflections

A wide variety of rewilding projects, are underway across Europe, but it will be some time before any systematic analytical evaluation research can be meaningfully undertaken. That said, five sets of issues, namely: definition; measurement; unpredictability; policy; and communication merit discussion and reflection. Firstly, there are problems of definition in the identification of rewilding projects. This is simply illustrated by the Cambrian Wildwood project outlined earlier. While Rewilding Britain (2019d), perhaps deliberately, sidestepped the issue by describing the project as having 'elements of rewilding', Cambrian Wildwood (2019) reported that while 'many people are interested in Cambrian Wildwood as an example of rewilding....we are no longer promoting the project as such.'

In explaining this decision, Cambrian Wildwood (2019) suggested 'the problem with this term (rewilding) is that it is not well defined and means many different things to different people.' Further, Cambrian Wildwood (2019) suggested that the lack of a clear definition 'leads to misapprehensions about what we are doing and what our plans might be.' Here, one of the concerns is that in the local area, the term rewilding is perceived as being synonymous with land abandonment, whereas Cambrian Wildwood emphasised that its management process is active and involves restoration and the reintroduction of grazing animals.

At the same time, Cambrian Wildwood argues that while people living in towns and cities often have a positive view of rewilding and see it as a potentially important way of stemming the loss of wildlife from the rural landscapes, many rural dwellers, particularly those who make their living from the land, see rewilding leading to job losses and rural depopulation. More generally, and perhaps more significantly, farmers, notably sheep farmers, who are in receipt of what can be substantial agricultural subsidies fear that rewilding, and more specifically the introduction of large carnivores, can pose a major threat

to their income as well as their way of life. Such existing commercial interests certainly seem to pose a challenge to the more widespread introduction of rewilding ventures.

Secondly, there are issues about measurement. To date, progress in rewilding projects has generally been measured either in qualitative terms, or in ways that make it difficult to compare across space and over time. Under the banner 'Measuring Up', Rewilding Europe (2019f) suggested 'as European rewilding initiatives multiply' so 'monitoring and mapping tools have become more essential.' Perhaps more pointedly, Rewilding Europe (2019f) argued 'a framework for quantifying rewilding progress has been long overdue.' Torres et al. (2018) have proposed a 'novel approach for measuring and monitoring progress in rewilding', which looks to assess 'the recovery of processes and their natural dynamics.' More specifically, Torres et al. (2018) provided a list of 18 indicators, tied to particular restoration activities to measure rewilding progress within projects and provided a simple scoring scale for each of these indicators. Rewilding Europe (2019f) reported that this technique 'should provide a significant boost to our efforts and help to guide rewilding work in future years.' That said, it remains to be seen if all project officers working on the range of rewilding ventures within Europe will have the expertise and resources to regularly measure and monitor progress.

Thirdly, rewilding is a process involving the complex interaction of different elements within an ecosystem, and it thus is difficult to predict the results with any great accuracy. It is important to recognise that rewilding may produce unpredictable, and potentially undesirable, consequences. Nogues-Bravo et al. (2016), for example, argued that the introduction and reintroduction of species can provoke unexpected negative consequences and that subsequent control measures can prove to be both challenging and costly. More specifically, Nogues-Bravo et al. (2016) identified 'far reaching consequences of rewilding' associated with the introduction/reintroduction of species including, the extinction of native and protected species, the spread of pests and parasites within native ecosystems and conflicts in the co-existence of wild animals and humans. More generally, while Corlett (2016) argued 'rewilding science needs to catch up with rewilding practice', in summarising concerns about rewilding Sandon (2016) suggested that 'there is limited scientific support for rewilding' and that 'considerable caution should be employed when putting rewilding into practice because of the unknowns of ecosystem dynamics.'

Fourthly, there are issues about rewilding and policy frameworks, and more particularly about what is perceived to be a policy vacuum. Two dimensions can be identified, the one focussed on conservation and the other set within wider agricultural and land use policies. In looking to create 'an enabling policy environment' for rewilding within the European context. (Jepson and Schepers (2016) suggested 'rewilding is the next logical step in an on-going process of EU nature policy development' and they urged 'policy makers to create spaces and partnerships to allow rewilding to gain traction as a complimentary conservation approach that will expand upon past achievements and refashion conservation in the 21<sup>st</sup> century.' In a similar vein, Navarro and Pereira (2015) claimed 'rewilding will help policy makers in rethinking their relationship with nature.' More pointedly, Navarro and Pereira (2015) argued that 'rewilding research should aim at having three important impacts on policy makers: a conceptual impact (to change the way policy makers think), an instrumental impact (to directly influence existing policies and management) and a symbolic impact (to support established positions).'

