Received: 13 June 2024 | Accepted: 13 June 2025

DOI: 10.1002/pan3.70100

People and Nature

RESEARCH ARTICLE

Five critical questions we should ask of rewilding projects—And that social science can help us answer

Emma Cary[1] | Karen Jones[2] | Virginia Thomas[3] | Signe Brieghel[4] | Ana Payo Payo[5] | Flurina M. Wartmann[1,6]

[1]Department of Geography & Environment, University of Aberdeen, Aberdeen, UK; [2]School of History, University of Kent, Canterbury, UK; [3]Centre for Rural Policy Research, University of Exeter, Exeter, UK; [4]Saxo Institute, Ethnology Section, University of Copenhagen, Copenhagen, Denmark; [5]Departamento de Biodiversidad, Ecología y Evolución, Universidad Complutense, Madrid, Spain and [6]Leverhulme Centre for Nature Recovery, University of Oxford, Oxford, UK

Correspondence
Emma Cary
Email: e.cary.22@abdn.ac.uk

Funding information
Natural Environment Research Council; University of Aberdeen

Handling Editor: Emmeline Topp

Abstract

1. Engaging conservation decision-making with critical aspects of social science can enhance the equitability of conservation practice by recentring issues of social and environmental justice.
2. Using rewilding as a conservation case in point, we identify five foundational questions to ask of rewilding projects to help align rewilding decision-making with justice principles.
3. We unpack these questions through five rewilding case studies: Yellowstone National Park (USA), Oostvaardersplassen (NL), Knepp Wildland (UK), Alladale Wilderness Reserve (UK) and Carpathia (RO). Applying different social science disciplines—history, anthropology, political ecology, human geography and sociology—we explore rewilding's socio-cultural and socio-economic dimensions; aspects that underpin rewilding decision-making, but that remain under-represented in the literature as well as in praxis.
4. We show that the decisions made in these rewilding projects not only impact ecosystems but are also deeply connected to people and societies, making them inseparable from issues of social justice. In addition to the ecological goals, we highlight the social motivations driving these projects and consider what society might gain or lose—beyond increased ecological dynamism and species recovery.
5. Bringing in different disciplinary perspectives helps us better understand the key political issues and debates raised by rewilding projects. We argue that this approach is essential for achieving both ecologically effective and socially just biodiversity governance.

KEYWORDS
biodiversity governance, conservation social science, decision-making, rewilding, social environmental justice

1 | INTRODUCTION

In the context of multiple crises across the Earth's system (Richardson et al., 2023), both state and non-state actors are calling attention to society's unsustainable interactions with nature (Dasgupta, 2021; IPBES, 2022). Efforts to improve biodiversity outcomes now go beyond species- and site-focused conservation, and new approaches to conservation and restoration are proposed as means to drive social and ecological transformation (Martin, 2017; Tedesco et al., 2023). Rewilding is one such approach. Increasingly seen as a promising conservation strategy, rewilding supports dynamic ecosystems and reintroduces keystone species, helping to tackle both biodiversity loss and climate change (Svenning et al., 2024). Rewilding advocates highlight benefits for biodiversity alongside the potential to deliver societal benefits, such as jobs in ecotourism (Rewilding Europe, n.d.). However, rewilding has also faced criticism for a lack of consideration of negative societal impacts, such as reintroduction conflicts or changes in livelihoods (Martin et al., 2021; Wynne-Jones et al., 2018).

Fair distribution of the costs and benefits, and wider justice aspects, of biodiversity action is a significant topic in wider nature conservation. As land-use changes driven by environmental goals increasingly clash with the realities of local communities, global targets such as the '30 by 30' initiative that aim to restore large areas of land (Convention on Biological Diversity, 2022) have consequences for local decision-making, as the drive to meet global targets risks taking precedence over needs of local actors (Iordăchescu, 2022). While rewilding shows potential in its ecological contributions, true transformative and socially just conservation requires opening space for a variety of perspectives, rather than promoting a single ecological 'fix' (Fabinyi et al., 2014).

We recognise that rewilding is a contested term. Conservation science and policy might prefer to focus on ecological restoration instead of using rewilding. However, rewilding remains popular in many projects and helps inspire hope among a wider audience (Jepson, 2019). Instead of abandoning the term, we suggest exploring the debates around rewilding to uncover new perspectives and insights for a more socially just future in conservation. While these insights can apply to other conservation methods, this article focuses on rewilding as a newly contested approach which needs critical and constructive attention.

