What is Rewilding, How Should it be Done, and Why? A Q-method Study of the Views Held by European Rewilding Advocates

George Holmes[a,#], Kate Marriott[b], Charlie Briggs[c], and Sophie Wynne-Jones[d]

[a,b]School of Earth and Environment, University of Leeds, Leeds, UK

[c]Independent Scholar, London, UK

[d]School of Natural Sciences, Bangor University, Bangor, UK

[#]**Corresponding author. E-mail**: g.holmes@leeds.ac.uk

Abstract

In recent years, the profile of rewilding, a conservation approach emphasising reduced human interventions in ecosystems, restored ecosystem processes and autonomous nature, has increased. This has prompted critiques of how wildness, nature, and non-human co-existence with humans, are conceptualised within rewilding. Yet so far, there has been no detailed empirical exploration of the views held by rewilding advocates on what rewilding is, and how it should be done. Here we present an analysis of the views of rewilding practitioners and advocates across Europe, using Q-methodology. We identify two distinct visions, one focusing on extensive radical transformation of rural landscapes towards wilder states, and another focused on pragmatism, embracing different forms of rewilding in different places. Divisions over pragmatism versus radical transformation have not previously been identified in studies of rewilding but have critical implications for how rewilding is enacted. These differences also map onto distinct positions in whether rewilding compliments or challenges existing conservation practice. Beyond these distinctions, we find important areas of consensus, such as seeing humans as part of nature, which challenges arguments that rewilding strives for people-free wildernesses or facsimiles of past ecosystems. Overall, our analyses suggest greater coherence within rewilding than has previously been identified.

Keywords: rewilding, wildness, wilderness, q methodology, discourse, Europe, NGO, restoration, political ecology

INTRODUCTION

Interest in rewilding has increased in recent years, with rewilding projects and NGOs specialising in rewilding approaches to conservation emerging across the world. The academic literature is paying increasing attention to rewilding, both in the conservation biology and ecology fields from which it originated, and in the broader literature in the social sciences and humanities exploring the relationship between society, culture, nature, and conservation (Lorimer et al. 2015). The outputs of writers such as Monbiot (2013) and Marris (2013) are stimulating public interest in the topic. As rewilding spreads, it is worth taking note of the characteristics of the movement, and to analyse the ways it seeks to enact change.

The origins of rewilding can be linked to the 'traditional' conservation movement (Holmes et al. 2017) in North America, which focused on preserving large, connected wilderness areas with a complete suite of key ecological actors, particularly carnivores (Soulé and Noss 1998). Emerging from this, Donlan et al (2006) argued that many key ecological actors, such as giant tortoises, sabre-toothed cats and mastodons, had been made extinct by humans during the Pleistocene and early Holocene, and this loss of ecological functions had fundamentally altered the ecology of North America. As such, they argued for the

Access this article online	
Quick Response Code:	**Website:** www.conservationandsociety.org
	DOI: 10.4103/cs.cs_19_14

reintroduction of these species or their close analogues, in order to 'rewild' North America to something closer to its pre-human state. Since then, a diverse range of rewilding proposals and projects have emerged worldwide, for conservation that seeks to create functioning ecosystems with reduced human control and restored ecosystem processes (see Jørgensen 2015; Lorimer et al. 2015). Beyond the attention-grabbing ideas about bringing elephants to the Great Plains, such proposals critique many tenets of mainstream conservation. Whilst mainstream conservation tends to focus on ecosystem composition and species abundance, such proposals focus on ecosystem functions. Unlike mainstream conservation, which argues for human management of landscapes towards pre-defined and static biodiversity targets, rewilding argues for open-ended, autonomous, natural processes management (Navarro and Pereira 2015; Jepson 2016).

The aim of this paper is to explore the variation in how rewilding is defined, thought about, and the visions for how rewilding should be done. In particular, it seeks to identify coherent worldviews linking ideas of nature to ideas of the politics of rewilding. It does this through a Q-analysis of the discourses of rewilding advocates and practitioners across Europe. It includes empirical analysis in a field that is dominated by opinion pieces (Pettorelli et al. 2018) and the voices of non-academics in a field that is currently dominated by the views of academics (Gammon 2018).

DIVERSITY OF PERSPECTIVES IN REWILDING

The rewilding movement can be characterised by its diversity of ideas, as reviewed extensively elsewhere (Lorimer et al. 2015; Jørgensen 2015; Gammon 2018; Pettorelli et al. 2018). Jørgensen (2015) identifies six different ideas of rewilding: restoration of large areas of connected wilderness using extant species, abandoning human-managed land, and four variants of species reintroductions (reintroducing analogues for extinct Pleistocene megafauna using extant species, reintroducing analogues for recent extinctions on islands, transforming landscapes by reintroducing locally extinct species, and releasing captive-bred animals to bolster marginal wild populations). Lorimer et al propose five axes for understanding rewilding. Rewilding that: 1) focuses on post-productive landscapes versus working in areas with low intensity agriculture (a variant of land sparing/land sharing – Phalan et al. 2011); 2) is reductionist and focused on genes and breeds versus rewilding that is focused on ecosystem functions and processes, 3) aims to recreate past ecosystems versus future-oriented rewilding, 4) focuses on pure and remote wilderness areas versus rewilding that focuses on hybrid natures closer to humans, and 5) is grounded in locally specific wildness versus a more cosmopolitan wildness.

There is a geographical aspect to disagreements. Several authors (e.g. Jørgensen 2015; Corlett 2016; Prior and Brady 2016) identify a distinction between North American rewilding, which is more focused on purity and recreating modern copies of past ecosystems, and European rewilding which is more future oriented (though Brown et al. 2011 argue for recreating past ecosystems in Europe), to the extent that some advocates question the utility of the 're' prefix (Wynne-Jones et al. 2018). Similarly, while North American rewilding may be more focused on carnivores, in Europe there is a greater focus on grazers, perhaps due to the influence of Vera's arguments that past European ecologies were dominated by the actions of herbivores (Lorimer et al. 2015; Svenning et al. 2016). This leads to debates and controversies on (re)creating genetically and morphologically appropriate grazers (Lorimer and Driessen 2014).

This diversity of perspectives raises the question of whether there is any common thread within rewilding. Prior and Ward (2016) have argued rewilding approaches share a common focus on autonomous, self-willed nature, and that this makes it distinct to other forms of conservation. For Jørgensen (2015), the variation makes it a plastic idea, vague and imprecise, without a distinct meaning. Jørgensen argues that such plasticity can give rewilding particular power, so it can cross between the scientific and the political worlds. Such plasticity also means that a range of projects from the experimental and radical to the much-less-controversial can be considered under the same umbrella of 'rewilding'. Deary and Warren (2017) note that some conservationists promoting less controversial projects involving autonomous self-willed nature consciously avoid the term 'rewilding' to avoid the negative associations with controversial actors and ideas. This represents a tension between more transformative rewilding, advocating significant or rapid changes, and more incremental or limited change. Such tensions may be part of other axes of difference within rewilding, for example, between potentially transformative plans to create large scale wilderness areas and more pragmatic plans for hybrid nature in human-dominated landscapes (see Lorimer et al. 2015). There may be differences in beliefs of what is desirable, based on fundamental values, or on what is considered feasible or pragmatic, an assessment of possibility.