More generally, in looking explore the policy implications surrounding rewilding, Pettorelli et al. (2018) suggested that two policy areas were particularly relevant to rewilding, namely biodiversity and agricultural and land use policy. Specifically within the UK, there are no explicit Government policies on rewilding but Wentworth and Alison (2015) suggested that 'rewilding is relevant to many policy areas including agriculture, natural capital and biodiversity.' Wentworth and Alison (2015) suggested that post Brexit landowners might receive financial support from the Government for providing specific ecosystem services, for example flood prevention measures, and that this might fund some rewilding ventures. Arguably less optimistically, the recently published 'Indicators' for 'Biodiversity 2020' (Department for Environment, Food and Rural Affairs 2019), the strategy for England's wildlife and ecosystem services, make no mention of rewilding.

Within the UK the popular view is that land use is regulated by local planning authorities, but it is the development rather than the use of land that comes under planning legislation and in truth, the planning system has little control over agriculture and forestry. England's National Planning Policy Framework emphasises the importance of conserving and enhancing the natural environment and of meeting the challenge of climate change but rewilding receives no mention in the policy framework. The planning policies for the devolved administrations in Scotland and Wales also make no reference to rewilding. Scotland does have a specific land use strategy but here too there is no explicit mention of rewilding, though the British Ecological Society Scottish Policy Group (2016) suggested that 'rewilding could be incorporated into something based on the general principles of the Land Use Strategy, especially if the latter was being used to investigate what was feasible at different scales.' Overall, there seems little by way of statutory policy to guide rewilding within the UK.

Finally, communication has a vital role to play in winning hearts and minds for rewilding. Here, Rewilding Europe's communications activities have two dimensions, namely: increasing public interest and building public support, creating positive attitudes, in engaging with a range of stakeholders and building harmonious relations between humans and nature; and inspiring other groups to adopt its vision and approach to rewilding and thus to increase the scale of rewilding ventures within Europe. The ultimate vision is that increasing numbers of people will be inspired by rewilding, and will themselves become advocates for increasing the role of natural processes within the environment. The majority of Rewilding Europe's publications include large powerful images, many of which are also displayed at photographic and film festivals in many parts of Europe, can also be seen to play an important role in inspiring a passion for rewilding.

Storytelling also has a part to play and paradoxically, Francesco Romito, Vice President of the Return of the Wolf project in Italy, claimed that 'the wolf is an infinite source of stories, each of which which we can use to promote the life and behaviour of this special animal in order to increase its public acceptance' (Rewilding Europe 2019g). At the same time, face-to-face discussions, gatherings and meetings, especially in the areas in, and around, rewilding ventures, are also vitally important in spreading the rewilding message. More generally, Pete Cairns, a Project Director for the European Rewilding Network, suggested 'communicating rewilding is a reframing exercise: promoting those things that we must have, rather than those that are nice to have', that 'we all need clean water and breathable air', and that 'rewilding can help deliver these commodities, which we often take

for granted' (Rewilding Europe 2019 h). Further Pete Cairns argued 'we need to show that rewilding is not about returning to the past, or somehow limiting people, but conversely that it offers opportunities – opportunities for people to live alongside thriving wild nature and benefit from it in a sustainable, exciting and reinvigorating way' (Rewilding Europe 2019h).

### Conclusion

There is growing interest in rewilding within Europe and may benefits have been claimed for moves to increase the role of natural processes within landscapes and environments. However, rewilding faces several challenges, in that it means different things to different people, some public perceptions of rewilding generate unease, hostility and concern and it has only limited scientific support. At the same time, there are issues concerning the measurement and monitoring of rewilding ventures and there is no clear statutory conservation or agricultural and land use policies to guide the rewilding process. As such, rewilding organisations may increasingly look to communications and public relations professional and consultancies to garner public and financial support for their cause and to win hearts and minds for rewilding.

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### THE AUTHORS

Peter Jones and Daphne Comfort work in the School of Business and Technology at the University of Gloucestershire.