1.1 | Using multi-disciplinary lenses to enhance social and environmental justice in conservation

The efficacy of conservation practice can be enhanced by recentring issues of social and environmental justice (Montgomery et al., 2024; Shoreman-Ouimet & Kopnina, 2015a). However, achieving this requires using disciplines and methods that incorporate social values into conservation decision-making—which is the focus of social sciences (Díaz-Reviriego et al., 2019; Vatn et al., 2024). In addition to their ability to analyse, understand and predict social phenomena (Moon & Blackman, 2014), social sciences provide tools to critically examine normative ideals, such as those that relate to justice, ethics and rights, or about what *ought to be* (Jetzkowitz et al., 2018; Smith, 1998). By fostering pluralistic debate, social science disciplines can also broaden our understandings of what a viable, environmentally and socially just future could look like (Massarella et al., 2022). Social sciences also have a critical emancipatory role[1] to play in nature conservation (Moon & Blackman, 2014) in both empowering people and in helping to identify transformative and more equitable alternatives (Massarella et al., 2021). Applying social science perspectives thus creates opportunities for collaboration between the social and natural sciences to develop just options for people and nature (Shoreman-Ouimet & Kopnina, 2015a).

Conservationists are increasingly incorporating social sciences into their practice. Applied social sciences can tailor implementations to local management and cultural contexts (Leong et al., 2024) and help enhance salience and legitimacy in collaborative, multi-stakeholder management efforts (Samanta et al., 2020). Nevertheless, social sciences encompass many subdisciplines and diverse approaches (see Mathevet & Marty, 2020), and some are much more likely to be incorporated in conservation practice than others. Topics more commonly included are, for instance, economic valuation, behavioural sciences, management effectiveness and human–wildlife interactions. These are perhaps seen as integral and instrumental to conservation science and practice, or as less critical and therefore less likely to challenge current conservation paradigms (Bennett & Roth, 2019). Conversely, issues such as governance, social impacts, power relations, ethics and knowledge are less frequently addressed (Shackleton et al., 2023). Indeed, research focusing on the 'politics' of conservation is often negatively connotated (Büscher & Wolmer, 2007); partly due to a tendency to focus on critiquing conservation practices, rather than seeking constructive improvements (Brosius, 2006; Peterson et al., 2010). The resulting sometimes adversarial relationship between critical social science and conservation hinders both effective collaboration and improved conservation practices and outcomes (Redford, 2011).

Recent efforts show that productive engagement of conservation practice with the more critical aspects of social science is possible under the right conditions (Chua et al., 2020). These include sustained collaboration among diverse researchers and practitioners, even from disciplines seemingly unrelated to conservation. Such engagement encourages a conscious effort to address issues of politics and morality (ibid.) alongside critical reflexivity (Schreer et al., 2024). However, even where research explicitly addresses justice in conservation, it often fails to enact the disciplinary diversity it claims is needed to secure justice outcomes (for example, Stanley et al., 2025). To address this gap, and recognising the need to raise, interrogate and debate questions

[1]Emancipatory research seeks to challenge oppression and empower the subjects of social inquiry (Moon & Blackman, 2014).

around the who, what, when, why and how of conservation (Chua et al., 2020), we use the case of rewilding to critically and constructively explore, through specific examples, how a range of different social science subdisciplines can enable more equitable conservation practice.

1.2 | A critical and constructive view of decision-making in rewilding

We focus in this paper on rewilding, which is not a neat, complete concept (Hawkins et al., 2023). Extensively debated across the natural (Anderson et al., 2019; Hayward, Scanlon, et al., 2019; Pettorelli et al., 2018) and social sciences (Deary & Warren, 2019; Prior & Ward, 2016), as well as humanities literature (Gammon, 2017, 2018a; Jørgensen, 2015), it continues to be differently interpreted and implemented. It is informed by principles that are adaptable across a variety of landscapes, systems, and social contexts (Hawkins et al., 2023). Without a legal definition, rewilding remains a 'boundary object'—a concept that adapts locally but keeps a shared identity for broader use (Star & Griesemer, 1989). Although rewilding projects interpret the term in different ways, it still provides a shared identity for a growing number of projects linked by a common idea. In this paper, we view rewilding as one approach to biodiversity conservation, using the definition provided by Carver et al. (2021, 1888) and the IUCN Rewilding Thematic Group, summarised as: '*Rewilding is the process of rebuilding, following major human disturbance, a natural ecosystem by restoring natural processes and the complete or near complete food web at all trophic levels as a self-sustaining and resilient ecosystem with biota that would have been present had the disturbance not occurred*.'