As more rewilding projects emerge and evolve, it is worth considering the tensions between transformation and more incremental or limited change, and between what is desirable and what is considered feasible (Wynne-Jones et al. 2018; Tanasescu 2017). This is part of wider tensions within conservation over what is pragmatically possible and what might be ideal. Trade-offs emerge within conservation between different biodiversity goals, such as when the interests of two endangered species may clash, between conservation goals and other worthwhile social goals such as poverty alleviation, and between what conservationists might want to achieve and the political and financial capital that they possess to make it happen (Robinson 2011; McShane et al. 2011). There are calls for various kinds of pragmatism, such as taking different approaches to conservation in different social, political, economic or ecological contexts, or accepting plural values in conservation (Robinson 2011; Tallis and Lubchenko 2014). Others accuse the pragmatist approaches for compromising too far and weakening conservation goals (Soulé 2013).

The diversity of rewilding perspectives goes well beyond questions of how rewilders think about nature and its relationship with humans, and places in which they work. There is substantial yet unexplored diversity in the political economy of rewilding, the political actors involved, and the governance of rewilding projects. As with many other approaches in conservation such as protected areas or ecological restoration, there is nothing inherent to rewilding that means it is only compatible with certain approaches to political economy or certain forms of governance. Attitudes to capitalism divide conservationists more than attitudes towards wilderness and ecological purity (Sandbrook et al. 2019). Rewilding has been enthusiastically embraced by actors at different ends of the 'new conservation' debate (Holmes et al. 2017). Lewis (2015), writing in the journal of the Breakthrough Institute, strongly associated with the 'new conservation', argues for a rewilding that takes place in human dominated landscapes, integrated into a green capitalism through ecotourism and payments for ecosystem services, facilitated by the state, in what might be described as neoliberal conservation. Soulé and Noss (1998), whose arguments for rewilding as a tool to create large tracts of human-free wilderness were very influential, particularly in North America, are also strongly associated with the 'traditional conservation' movement (see Holmes et al. 2017).

The academic literature on rewilding has largely focused on issues of how nature is defined and understood within rewilding, and has been less attentive to questions of political economy of rewilding, for example, the extent to which the different views on capitalism of Soulé and Noss or Lewis might be reflected among the actors involved in rewilding. Questions of governance are under-explored. Rewilding tends to be thought of, and valued, for being provocative (Jepson 2016) and uncertain (Lorimer et al. 2015), and tended to be carried out by actors outside of mainstream state conservation agencies, frameworks and restrictions that govern most protected areas. Yet the range of actors involved is diverse. There are independent repentant-capitalist philanthropists such as Douglas Tompkins, who bankrolled radical rewilding thinkers (see Foreman 2004), and who embraced rewilding approaches in his privately protected areas (Holmes 2015). There are for-profit businesses, such as the Alladale Reserve in the Scottish Highlands (See Wynne Jones et al. 2019 for a summary of UK actors).

Rewilders use a range of political tools to make rewilding happen. Some organisations have attempted to do rewilding at landscape scale with multiple actors and landowners, but others such as Tompkins do rewilding on large private estates - a longstanding conservation tool which can pragmatically align with dominant paradigms of land tenure - and have been accused of colonialism and land-grabbing (Holmes 2014).

There is diversity not just in how rewilders define rewilding, but how they think it should be done, the tools and approaches that should be used. The diversity of views regarding tools and approaches are important issues to explore as rewilding expands and as attempts are made to turn rewilding visions into reality. The next section outlines some of the key debates about how rewilding should be implemented, governed and managed.

Governing and managing rewilding

A key aspect of the rewilding debate is the implications of ecological uncertainty. A common, if not defining (Prior and Brady 2016), feature of rewilding is that it creates autonomous, open ended, and self-willed natural ecosystems. Rewilding is often open minded about surprises and unexpected consequences. This clashes with dominant conservation approaches which are often about controlling natural processes to move a natural system to a desired, fixed and pre-determined end point, such as a particular ecological composition or population of a particular species (Lorimer et al. 2015; Jepson 2016). This characteristic, as well as the fact that rewilding remains largely experimental and unproven, opens up the possibility that such self-willed ecosystems may not produce the benefits or biodiversity of more managed projects (Lorimer et al. 2015). The uncontrollability of rewilding has meant that state conservation agencies have declined to follow such an approach (Lorimer and Driessen 2016), perhaps explaining why rewilding is dominated by non-state conservation organisations, and newer rather than more established conservation organisations. It also raises questions of whether rewilding areas can be territorialised in the same ways as traditional conservation institutions such as protected areas, whose wild characteristics are intended to be contained within defined territories. Autonomous nature is not likely to respect such geographical boundaries. Hence there are important questions about whether 'mainstream' tools for conservation governance can cope with autonomous self-willed rewilded nature.

Whilst rewilding may involve a greater degree of uncertainty for nature, less explored is the uncertainty for humans. Rewilding projects explicitly or implicitly promise significant changes for local humans, from having to learn to live alongside large animals to profound socio-economic changes, as traditional agricultural livelihoods and cultures are replaced with living from, and with, wildness through initiatives such as ecotourism (Vasile 2018). Although these changes can be understood as part of broader trends of the social impacts of conservation (e.g. Wynne-Jones et al. 2018), the impacts of rewilding may differ from other forms of conservation because of the reticence to make these impacts more manageable, given the focus within rewilding on autonomous, and open-ended nature. For example, in 'mainstream' conservation projects, the tensions of living alongside wild animals can be mitigated by controlling those animals (e.g. fencing, lethal controls, relocation), but rewilding projects may be less inclined to intervene and control because of the focus on non-human autonomy (Arts et al. 2016).

This uncertainty, as well as the radical transformations of ecology, economy and culture promised by rewilding, have generated notable fears, hopes and expectations, from those living in and around proposed rewilding areas (Convery and

Dutson 2008; Wynne-Jones et al. 2018; Vasile 2018). These result in contests between local people and rewilders, as each group attempts to reshape rewilding projects to their liking. Similar to contestations over conservation, these are often part of broader arguments over rural land and land use, with local groups accusing rewilders of being out-of-touch metropolitan elites who impose their views and values on rural places without regard for local culture or livelihoods (Holmes 2007). These conflicts have long histories – for example, in contests over rewilding in Scotland, reference is made to the Highland Clearances two centuries earlier, and their lingering impact on land ownership, rural economies and landscape aesthetics (Deary and Warren 2017).

Land abandonment, a key issue in rewilding (Navarro and Perreira 2015), is part of such conflicts. Changes in subsidy regimes and other factors have made agriculture uneconomic in many marginal areas, leaving farmers and livestock herders to abandon the land. This is seen as beneficial by many rewilders, because it makes rewilding easier by reducing land prices for conservationists to purchase, by reducing competing land use, and because it can itself lead to reduction in human manipulation of the landscape, to be replaced by autonomous natural processes (op cit). The conflicts arise over how such abandonments are viewed, and what kinds of post-abandonment relationships are envisioned between nature, land use and culture. Some rewilders critique attempts to sustain traditional land use forms through subsidies and other measures on the basis of the ecological and economic costs, as well as challenging whether such landforms should be seen as 'traditional' (Navarro and Perreira 2015; Monbiot 2013). Remote sensing and mapping exercises may identify wild places, and places where land abandonment is imminent and implicitly inevitable (e.g. Ceaușu et al. 2015), thus rendering the landscape as a kind of *terra nullis* absent of any people, politics or culture. Arguments about the inevitability of land abandonment and such mapping exercises can be seen as evidence that rewilders do not value local livelihoods, traditions or cultures. Some have likened the replacement of traditional farming with wilder land, particularly through policies that might hasten this transfer such as physical or policy barriers to traditional, to historic transfers of land control and ownership from local farmers to wealthy elites and acts of enclosure (Olwig 2016).