Despite significant research on rewilding (Hart et al., 2023; Torres et al., 2018), the decision-making processes behind these initiatives are not yet fully understood. Understanding these processes is important because decisions that use nature-based solutions to address environmental change often hide underlying knowledge-related (epistemic) and power dimensions (Woroniecki et al., 2020). Therefore, critically analysing decision-making is key to social justice (Turnhout, 2024), especially since our understanding of what fair decision-making in conservation looks like is still limited (Ruano-Chamorro et al., 2021).

In this paper, we show how social science perspectives can be applied by asking five questions about five rewilding projects. These case studies were chosen to represent projects at different stages of implementation and across various locations. By addressing these questions, we show how critical engagement can reveal that decisions in these projects not only change ecosystems but are also connected to people and societies, making them inseparable from social justice issues (Henry et al., 2022). While all five questions can apply to all five projects, we address one question for each project to highlight the different insights the social sciences can offer in the evolving field of conservation. We show how cross-disciplinary dialogue can provide valuable perspectives for rewilding research and practice, and improve the justice of rewilding decisions by addressing factors often overlooked in conservation efforts.

2 | METHODOLOGY

This paper uses a case study approach, drawing on interviews (Thomas, 2022), archival research (Jones, 2002, 2017), ethnographic fieldwork (Brieghel, 2020), and policy and literature review (Cary & Wartmann, 2024). Each of the five rewilding cases addresses one of our five critical social science questions. The study originated from an interdisciplinary workshop in Pitlochry, Scotland, organised by Emma Cary and Flurina Wartmann, and funded by the University of Aberdeen. Participants contributed diverse social science expertise and fieldwork experience across Europe and North America. A conservation ecologist joined the team to ensure relevance for conservation science. Author backgrounds are detailed in Table 1.

We recognise that the authors' perspectives represent only a small part of the social sciences. While this is a limitation, we believe using a few less common approaches, along with practical examples of questions from these fields, can start important discussions between conservation scientists, practitioners, and

TABLE 1 Social science subdisciplines and their contributions.

Subdiscipline	Areas of investigation	Example application	Example methods
History	Information, evidence, argumentation	Identify continuity and change over time, explain the genealogy of ideas and practices	Ethnographic research Participant observation Archival research Documentary research Surveys Interviews Case studies Qualitative document analysis
Anthropology	Context, process, scale	Recognise the interconnectedness and interdependence of human (and non-human) experiences	
Political ecology	Behaviour, governance and power	Understand how individuals or groups exert power	
Human geography	Temporal and spatial organisations and interactions	Describe human interactions with place, nature and each other	
Sociology	Social interactions, inequality	Explain the causes and characteristics of social and environmental issues	

researchers focused on the social aspects of conservation (Büscher & Wolmer, 2007; Massarella et al., 2022; West et al., 2006).

2.1 | Author positionality and approach

The author team consists of Western researchers from various disciplines and career stages, from early career to senior academics. We acknowledge that research is not value-free (Turnhout, 2024), and our backgrounds, academic positions, and personal characteristics influence our research design and interpretations. Our research occurs within social, historical, and political contexts. Guided by a relativist ontology and moderate social constructionism (Moon & Blackman, 2014), we recognise that objective reality exists but emphasise that knowledge is socially constructed. We view rewilding and natural processes as shaped by social decision-making and actions. Nature, whether measured scientifically or interpreted locally, is seen as a subjective product open to social scientific research (Robbins, 2001). Our approach assumes that reality is complex and socially constructed, and we explore how knowledge is produced (Moon et al., 2019).

2.2 | Developing the five questions to ask of rewilding projects

We focus on foundational issues as a framing for question development (Table 2). Using different disciplinary perspectives for each question, we developed themes to explore how rewilding decisions are made, particularly in relation to social justice, a growing concern in conservation research and practice (Montgomery et al., 2024). Dimensions of justice are multiple (Friedman et al., 2018). Here we focus on five aspects of justice commonly characterised in the conservation literature (see also Table 2): epistemic justice (Widenhorn, 2013), recognition justice (Martin et al., 2016), participatory justice (Ruano-Chamorro et al., 2021), multi-species justice (Haraway, 2018) and distributive justice (Martin et al., 2015).

We use these questions to explore the socio-cultural and socio-economic aspects of rewilding, which influence decision-making but are under-represented in the literature (Massenberg et al., 2022). While the impact of rewilding on biodiversity is comparatively well reported (Schulte to Bühne et al., 2022; Smith & Bangs, 2009), the social effects are less discussed, likely due to the unpredictability of social impacts (Pettorelli et al., 2018). By critically examining our five questions (Table 2) on the knowledge used in rewilding (Q1), the outcomes for species (Q2), the beneficiaries of the approach (Q3), the reference points considered (Q4) and the people involved or excluded (Q5), our aim is to uncover the social motivations behind rewilding and consider what society gains or losses from these initiatives, beyond ecological benefits and species restoration.

2.3 | Selection of five case study sites

We explore five established rewilding case studies: Yellowstone National Park (USA), Oostvaardersplassen (Netherlands), Knepp

TABLE 2 Question development.

Question	Critical aspect	Justice aspect	Discipline selected to address question
Question 1: Whose knowledge is included?	What justifications are used for rewilding? How is rewilding framed? Which values underpin rewilding?	Epistemic justice—respect for diverse forms of knowledge	History
Question 2: Whose rights and responsibilities are considered?	What agency do restored species have? Who is responsible for managing coexistence challenges? Who bears the costs of coexistence?	Multi-species justice—the rights of non-humans	Multi-species anthropology
Question 3: Which costs and benefits are prioritised?	Who is meant to benefit from rewilding? What aspirations are behind rewilding? What inequalities does this approach reproduce?	Distributive justice—allocation of costs and benefits	Political ecology
Question 4: Whose identities, histories and visions are foregrounded?	Which reference points are used to inform rewilding? Why are these reference points chosen? Whose worldviews are included or excluded?	Recognition justice—respect for different identities, histories and cultures	Human geography
Question 5: Who participates in decision-making and how?	Who is defining visions of future landscapes? Who gets to participate? Are the most affected or vulnerable actors included in decision-making?	Participatory justice—fairness in decision-making practices, processes and institutions	Sociology

Wildland (UK), Alladale Wilderness Reserve (UK), and Carpathia (Romania). We purposefully selected these cases to represent (i) a range of rewilding models, (ii) various stages of project implementation, and (iii) geographical spread across North America, Britain, and Europe. Specifically, we use Yellowstone National Park as a North American example, an established project that has inspired other rewilding initiatives across the globe. From Europe, we use the example of Oostvaardersplassen in the Netherlands as one of the first projects in Europe that was inspired by ecological thinking around Frans Vera's theories (Vera, 2002), and has served as a blueprint for other projects, including the Knepp Wildland in England, one of our British examples. Knepp Wildland is owned by Charlie Burrell and Isabella Tree, who have popularised rewilding and brought it into the public consciousness with publications 'Wilding' (Tree, 2018) and 'The Book of Wilding' (Tree, 2023). As a Scottish example, we chose the privately owned Alladale Wilderness Reserve, which epitomises debates around land ownership and contestations around rewilding in culturally saturated lands. And finally, we use a new project, 'Carpathia' in Romania, which has been described as the 'Yellowstone of Europe' in the National Geographic (Tree, 2024) and which provides an example from Eastern Europe, an expanding front of rewilding projects. These cases, though place-bound, are socially and conceptually linked, shaped by influential actors. Using a different disciplinary lens for each, we explore how rewilding decisions are made and how they intersect with social justice.

2.3.1 | Question 1: Whose knowledge is included in rewilding? A historical perspective on Yellowstone National Park

Yellowstone National Park lies within the Greater Yellowstone Ecosystem, spanning three U.S. states with a mix of tribal, private, and state land ownership. Home to large herbivores such as elk and bison, and predators including grizzly bears, wolves, and lynx, the park draws over four million visitors annually (U.S. National Park Service, n.d.). To explore whose knowledge is included in rewilding, we take a historical perspective on this globally influential project.

When Yellowstone was established in 1872, wildlife was not the focus. The 1872 Enabling Act emphasised protecting landscape features (Figure 1) including timber, mineral deposits and natural curiosities such as geysers and hot springs (Jones, 2013).

During the same period, the Great Plains were colonised and transformed through extractive economies, especially cattle farming, into a grazing pasture the size of Western Europe (Rifkin, 1992; Sherow, 2007). As Rifkin notes, within 50 years, the western wilderness had been converted into a 'productive resource' (Rifkin, 1992, 67). Early preservation efforts at Yellowstone reflected this logic; nature was something to manage, extract from, and control (Murdock, 2021). Early management policies at the park accordingly ranged from establishing acceptable levels of commercial development to deciding which types of tourist activities would be allowed (Rifkin, 1992). At the heart of these white colonialist efforts to simultaneously protect and capitalise on Yellowstone's landscapes was the violent dispossession of Indigenous peoples with ancestral ties to the land (Smith & Bangs, 2009). Yellowstone's founding coincided with federal policies aimed at confining Native Americans to reservations and removing them from lands deemed valuable for settler conservation and recreation (Murdock, 2021; Smith & Bangs, 2009). Ironically, these landscapes were ecologically rich precisely because of millennia of Indigenous stewardship, creating and promoting the ecological conditions that white settlers now wanted to preserve as 'untouched wilderness' (Murdock, 2021, 239; Stark et al., 2022).