Despite such recognised and emerging axes of conflict, some studies show how rewilding projects evolve as they seek compromise between the ideal vision and the practical challenges posed by imperfect ecological knowledge and conditions, competing land uses, and political challenges (Lorimer et al. 2015; Wynne-Jones et al. 2018). Rewilding advocates and practitioners have responded to critiques and challenges of doing rewilding by, for example, evolving practices and recasting their ideas using local cultures and languages (Wynne-Jones et al. 2018).

METHODOLOGY

We used Q-methodology to systematically study the subjective views and priorities of rewilding advocates (those campaigning for or promoting rewilding) and practitioners (those implementing rewilding-type projects) across Europe. Q-methodology is increasingly popular in studies of conservation (Zabala et al. 2018), including rewilding-related conservation (Deary and Warren 2018). Emerging from psychology, it combines quantitative and qualitative elements to identify particular subjective positions (known as 'factors') that exist in the study population, how these differ, as well as areas of consensus. The qualitative data helps inform how these are interpreted. Because there are as many opinions on what rewilding is as there are rewilding advocates, Q looks for clusters of opinion. Such clusters or 'factors' may not overlap completely with the views of any individual respondent within the sample, but can nevertheless capture and characterise the underlying distribution of opinion. Importantly, Q asks respondents to compare ideas in rewilding relative to one another, thus identifying not only what ideas are important within a factor, but which ones are the most important. Q-methodology works well with low response rates, but whilst it provides detailed insights into the range of views that exist, it cannot be used to extrapolate their prevalence within the population.

Q-methodology starts by compiling a broad range of statements which combined capture the key debates and important issues in the area of study. The aim is to have a manageable number of statements which also allows respondents to express a holistic worldview on rewilding that incorporates all the important topics and issues. To do this, the first two authors read the peer-reviewed academic literature on rewilding, focusing on review documents that captured the empirical literature and on articles exploring how rewilding was defined and understood. We went through documents produced by rewilding organisations and advocates, such as websites, books, pamphlets and newspaper articles. We also looked for newspaper articles discussing issues of rewilding and associated issues. We extracted 435 direct quotes from 61 sources covering key issues in rewilding. We reduced this by eliminating statements which overlapped, those lacking clarity, or those tackling issues which were peripheral to understandings of rewilding. The remaining statements were edited for clarity and brevity to produce 45 statements which were relevant to rewilding across Europe. In Q-methodology, statements must correspond to a particular position in the debate, be clear and concise, and participants should be able to react instinctively to statements. On reviewing a previous Q study of rewilding (Briggs 2017), we included statement 46 (see Table 1), as this was thought to capture an important controversy not clearly present in the published literature. The statements were successfully piloted with one participant, and no amendments made.

In Q, sampling is purposive, aimed at capturing a broad range of opinions rather than producing a stratified representative sample. Our participants were all rewilding advocates or practitioners. We recruited 21 participants (see Table 2), who were surveyed between August 2017 and July 2018. We drew up a list of potential participants from authors of

Table 1
Showing the normalised Q value and z-scores for each factor. The final column lists whether the statement was a distinguishing (D) or consensus (C) statement at P<0.01

	Statement	Factor 1		Factor 2		Consensus/ distinguish
		Norm	Z	Norm	Z	
1	Public feelings over predators are irrational rather than reflecting any concrete problems caused by predators	0	0.28	-2	-0.73	D
2	"Wilderness" is an unhelpful term	-3	-1.25	-2	-0.72	
3	Lack of support from government is a major constraint to rewilding	1	0.32	-1	-0.22	
4	Rewilding can lead to a loss of local history and identity	-4	-1.42	1	0.41	D
5	Rewilded landscapes and traditional land uses of remote and upland areas can successfully coexist side-by-side	2	0.59	2	0.94	C
6	Rewilding involves uncertainty and unpredictable outcomes for human society	-1	0.00	2	1.11	D
7	Rewilding is about standing back and letting nature take care of itself	4	1.37	-1	-0.76	D
8	We should use market-based instruments such as payments for ecosystem services to generate money from rewilded areas	0	0.14	0	-0.04	C
9	Wilder areas have greater ecosystem service provision than more modified areas	1	0.56	-3	-1.07	D
10	When planning rewilding, we should reintroduce species which are more resilient to future environmental change rather than necessarily what is best suited at present	-4	-1.54	1	0.24	D
11	Rewilding involves uncertainty and unpredictable outcomes for nature	3	1.01	3	1.2	C
12	The support of local people is vital to the long-term success of rewilding	4	1.41	3	1.13	C
13	The general public prefer modified, not wild, landscapes	-4	-1.30	0	0.07	D
14	Traditional land uses in remote and upland areas have a right to exist	-1	-0.42	-1	-0.58	C
15	Rewilding often requires some initial interventions to re-start natural processes	4	1.38	4	1.34	C
16	In rewilded areas, some ongoing human interventions will be required where ecological processes cannot be restored.	1	0.51	4	1.34	D
17	The human presence is a legitimate part of wild places	2	0.59	2	0.97	C
18	Traditional land management of remote and upland areas has significant value for biodiversity	-5	-1.57	0	-0.01	D
19	Rewilding should be recognised as an important tool for nature conservation along the entire "wildness scale" from city centres to the wildest areas of the continent	3	1.36	3	1.24	C
20	A focus on rewilding devalues nature located in human landscapes	-5	-1.8	-4	-1.56	C
21	There are very few truly wild areas in Europe	1	0.48	1	0.44	C
22	Rewilding should be interpreted differently in different places	1	0.51	5	1.47	D
23	Rewilded areas must be economically competitive if they are to succeed	-3	-1.20	-1	-0.59	D
24	Rewilding is unprofitable in many upland and remote areas, without subsidy	-2	-0.82	-1	-0.45	C
25	Focusing on economic rationales for rewilding landscapes displaces intrinsic rationales for rewilding landscapes	0	0.19	-3	-0.88	D
26	As much as possible, rewilding should recreate the conditions of the past	-2	-1.04	-5	-2.21	D
27	Rewilding is about restoring lost natural processes and ecosystem functions	5	1.93	1	0.51	D
28	Reintroducing native large mammals is essential to rewilding	2	0.66	-1	-0.41	D
29	For rewilding, we must remove all non-native species	-2	-1.04	-5	-1.73	D
30	There is a lack of consensus on what the pre-human ecology of Europe looked like	-1	-0.39	1	0.52	D
31	We should attempt de-extinction to create viable free-ranging populations for conservation benefit	-2	-0.95	-3	-1.26	C
32	Rewilding should include the introduction of non-native mega fauna as surrogates for extinct mega-fauna	-3	-1.07	-1	-0.64	C
33	Traditional land uses are unprofitable in many upland and remote areas, without subsidy	3	1.16	2	1.02	C
34	Rewilding offers better livelihoods for communities than traditional land uses in remote and upland areas	0	0.19	-2	-0.84	D
35	The idea of rewilding can generate more support for biodiversity than mainstream ideas of conservation	3	0.97	-2	-0.79	D
36	Rewilding should complement mainstream nature conservation, and not replace it	1	0.43	5	1.52	D
37	Pre-human conditions are useful baselines for rewilding in Europe	0	0.04	-4	-1.36	D
38	There is a trade-off between the rewilding ideal and what is feasible in practice	0	0.30	4	1.26	D
39	We should test rewilding ideas with small scale pilot schemes before implementing them on a larger scale	-1	-0.68	-3	-1.31	D
40	It should be the role of experts to decide which ecological processes to restore where	-1	-0.63	-4	-1.34	D
41	Rewilding may lead to animal suffering	-3	-1.21	0	-0.01	D
42	There is no consensus on what "rewilding" means	-2	-0.72	0	0.17	D
43	No section of land is too small for rewilding	2	0.69	1	0.58	C
44	Rewilding should value marine as well as terrestrial environments	5	1.68	3	1.24	C
45	Rewilders should promote the spiritual value of the rewilding process	2	0.97	0	0.1	D
46	It is more important that a rewilding area look and feel wild than it necessarily be devoid of human management	-1	-0.65	2	0.71	D