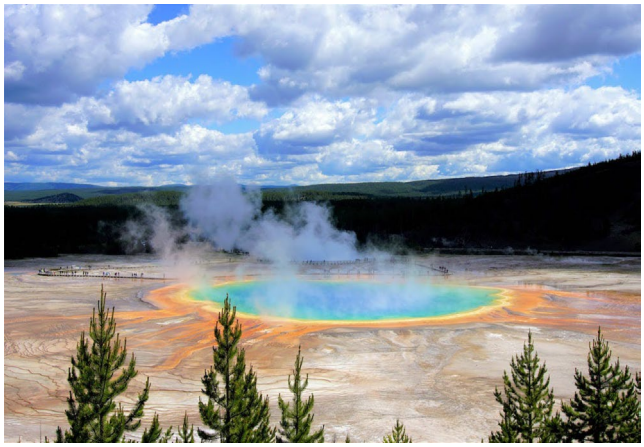

FIGURE 1 Yellowstone National Park was originally designated for the preservation of its geothermal features. Photo credit: Meina Yin via Unsplash.

Grey wolves (*Canis lupus*) were eradicated from Yellowstone by the mid-1920s, reflecting conservation policies that prioritised grazing ungulates over predators such as wolves. However, advances in ecological science and a growing appreciation for rare species led to a shift in park policy (Fritts et al., 1997). Scientific knowledge emphasised the importance of predators in maintaining the 'balance of nature' (Pritchard, 2022), and the Endangered Species Act (1973) mandated the restoration of extirpated species, including grey wolves,[2] which were reintroduced to Yellowstone in 1995.

This was hailed as a 'new era' (White et al., 2013) restoring the park's full predator–prey dynamics (IUCN CEM, 2021). The reintroduction of wolves became a widely celebrated example of ecological restoration, showcasing the role of predators in shaping ecosystems, or what Ripple and Beschta (2004) refer to as the 'ecology of fear.' This success was widely reported in the media (Randall, 2010), with the grey wolf becoming a symbol of

[2]U.S. Fish & Wildlife Service states that grey wolves were originally listed under the Endangered Species Act as subspecies or as regional populations of subspecies in the contiguous United States and Mexico. In 1978, the grey wolf was reclassified as endangered at the species level (*C. lupus*) throughout the contiguous United States and Mexico, except for grey wolves in Minnesota which were classified as threatened. A listing timeline can be found at: https://www.fws.gov/species/gray-wolf-canis-lupus.

restorative success, conferred with a sort of 'ecological sainthood' (Jones, 2017). This success was later embraced by the rewilding movement. Through the build-up of discourse, by 2013, the concept of rewilding began to frame the Yellowstone project (Monbiot, 2013, 2014). Although the evidence for trophic cascades is contested (Hayward, Edwards, et al., 2019), the rewilding narrative now drives large-scale efforts such as the Yellowstone to Yukon Conservation Initiative, spanning 1.3 million km^2 (Hilty et al., 2022; Yellowstone to Yukon Conservation Initiative, 2024). Framed by conservation science, 'real rewilding' with carnivores (Carver & Convery, 2021) and the portrayal of Yellowstone as a rewilding success construct a powerful narrative, presenting trophic rewilding as a solution to ecosystem dysfunction (Gammon, 2018b). However, ecosystems do not merely 'dysfunction' for internal reasons, and such narrative risks masking the underlying (often anthropogenic) causes. For instance, much of the Yellowstone region remains heavily shaped by industrial cattle grazing, which has rendered surrounding prairies nearly treeless (Svenning, 2017).

Storylines help people make sense of the world, and positive ones can support sustainable and just futures (Veland & Lynch, 2016). However, attending to these stories as social constructs sheds light on the power of some science stories to gain authority over others (Louder & Wyborn, 2020), exposing the underlying value systems and inequalities embedded within. A historical perspective reveals this knowledge politics and the fluid nature of science (Turnhout, 2009). The shifting portrayal of grey wolves, from threats to ecological icons, shows how science is continually reframed in line with new developments and agendas. These framings often support dominant interests while sidelining alternative ways of knowing, such as traditional and place-based knowledge systems. In Yellowstone, dominant ideas about what belongs in nature shape decisions about species protection and removal, reinforcing truth claims around nativeness and ecosystem health while marginalising less powerful voices and knowledge systems (Perkins, 2020; Robbins, 2006).