<div align="center">

Table 2
Showing demographic attributes of participants

</div>

Gender	Female	Male			
	5	16			
Principle Sector	NGO	Academia	Landowner/landowner's representative	Writer/journalism	Other
	6	5	3	6	1
Country of domicile	UK	Other European country			
	17	4			

documentation reviewed, or people cited within this, as well as internet searches for rewilding projects. Four participants were also authors of pieces of literature from which we derived statements. We asked participants to identify other people who they thought might be interested in participating. We recruited a range of participants from different locations and employment sectors, for example, academics involved in both rewilding research and advocacy for rewilding; actors involved in NGOs in a rewilding related role; journalists and writers involved in rewilding practice and advocacy; independent landowners implementing rewilding projects; and other campaigners for rewilding. Although we characterised participants according to their principle sector of employment and their domicile, these are not exclusive categories. For example, the majority of academic respondents also held a formal role in a rewilding related organisation outside of academia, and there were similar overlaps between other categories. We sought a broad range of opinions to capture the breadth of thinking on rewilding, until we had captured all the main viewpoints. Respondents were predominantly domiciled in the UK, but most had direct professional experience of rewilding in other European countries.

Ethics approval for the research was granted by the University of Leeds. All interviews were conducted in English (either via webcam or face-to-face) by one of the first three authors, following a common protocol. We explained to participants that we were interested in understanding variation and consensus in the rewilding movement in Europe. We emphasised to participants that we wanted them to place statements in order of relative, not absolute, agreement, and that it was a subjective process. We began by asking participants to place statements in three piles: those with which they agreed, those with which they disagreed, and those in between. We then asked participants to place them on the grid, encouraging them to follow the structure of the grid, but gave them permission to deviate from it if required, which 14 did. As they sorted and placed statements we encouraged participants to comment on their views on any important statements. Upon completion, we asked them to identify which statements were particularly important, and asked for further insights and thoughts.

We analysed the Q sorts using PQMethod, version 2.35 (available from www.schmolke.org). We used centroid analysis, and chose to rotate two factors, based on the eigenvalues and scree plots of different analyses, and our interpretation on the qualitative data from respondents explaining their views (see Watts and Stenner 2012, for a comprehensive guide to Q-method). These two factors combined to explain 48% of the variation within the sample, with eigenvalues of 7.953 and 1.934, whereas adding an additional factor added an extra 1% of explanation, with an eigenvalue of 0.218. We flagged individual respondents' Q sorts to factors, using varimax analysis and PQMethod's statistical threshold for automatic flagging. All respondents loaded significantly onto one of the two factors, meaning that their responses were statistically close to one of the two resulting factors. The two factors identified were coherent across both the qualitative and quantitative data – the interview data supported the description of the factors produced by the statistical analysis.

RESULTS

Table 1 illustrates the statements and their corresponding place in each factor. It lists the normalised Q scores for each statement for each factor. These scores describe where each statement would have been placed on the Q grid by a respondent whose views aligned perfectly to that factor, with -5 denoting the statements which were least like their own opinion, and 5 denoting those that are most like their own opinion (note that Q-method does not explore absolute levels of agreement but compares relative levels of agreement between statements. A correspondent could agree or disagree with all the statements - their placement reflects the relative levels of dis/agreement). It also lists the z-score for each statement, which is the distance for that statement from the mean of 0, within that particular factor, and which determines the normalised Q scores. The final column lists whether it was a consensus (where both factors produced a very similar score for that statement) or distinguishing statement (where the placement of that statement can be used to distinguish between factors) at p<0.01. There were 16 consensus statements, 28 distinguishing statements, and two statements than failed to meet the statistical thresholds to be considered either consensus or distinguishing statements.

Below we discuss the two factors in turn, illustrated using data from participants who loaded into each factor. Where we describe aspects of each factor, we include in brackets the relevant statement number, followed by the normalised Q score for that statement for that factor.

Factor 1: Transformative wildness enthusiasm

This factor is distinguished by its focus on restoring wild and autonomous ecosystem processes, its strong critique of traditional land use practices and associated landscape values,

and its enthusiasm for significant land use change. As such, we call it Transformative Wildness Enthusiasm. 15 respondents loaded onto this factor. It strongly disagreed that traditional land uses had biodiversity value (18, -5). One respondent noted that this "cuts to the heart of the issue", as traditional land use is "about the worse possible use" of these places. They were highly critical of arguments produced by farming and certain conservation "industr[ies] that goes out of its way to find value in these landscapes". Some participants stated that it might be true of some specific species, but they did not like the species-focus within conservation. It strongly agrees with the idea that rewilding is about restoring lost processes and functions (27, +5), and that rewilding should let nature take care of itself (7, +4), perhaps after some initial intervention to restart processes (15, +4). Participants viewed these as the fundamental things which united all ideas of rewilding. It disagreed that there was a lack of consensus on the meaning of rewilding (42, -2) – one respondent stated that "debates about herbivores is just semantics", and another "there is more agreement than is often portrayed", and critics were attempting "divide and rule". It was relatively neutral that pre-human baselines were useful (37, 0), in contrast to the other factor. Respondents considered that there was scientific uncertainty over the pre-human ecology of Europe, conditions which had long-since disappeared, and although there was no commitment to creating facsimiles of pre-human environments, such conditions could inform thinking about what rewilding might look like. Similarly, there was slight disagreement that there is no consensus on pre-human ecology (30, -1), but this issue was not seen as important. One respondent argued that this was "true, but who cares", and that rewilding advocates "spend too much time worrying about what things used to look like". There was agreement that reintroducing large mammals is central to rewilding (28, +2), because these provided important but absent ecosystem functions. Respondents argued that large mammals are key ecological actors whose presence has been strongly affected by humans, and it "isn't rewilding" without them, and that such reintroductions are what distinguishes rewilding from other forms of conservation. There was strong disagreement that reintroductions should anticipate climate change (10, -4), partly as respondents saw future ecological changes as un-knowable, but also because they were unwilling to be so controlling and "manipulative" of wild landscapes. Rather, landscapes should be left to take their own course autonomously. It was relatively neutral on ongoing human intervention (16, +1), compared to the enthusiasm of the other factor, with respondents noting that it is "not an ideal situation", and reflecting on what timescales were meant by 'ongoing'. This factor did not agree that rewilding should be economically competitive (23, -3). Respondents were motivated by intrinsic biocentric rather than economic rationales, and some were hostile to economic arguments. One noted that "some things money can't buy" and another "I abominate the language of economic competitiveness".

Compared to the other factor, there was much less agreement that rewilding should complement other forms of conservation (36, +1), which were seen by respondents as defensive rather than forward-looking like rewilding, and that there are trade-offs between ideal and feasible rewilding (38, 0). Some respondents noted that rewilding must be seen to be sensitive to all shades of opinion, but it should not compromise on its objectives. Others saw compromise as an attempt by vested interests to reign in rewilding's radical potential.

This factor agrees with the notion that rewilding can generate more public support than other forms of conservation (35, +3). Respondents argued that "unsexy" mainstream conservation "needs a change", and rewilding could provide a new, exciting, fascinating concept that is more emotionally engaging and easier to understand than abstract, technical concepts such as biodiversity. It strongly disagrees that the public prefer modified rather than wild landscapes (13, -4). Respondents argued that the public were too accustomed to modified landscapes and shifted baselines - "What the general public want is what they are used to." However, if they were exposed to truly wild landscapes it would change their opinion and the public would end up preferring wild places. The factor disagreed that rewilding can lead to a loss of local history and identity (4, -4), with some respondents arguing that this was related to a "fear of letting go" of attachments to traditional land uses, a reluctance to engage with change, or that rewilding was a scapegoat for socio-economic changes driven by wider economic forces. Others thought that rewilding could open up new cultural links between people and land, creating new ways of understanding and valuing nature, or revealing lost historical ones. Compared to the other factor, this factor was less in favour of land feeling wild rather than being wild (46, -1), with respondents noting that many people can consider modified landscapes such as sheep-grazed uplands as wild because they are unaware of the long human histories which have shaped them, but that such assumptions need to be challenged as ecological integrity was more important than aesthetics.

This factor did not consider that rewilding would lead to animal suffering (41, -3), because suffering was part of nature anyway, and it was not necessarily greater within rewilding. Some respondents noted that wild animals suffered less than domesticated ones – referencing the controversies over Ooostvardesplaasen (Lorimer 2015), one rhetorically asked "do starving horses in OVP have a worse life than a horse in a stable?". There was slight agreement that the spiritual aspects of rewilding were important to promote (45, +2). Although these were important in the personal motivations of many rewilding advocates, there was some squeamishness about spreading their personal spiritual values onto others.

Factor 2: Pragmatic, cosmopolitan rewilding

This factor is defined by its openness to compromise on both ecological and socio-political issues, rejection of ecological purity, relative greater concern for local livelihoods and culture, and its embrace of many forms of rewilding in many places. As such, we call it Pragmatic, Cosmopolitan Rewilding. Six respondents loaded onto this factor. This factor is more likely

to have greater relative agreement with the idea of trade-offs between idealism and pragmatism in rewilding (38, +4). Compromise was understood by participants who significantly loaded onto this factor as a normal part of any project, reflecting the relative power of both re-wilders and their political opponents. One noted that farmers hate conservationists who are 'not diplomatic, and judgemental and ignorant to community life'. It also reflected respondents' views of the realities of patterns of land ownership and competing demands for land which make it difficult to create large, wild, connected landscapes in Europe. This relates to its strong disagreement with being inspired by (26,-5) and recreating past landscapes (37, -4). Pre-human past landscapes were seen as uncertain, unknowable, unachievable in ecological or political terms, and an unhelpful distraction for practical action. This vision of rewilding was strongly future oriented. Participants argued that re-wilders should be less obsessed with the past ("old school rewilding"), and that rewilding should create the conditions of the future. There was some agreement that there was no consensus on the pre-human ecology of Europe (30, +1). Getting rid of all non-native species (29, -5) was seen as impractical and an expensive distraction from more helpful actions. There were similar approaches to compromise in this factor's disagreement that economic rationales displaced other rationales for rewilding (25, -3). Whilst the respondents themselves were motivated by intrinsic biocentric rationales for rewilding, they considered economic rationales to be useful for building support, and that these positions were not contradictory.

This factor was more cautious in asserting a singular view of rewilding as the future of conservation, asserting instead a more cosmopolitan view. It was strongly in favour of rewilding being interpreted differently in different places (22, +5), based on an idea that rewilding is about making many places slightly wilder in their own particular way, rather than creating a pre-existing re-wilding ideal. It was relatively neutral on whether there was consensus on what rewilding means (42, 0), with respondents noting that although there were some shared concepts, it should be interpreted differently in different places – "there isn't, and shouldn't be" a consensus definition. A few respondents noted that 'rewilding' was an unhelpful term because it had become politically loaded. It strongly agrees with the idea that such rewilding projects would require ongoing interventions (16, +4), with respondents considering that many rewilding projects would involve only a partial removal of human management, and thus requiring human interventions in grazing regimes or in replicating the role of predators that may prove impossible to reintroduce. Related to this, this factor was mildly less in favour of seeing large mammals as essential to rewilding (28, -1) – whilst they were viewed as good for rewilding, they were not a necessary pre-requisite. There was disagreement that pilot projects were required (39, -3) because there was sufficient knowledge about rewilding, and because some rewilding projects, particularly relating to large mammals, could only happen at large scales.

This factor viewed rewilding as a complement to mainstream conservation (36, +5), an additional tool to go with existing approaches rather than being more critical of them and supplanting them. In part, this was due to the cosmopolitan view that allowed for multiple types of rewilding, but also because rewilding was seen as impractical in some instances, and because of the value given to biodiversity in cultural landscapes, which could only be conserved through mainstream forms of conservation. Unlike the other factor, there were relatively neutral views on the biodiversity value of traditional land uses (18, 0), and how practices such as traditional grazing and coppicing could produce valued biodiversity. There was disagreement that wilder places provided more ecosystem services (9, -3), partly reflecting the cultural services of traditional landscapes but largely reflecting a sense that there was no clear evidence to support or refute this statement. There was relative disagreement with the idea that rewilding can generate more support for conservation (35, -2). Respondents saw species-focused campaigns and mainstream NGOs as established, and the contribution of rewilding was a new but relatively small addition to the public imagination. Unlike the other factor, it was also relatively neutral on whether the public preferred wild or modified landscapes (13, 0), although there was an aspiration to change this, and make the public more appreciative of wildness in future. There was some agreement with the idea that wild places should feel wild rather than being truly devoid of human management (46, +2) because this could generate support and tourism.

This factor was in relative agreement with the notion that rewilding creates uncertainty for society (6, +2). Respondents noted that the economics of rewilded landscapes, and the livelihoods that this would generate, were uncertain. There was mild disagreement that rewilding provides better livelihoods (34, -2), because of this uncertainty, and because wildness-based livelihoods such as hunting or ecotourism were unproven or their potential limited. There was disagreement that concerns over predators were irrational (1, -2), rather, they were seen as legitimate and not to be dismissed. This factor disagreed that experts should decide on rewilding (40, -4), because non-ecologists such as economists were seen as having legitimate views, and because there was a desire to be democratic and participatory. There was some agreement that rewilding could lead to a loss of local culture and history (4, +1). Participants noted that rewilding could strengthen these, but could weaken them "if done badly" without participation nor concern for local views.