By tracing continuity and change over time, history reveals the genealogy of ideas and practices and shows how scientific framings are shaped by shifting ideas and trends. In Yellowstone, conservation based on ideals of nativeness and wilderness often overlooks ecological dynamism and reduces Indigenous peoples to passive 'parts' of nature, without a cultural or ecological imprint. While history highlights the violent displacement and dispossession of Indigenous knowledge holders, the Yellowstone model still inspires global projects (e.g. Alladale, Carpathia in this paper), bolstered by powerful narratives that justify conservation as necessary (Louder & Wyborn, 2020). Reintroductions are framed as ethically and ecologically justified, with ecosystem-level benefits presented as outweighing harm to individuals (Arts et al., 2012). Rewilding as a term is sometimes applied retrospectively, creating compelling stories that obscure the knowledge inequalities behind these supposed successes. A socially just approach to conservation requires rethinking what Yellowstone National Park is for, and what it can become in the future (Stark et al., 2022), and urges organisations to reflect critically on the assumptions and knowledge systems they privilege; a vital step toward disciplinary diversity and inclusion (Nyssa et al., 2024).

2.3.2 | Question 2: Whose rights and responsibilities are considered in rewilding? A multi-species anthropological perspective on Oostvaardersplassen

Located in the Netherlands near Amsterdam, Oostvaardersplassen is a state-owned nature reserve with varied marshland, lakes, reed beds, and willow forests. Large herbivores—Heck cattle (*Bos taurus*), konik ponies (*Equus ferus caballus*) and red deer (*Cervus elaphus*) were introduced onto the fenced site in the 1980s–1990s to deliver naturalistic grazing. In the following section, we employ a multi-species anthropological perspective to explore our second question: whose rights and responsibilities are considered in rewilding?

Oostvaardersplassen, established in 1968, pioneered a 'hands off' conservation approach inspired by grazing ecology theory (Vera, 2000), and later influenced projects including Knepp Wildland in England (Knepp Castle Estate, 2024a). The goal was to let ecosystems function naturally, using large herbivores including cattle, ponies (Figure 2) and deer, to maintain open wood pasture instead of closed canopy forest (Vera, 2009). These animals were treated as wild, with survival depending on food availability. However, the reserve's visibility to the public meant starving animals during harsh winters drew growing concern. Public criticism began in 2005 and peaked in 2017–2018, when protests and unauthorised feeding were triggered by scenes of animal suffering (van der Maten et al., 2022). In response, a government committee recommended reducing herbivore numbers and ending the

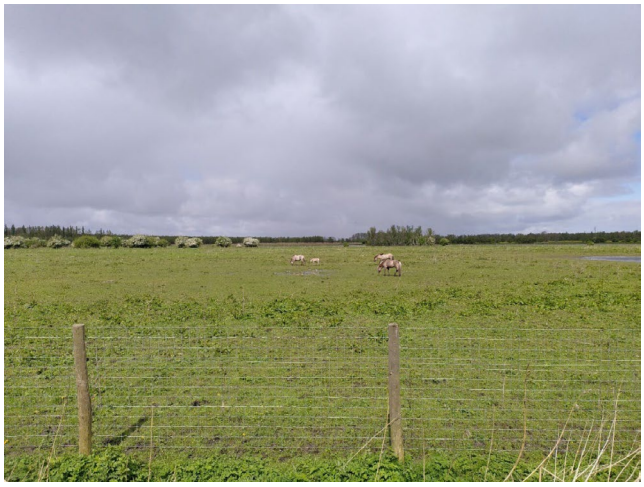

FIGURE 2 Konik ponies (*Equus ferus caballus*) grazing at Oostvaardersplassen. Photo credit: Emma Cary.

non-interventionist model. Since 2018, management now includes culling (ibid).