Consensus statements

There were statistically significant levels of consensus on 16 statements. Both factors strongly considered that rewilding should cover both land and sea (44), although some respondents noted that the sea was less defaunated than terrestrial environments. Rewilding was seen as an important tool at all points on the wildness scale (19) – "if you are moving everything along the scale, you are winning". This statement

generated considerable enthusiasm amongst respondents, and urban wildness was seen as a tool for generating public engagement and support. Similarly, both factors disputed that that rewilding would devalue nature in human landscapes (20), because rewilding was seen as possible in such places. There was consensus that no section of land is too small for rewilding (43), because of this potential for urban rewilding – "you can rewild a window box". Some respondents cautioned that whilst this kind of action might be good for public engagement, large areas were often required, and care would be needed not to "water down" the meaning of rewilding. Both factors considered that human presence is legitimate in wild places (17), though this was interpreted differently. Some noted that "people are part of nature", which may include living and working in wild places. Others took the statement to mean that humans were purely temporary guests in wild areas, but needed to directly experience these places because "the whole point of wild land is for humans to experience it".

There was consensus and strong agreement that rewilding often requires initial interventions (15), and that rewilding created uncertainty for nature (11). Some respondents noted that this uncertainty is a key aspect of rewilding – "that is half the fun" – and that while some effects could be predicted from ecological knowledge, humans need to be better at "letting go" of environmental management. There was general neutrality that there are few wild areas in Europe (21). Although respondents disagreed on quite how few wild areas there were, this was variously interpreted as a challenge to create more ("it's true at the moment, but this can be mended"), or a point of reflection on what wildness means, and getting the public inspired by wildness.

Both factors disagreed with attempts at de-extinction (31), which most respondents saw as a poor use of resources (one respondent denounced back-bred Heck cattle as "fake plastic aurochs"), and with the use of non-native surrogates for extinct species (32). Some respondents argued that non-native species introductions were not necessary, based on uncertain science, and too risky. Some respondents were more confident in the underlying science but were not strongly in favour because of the uncertainty of how society could live alongside such animals.

There was consensus that traditional land uses in remote and upland areas are unprofitable without subsidy (33), which some took as a rationale for doing rewilding and a reason why rewilding was perhaps inevitable in some low-value agricultural land due to changes in subsidy regimes. There was consensus in agreeing that rewilded landscapes and traditional land uses can coexist (5), albeit often with caveats, with many respondents mentioning the need for zoning to ensure coexistence, in some cases involving physical separation such as fencing keeping predators from livestock. Some respondents who loaded onto factor 1 and were in favour of large, connected, wild areas with extensive natural processes and predators, argued that co-existence had limited applicability in such cases, as there would be minimal space available to allocate to traditional uses in such areas. Both factors slightly disagreed with the idea that that traditional land uses have a right to exist (14).

Respondents noted that such uses were declining anyway, that such rights need to be balanced against the negative aspects of such uses, both ecological impacts and the cost of subsidy, but noted that consultation and consideration with land uses would be needed. Some respondents critiqued notions of tradition, arguing that such land uses had been established in recent centuries, a very recent time period on ecological timescales. Nonetheless, both factors strongly agreed that local support was vital (12). Respondents argued that as Europe is densely populated, there would be large numbers of people living with wildness, and that too much antagonism from people would fatally undermine rewilding projects. Whilst respondents from both factors shared this practical rationale for local support, some loading onto the pragmatic factor mentioned ethical and moral reasons for engaging with compassion with "people left in ghost villages". Some respondents loading onto the transformative factor noted that support could be gained if it wasn't currently present "There is scope to guide public opinion if you believe in it". Both factors mildly disagreed with the idea that rewilding is unprofitable without subsidy (24), with respondents uncertain about whether was true, as rewilding is in its infancy.

Two statements, on wilderness being an unhelpful term (2) and on a lack of government support constraining rewilding (3), did not meet the statistical threshold to be considered either distinguishing or consensus statements.

DISCUSSION

The results show two strong and intellectually coherent positions amongst rewilding practitioners and advocates in Europe. Factor 1 is more enthusiastic about a significant transformation of rural landscapes towards a wilder state with autonomous nature, more critical of the value of traditional rural landscapes, and less concerned with compromise, whereas factor 2 is the converse. There are important differences on the meanings of rewilding and wildness, and the politics of how it should be done. Factor 2, which is more cautious on ideas of ecological purity and the value of wildness over traditional landscapes is also more likely to be concerned with compromise and pragmatism.

These divisions over pragmatic cosmopolitanism versus radical transformation have not been identified in other explorations of rewilding in Europe (e.g. Lorimer et al. 2015). Much of this literature has focused more on the kinds of radical, transformative wildness espoused in Factor 1, with less discussion of the pragmatism and caution espoused in Factor 2 (but see Prior and Brady 2016 for a call for a more cosmopolitan rewilding. See also Wynne-Jones 2018; Tanasescu 2017). One interesting possibility is that rewilding projects may become more pragmatic as they evolve, as they attempt to navigate between scientific ecology and the ways local people can understand, relate to, and interact with rewilded ecology (see Tanasescu 2017). Wynne-Jones et al (2018) demonstrate how during the evolution of a project in Mid Wales, rewilders negotiated with local people to produce

something more grounded in local culture and language with a greater role for livelihoods and moved away from more radical and contentious ideas such as reintroducing predators.

Rewilding as a practice is only just emerging, and it is important to understand how it will interact and negotiate with local communities. This paper has explored the subjective views of rewilders on how rewilding should be done, which is only one part of understanding how rewilding happens. Whilst we show clear distinctions in intentions and attitudes towards compromise, plurality and intention to radically transform rural landscapes, other factors, such as the reactions of local people or the material qualities of nature, will also affect rewilding projects and how they play out (Tanasescu 2017; Wynne-Jones et al. 2018). Further work could explore whether actors move between discourses of transformative wildness or pragmatic cosmopolitanism as projects evolve, the relative prevalence of these discourses amongst rewilders generally and within those working in certain geographical contexts, or whether the desire to enact radical change is retained within projects. Anonymity concerns prevent us from linking participants from particular organisations or projects to either factor, and the nature of Q-methodology makes it difficult to analyse such issues quantitatively.

The analysis reveals some important areas of consensus within European rewilding. There is an enthusiastic embrace of uncertainty and dynamism in ecosystems as a key part of rewilding in both factors, supporting Prior and Brady's (2016) arguments that this is a defining characteristic of rewilding. There was rejection, to different degrees, of a view that rewilding aspires to create areas with some kind of ecological purity. For instance, some initial human interventions to start rewilding were strongly favoured, as was the idea that rewilding was applicable to all places from cities to remote areas. The factors varied in the extent to which they relatively disagreed with the removal of non-native species and the notion that rewilding should recreate the past. Lorimer et al (2015) identify a potential axis of difference between past-oriented and future-oriented rewilding, and both factors here are future oriented - past ecosystems were never seen as a target, but instead somewhere between an informative inspiration and a distraction to be rejected. Similarly, there was rejection to varying degrees of reductionist rewilding focused on genes in favour of functionalist rewilding focused on ecosystem processes, another potential axis of difference identified by Lorimer et al (2015). Species (re)introductions were not considered as important to rewilding as other issues, and they were considered sometimes complex and tricky. This supports Jørgensen and others who have distinguished between European and North American rewilding, with the latter having greater focus on species reintroductions. Whilst critiques of rewilding have argued that it devalues nature in human landscapes, drawing on Cronon (1996), both factors strongly disagreed with this notion. Similarly, both saw the human presence as a legitimate part of wild nature, but there was variation on how this was understood. Some respondents discussed this presence in terms of temporary and non-

extractive activities such as tourism, or at very low levels such as the Saami use of northern Scandinavia, whereas others saw some possibilities for human residence in wild areas.