In Euro-American contexts, rewilding often faces strong criticism over animal welfare, especially when large herbivores such as horses and cattle are left without supplementary feeding or veterinary care (Lorimer & Driessen, 2013). These controversies stem from cultural expectations shaped by centuries of farming, where animal welfare is linked to human care and productivity (Overstreet, 2018). Even when these animals roam freely in conservation areas, they are still widely seen as domestic and in need of human support. Multi-species anthropology offers a useful lens for examining what responsibilities humans have toward animals in rewilding projects. By treating controversies such as debates over animal welfare, or opposition to reintroduced species, as opportunities to ask new questions, rewilding practitioners can better understand how non-human species behave and adapt in human-shaped environments. Multi-species ethnography highlights how animals, plants, and other life forms interact with humans in dynamic, reciprocal ways (Ogden et al., 2013; Tsing et al., 2020). Rather than focusing on a solely human perspective, multi-species ethnography asks how animals, plants, fungi, microbes, and other non-human beings shape the world alongside, and sometimes in resistance to, human projects such as rewilding, and how they are also changed in the process. A multi-species anthropological perspective helps us see how rewilding is shaped by complex relationships between humans and non-humans. At Oostvaardersplassen, large herbivores are not just tools for conservation—they are part of a broader multi-species 'assemblage' that makes up the rewilding landscape (Aisher & Damodaran, 2016).

Reintroducing certain species might seem the right thing to do from a scientific standpoint, but relying on ecological reasoning alone can overlook the cultural meanings people attach to animals, the multiplicity of human-non-human relations (Glentworth et al., 2024), and the uncertainty associated with these past, present, and future relationships. The challenges of a non-interventionist approach also vary depending on the size, scope, and openness of the rewilding project. In smaller projects—such as individual species reintroductions—some mortality is expected as animals adjust to the wild, but welfare concerns remain, for instance with beavers (Crowley et al., 2017). In larger projects that aim to restore full ecological functioning and relations, including predators, letting nature take its course may be more accepted. Still, critics argue rewilding often seeks a contradictory ideal: animals that are wild, but not too wild (Von Essen & Allen, 2016). Recognising the agency of individual animals, even within controlled projects, can help us reflect on the values behind rewilding and the ethical trade-offs it involves (Ramp & Bekoff, 2015). Thinking about what happens to restored species and who is carrying coexistence burdens helps challenge human-centred conservation and instead promotes multi-species justice (Srinivasan, 2022). This might mean, as Ward and Prior (2020, 111) suggest, 'stepping alongside' non-humans, approaching rewilding with ethics, compassion, and shared responsibility, so that animals are seen not as passive tools, but as co-participants in creating more just futures for all (Shoreman-Ouimet & Kopnina, 2015b).

2.3.3 | Question 3: Which costs and benefits are prioritised in rewilding? A political ecology perspective on Knepp Wildland

The Knepp Estate in West Sussex, once unprofitable under intensive farming, has since 2002 built a successful rewilding-based business model that includes ecotourism, regenerative farming, and wild meat production (Tree, 2023).

Inspired by a visit to the Dutch Oostvaardersplassen project, the Knepp estate owners adopted Vera's (2002) wood pasture model as their reference, using herbivores and reintroduced species to create a dynamic wood pasture landscape of grazed savanna, thorny scrub, groves, and open-grown trees (Knepp Castle Estate, 2024b). The site is publicly accessible via the public rights of way network and has 16 miles of walking routes and a range of nature-based tourism experiences that showcase its restoration work. Drawing on the Burrell family's personal history and ties to the former British colony of Southern Rhodesia (now Zimbabwe), the estate's marketing relies on safari tropes, where nature restoration activities have transformed the landscape to such an extent that '*Looking out of the windows and seeing herds of fallow wandering across the landscape, felt like being in the middle of the Serengeti*' (Knepp Castle Estate, 2024c). On its website, visitors are encouraged to book guided tours with titles such as 'Wild Horses Safari', 'Nightingale Safari and Supper' and 'Stockman Safari'. These tours, held in open-sided vehicles that resemble traditional safari trucks (Figure 3), cost between £60 and £300 per person (Knepp Castle Estate, 2025). We examine this case study through a political ecology lens to address our third question: which costs and benefits are prioritised in rewilding?

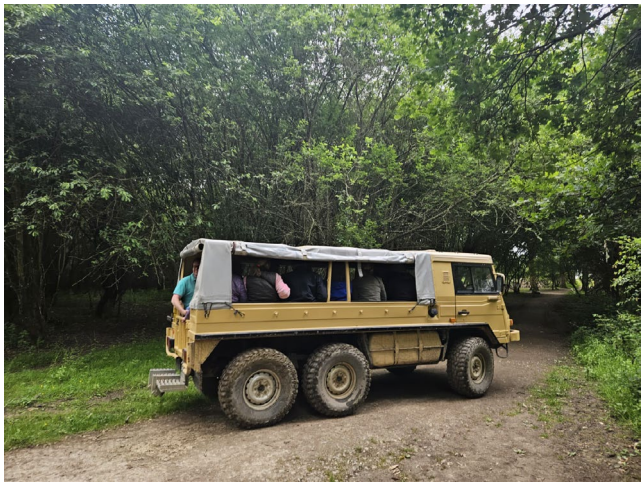

FIGURE 3 An open-sided safari vehicle used at Knepp Wildland Project. Photo credit: Claudia Wartmann.