Combined, the analysis suggests that critiques of European rewilding as promoting impossible ecological purity, hermetically sealed human-free places, or recreating facsimiles of pre-human systems are misplaced, and instead, the disagreements are over how to decide what level of human manipulation and presence is acceptable – a discussion of where rewilding should sit on the axis identified by Lorimer et al (2015) of pure nature versus hybrid nature.

With regards to the important question of whether rewilding has a diffuse, unified or plastic meaning, neither factor saw a lack of consensus on the meaning of rewilding, although there was clear recognition that there were some differences within it. However, they differed on the extent to which rewilding should be considered differently in different places. This would suggest that those who see rewilding as primarily about the radical transformation of landscapes currently dominated by traditional farming, hunting and other long-standing low intensity land uses have a narrower definition than the cosmopolitan vision, which is defined in large part by their positive view of differences as flexible and pragmatic. The radical transformative view saw rewilding as in some ways superior to other forms of conservation, whereas the cosmopolitan view saw rewilding's value as adding a new tool to conservation. There is broad consensus on what rewilding is, in general terms, but disagreement on how to do it, and how it relates to other forms of conservation.

There are important differences in how local communities, their culture and livelihoods, were viewed. Across both factors, some land abandonment was seen as inevitable, and the remaining traditional land uses were seen as compatible with rewilding with appropriate segregation, but there were differences in how rewilding should respond. The pragmatic factor differed in its concern over uncertainty for humans, loss of local culture, and relative scepticisms over the ability of rewilding to provide livelihoods. It placed greater concern on the wellbeing of these communities in their current state, whereas the other was more enthusiastic about transforming communities. There was consensus that local support is necessary for rewilding success, but some difference over whether this was a practical response to ensure cooperation (what Brockington 2004 calls the "principle of local support"; also see Holmes et al. 2017), seen in both factors, or an ethical imperative, seen in the pragmatic factor. Both factors saw future rural change as inevitable and desirable, but expressed differing levels of concern for the consequences for the communities of traditional land users. They also held different views on how rewilding should be implemented and governed and how local communities should be involved.

A few respondents were very certain on the likely impacts of rewilding on local communities, or how rewilding could (and therefore should) engage with new nature-based livelihoods and market-based conservation techniques. Most, however, were rather uncertain; they considered that

rewilding was new and such things were yet to be discovered. Similarly, whilst some were clear in embracing or rejecting neoliberal approaches to rewilding, or envisaging certain relationships with community livelihoods, most respondents were uncertain and hesitant. Neither factor is clearly linked to any particular position surrounding neoliberal conservation or the 'new' conservation (see Holmes et al. 2017), although the pragmatic factor shows some reserved engagement with economic rationales as a means of generating support and the transformative factor is stronger in rejecting economic competitiveness. When combined with the relative greater concern for local livelihoods in the pragmatic factor, and the relative greater focus on ecological purity and rural wild-ness in the transformative factor, this would tentatively indicate that the former has some similarities to the 'new' conservation and the latter to 'traditional' conservation (Holmes et al. 2017).

The study reveals that although rewilding advocates celebrate uncertainty and open-ended development of natural systems, views on how this might generate new uncertainties for humans are less developed. For example, when discussing statement 6 on uncertain outcomes for human society almost all respondents discussed how the uncertainty in natural systems needs to be considered by humans, such as by reducing the instincts to manage nature rather than in terms of economies or livelihoods. This was despite there being a separate statement on uncertain outcomes for nature (statement 11). The academic literature on rewilding has also focused much more on uncertainty for nature than for humans. The lack of a clear sense of the relationship between livelihoods, communities, markets and rewilding can be attributed to the fact that there is little experience of actually doing rewilding at present, and a number of studies (Wynne-Jones et al. 2018; Vasile 2018) show how rewilding projects evolve in negotiation with local communities over time.

It is worth noting that the relatively neutral placement of statement 42 on spiritual values reflects uncertainty on how to talk about something so personal, compared to questions of ecology. The qualitative data gathered shows many participants were motivated by spiritual or emotive aspects of rewilding but were uneasy about talking to others about something that was very individual and personal (see Taylor 2005; Monbiot 2013 for examples of emotion and spiritual values motivating individual rewilders). Economic or scientific arguments were seen as safer ground.

Finally, one aspect present in the qualitative data but missing from the statements is that a number of respondents were critical of not just the approach to rewilding taken by other organisations, but on occasion their personalities, politics, and ethical principles. This indicates that the disagreements between rewilders is about more than definitions of rewilding or pragmatism versus radical transformation. Within conservation, 'strategic disconnections' between organisations in which individuals from different organisations do not collaborate because of a personal conflict, can affect the flow of ideas and resources within conservation (Scholfield 2013) but this is rarely recognised in the academic literature.

CONCLUSION

There is considerable diversity within European rewilding. There are not the levels of plasticity identified by Jørgensen which might render the term useless, as there is enough coherence, perhaps most interestingly around the acceptance of human presence (if only temporarily in some instances) within wild nature. Rewilding projects are not inherently incompatible with human land uses and societies, but can co-exist, albeit sometimes uneasily (Prior and Brady 2016). Yet there are important differences, most notably on pragmatism versus radical transformation. These are tied to different visions of what rewilding is and how it works alongside, or aims to transform, mainstream conservation approaches. Whilst some have argued that there is inherent contradiction between rewilding ideals and realities, others have shown the political evolution of rewilding projects as they seek to resolve these through pragmatism and compromise. In this sense, rewilding may be less radical and conflictual than implied by the academic literature.

Future research should consider how such positions map onto particular demographics within rewilders. It should also explore how these subjective values, alongside other factors, affect the everyday politics of how rewilding projects are enacted, how they seek to work with both nature and people. As part of this, studies should also consider how the views and visions of rewilders and rewilding change over time. The social and governance aspects of rewilding will be central to how it emerges in coming decades.

ACKNOWLEDGEMENTS

REFERENCES

Arts. K., A. Fischer, and R. van der Wal. 2016. Boundaries of the wolf and the wild: a conceptual examination of the relationship between rewilding and animal reintroduction. *Restoration Ecology* 24(1): 27–34.

Briggs, C. 2017. *Full of sound and fury, signifying nothing (Jørgensen 2015: 486)? a Q study of rewilding in Britain*. B.A. thesis, University of Cambridge, Cambridge, UK.

Brockington, D. 2004. Community conservation, inequality and injustice: myths of power in protected area management. *Conservation and society* 2(2): 411–432.

Brown, C., R. McMorran, and M.F. Price. 2011. Rewilding–a new paradigm for nature conservation in Scotland? *Scottish Geographical Journal* 127(4): 288–314.

Ceaușu, S., M. Hofmann, L.M. Navarro, S. Carver, P.H. Verburg, and H.M. Pereira. 2015. Mapping opportunities and challenges for rewilding in Europe. *Conservation Biology* 29(4): 1017–1027.

Convery, I. and T. Dutson. 2008. Rural communities and landscape change: a case study of wild Ennerdale. *Journal of Rural and Community Development* 3(1): 104–117.

Corlett, R.T. 2016. Restoration, reintroduction, and rewilding in a changing world. *Trends in Ecology & Evolution* 31(6): 453–462.

Cronon, W. 1996. The trouble with wilderness: or, getting back to the wrong

nature. *Environmental History* 1(1): 7–28.

Deary, H. and C.R. Warren. 2017. Divergent visions of wildness and naturalness in a storied landscape: practices and discourses of rewilding in Scotland's wild places. *Journal of Rural Studies* 54: 211–222.

Deary, H. and C.R. Warren. 2018. Trajectories of rewilding: a taxonomy of wildland management. *Journal of Environmental Planning and Management* 62(3): 1–26.

Donlan, C.J.C., J. Berger, C.E. Bock, J.H. Bock, D.A. Burney, J.A. Estes, D. Foreman, et al. 2006. Pleistocene rewilding: an optimistic agenda for twenty-first century conservation. *The American Naturalist* 168(5): 660–681.

Foreman, D. 2004. *Rewilding North America: a vision for conservation in the 21st century*. Washington: Island Press

Gammon, A.R. 2018. The many meanings of rewilding: an introduction and the case for a broad conceptualisation. *Environmental Values* 27(4): 331–350.

Holmes, G. 2007. Protection, politics and protest: understanding resistance to conservation. *Conservation and Society* 5(2): 184–201.

Holmes, G. 2014. What is a land grab? exploring green grabs, conservation, and private protected areas in southern Chile. *Journal of Peasant Studies* 41(4): 547–567.

Holmes, G. 2015. Markets, nature, neoliberalism, and conservation through private protected areas in southern Chile. *Environment and Planning A* 47(4): 850–866.

Holmes, G., C. Sandbrook, and J. Fisher. 2017. Understanding conservationists' perspectives on the new-conservation debate. *Conservation Biology* 31(2): 353–363.

Jepson, P. 2016. A rewilding agenda for Europe: creating a network of experimental reserves. *Ecography* 39(2): 117–124.

Jørgensen, D. 2015. Rethinking rewilding. *Geoforum* 65: 482–488.

Lewis, M. 2015. Rewilding pragmatism: or, what an African Safari can teach America. *The Breakthrough Journal* 5.

Lorimer, J. 2015. *Wildlife in the Anthropocene: conservation after nature*. Minnesota: University of Minnesota Press.

Lorimer, J. and C. Driessen. 2014. Wild experiments at the Oostvaardersplassen: rethinking environmentalism in the Anthropocene. *Transactions of the Institute of British Geographers* 39(2): 169–181.

Lorimer, J. and C. Driessen. 2016. From "Nazi cows" to cosmopolitan "ecological engineers": specifying rewilding through a history of Heck cattle. *Annals of the American Association of Geographers* 106(3): 631–652.

Lorimer, J., C. Sandom, P. Jepson, C. Doughty, M. Barua, and K.J. Kirby. 2015. Rewilding: science, practice, and politics. *Annual Review of Environment and Resources* 40: 39–62.

Marris, E. 2013. *Rambunctious garden: saving nature in a post-wild world*. New York: Bloomsbury Publishing USA.

McShane, T., P.D. Hirsch, T.C. Trung, A.N. Songorwa, A. Kinzig, B. Monteferri, D. Mutekanga, et al. 2011. Hard choices: making trade-offs between biodiversity conservation and human well-being. *Biological Conservation* 144(3): 966–972.

Monbiot, G. 2013. *Feral: searching for enchantment on the frontiers of rewilding*. London: Penguin UK.

Navarro, L.M. and H.M. Pereira. 2015. Rewilding abandoned landscapes in Europe. Rewilding European Landscapes. *Springer*: 3–23.

Olwig, K.R. 2016. Virtual enclosure, ecosystem services, landscape's character and the 'rewilding' of the commons: the 'Lake District' case. *Landscape Research* 41(2): 253–264.

Pettorelli, N.J. Barlow, P.A. Stephens, S.M. Durant, B. Connor, H. Schulte to Bühne, C.J. Sandom, et al. 2018. Making rewilding fit for policy. *Journal of Applied Ecology* 55(3): 1114–1125.

Phalan, B., M. Onial, A. Balmford, and R.E. Green. 2011. Reconciling food production and biodiversity conservation: land sharing and land sparing compared. *Science* 333(6047): 1289–1291.

Prior, J. and E. Brady. 2016. Environmental aesthetics and rewilding. *Environmental Values* 26(1): 31–51.

Prior, J. and K.J. Ward. 2016. Rethinking rewilding: a response to Jørgensen. *Geoforum* 69: 132–135.

Sandbrook, C., J.A. Fisher, G. Holmes, R. Luque-Lora, and A. Keane, 2019. The conservation movement is diverse but not divided. *Nature Sustainability* 2(4): 316.

Scholfield, K. 2013. Transnational (Dis) Connections: Mountain Gorilla Conservation in Rwanda and the DRC. Ph.D. thesis, University of Manchester, Manchester, UK.

Soulé, M. and R. Noss. 1998. Rewilding and biodiversity: complementary goals for continental conservation. *Wild Earth* 8: 18–28.

Soulé, M. 2013. The "New Conservation." *Conservation Biology* 27(5): 895–897.

Svenning, J.C., P.B. Pedersen, C.J. Donlan, R. Ejrnæs, S. Faurby, M. Galetti, D.M. Hansen, B. Sandel, et al. 2016. Science for a wilder Anthropocene: Synthesis and future directions for trophic rewilding research. *Proceedings of the National Academy of Sciences* 113(4): 898–906.

Tallis, H. and J. Lubchenco. 2014. Working together: a call for inclusive conservation. *Nature* 515: 27.

Tanasescu, M. 2017. Field notes on the meaning of Rewilding. *Ethics, Policy & Environment* 20(3): 333–349.

Taylor, P. 2005. *Beyond conservation: a wildland strategy*. London: Routledge.

Vasile, M. 2018. The vulnerable bison: practices and meanings of Rewilding in the Romanian Carpathians. *Conservation and Society* 16(3): 217–231.

Watts, S. and P. Stenner. 2012. *Doing Q methodological research: theory, method & interpretation*. London: Sage.

Wynne-Jones, S., G. Strouts, and G. Holmes. 2018. Abandoning or reimagining a cultural heartland? understanding and responding to Rewilding conflicts in Wales–the case of the Cambrian Wildwood. *Environmental Values* 27(4): 377–403.

Wynne-Jones, S., G. Strouts, C. O'Neil, and C. Sandom. In press. Rewilding–departures in conservation policy and practice? an evaluation of developments in Britain. *Conservation and Society*.

Zabala, A. C. Sandbrook, and N. Mukherjee. 2018. When and how to use Q methodology to understand perspectives in conservation research. *Conservation Biology* 32(5): 1185–1194.