As a self-described 'leading light' (Knepp Castle Estate, 2024d) in the British conservation movement, the 'Knepp model' could set the agenda for rewilding in England. It is used as an exemplar by environmental charity Rewilding Britain, it features as the only rewilding case study in UK government policy (Cary & Wartmann, 2024), its owners have recently published a 'how to' guide to rewilding (Tree, 2023), are the subjects of a film,[3] and have expanded their rewilding influence into projects in Europe (Rewilding Europe, 2023; Tree, 2024). However, Knepp's success as a modern wildlife conservation project hinges not only on the estate's ability to preserve biological species diversity. As a privately owned estate passed down through generations, conservation efforts at Knepp are inextricable from broader issues of land ownership, power and land use. This raises critical questions about the social and political direction in which the Knepp model is steering the conservation movement, both in the UK and beyond, particularly as it is celebrated as a flagship rewilding project with considerable influence.

Drawing on feminist science studies scholar Donna Haraway (2008), we can ask: who benefits from the 'Knepp model' of rewilding? At first, the answer seems obvious. The Knepp estate provides various ecosystem services aimed at addressing ecological crises, from climate change to biodiversity loss. The restored ecosystem at Knepp is 'a story of hope', the estate's webpage accordingly instructs, 'showing how nature can bounce back if we let it' (Knepp Castle Estate, 2024e). Framed this way, it appears that nature itself is the primary beneficiary. However, a closer look at what caused nature's decline in the first place suggests that replacing row crops with rewilding does not automatically represent a complete shift in approach, even if it implies hope for biological diversity (Leadbeater et al., 2022). Central to the long history of human-caused extinctions are issues of colonialism, extractivism, and capitalism among others, all of which are based on unequal access to, and control of, land. These are rooted in a historically specific set of practices which imagine land solely as an inanimate background for resource exploitation (Latour et al., 2018, 592). It is significant that contemporary conservation efforts at Knepp and elsewhere rely on land-use practices oriented toward financial profitability predicated on private land ownership, even if the object of cultivation is now biodiversity and ecological function.

Through translating nature into financial currency, the concept of ecosystem services, even if framed as producing public goods (Fisher et al., 2009), reproduces nature-as-resource and land-as-property in subtle yet fundamental ways. At Knepp, the focus is on leveraging emerging natural capital markets and policies to support their 'vision of a sustainable future', the estate's Head of Natural Capital informed a guided tour that two of the authors participated in (Brieghel and Wartmann) during the autumn of 2023. This vision implies using nature-based solutions to achieve nutrient mitigation, flood management and carbon sequestration among other things, which are scientifically documented through continuous data collection with future investors and private sector actors in mind. Such schemes promise investors and shareholders the possibility to reach net-zero through nature regeneration and carbon sequestration programs, but they also inherently tie local landscape dynamics and hopes of restoring these to the global currents of capitalism and industry.

While scientific documentation of natural processes is crucial for addressing climate change, doing so under a 'nature-positive business' model, as Knepp describes it, risks focusing on only 'the nature that capital can see' (Robertson, 2006, 368). In other words, that capital, rather than nature itself, will shape the restoration process. Such an approach, where rewilding is driven by business interests, could reinforce land access as an elitist privilege, which is a major obstacle to achieving a just environmental transition (Newell & Mulvaney, 2013). Since both Knepp's research and tourism strategies are aimed at high-value markets, it raises the question of whether the 'Knepp model' will be sufficient to build the broad-based environmental public that will care for British waters, woodlands, and species diversity in the future (Green, 2022).

2.3.4 | Question 4: Whose identities, histories and visions are foregrounded in rewilding? A human geographical perspective on Alladale Wilderness Reserve

Purchased in 2003 by Paul Lister, Alladale in the Scottish Highlands (Figure 4) was once used as a sporting estate but now focuses on nature-positive tourism at the Alladale Wilderness Reserve. Conservation efforts include large-scale reforestation, peat bog restoration, and encouraging natural forest regeneration through deer management. However, plans to release grey wolves into a controlled area of 50,000 acres have sparked controversy (Alladale Wilderness Reserve, 2024a). In this section, we explore the Alladale case study through a human geography perspective to address the

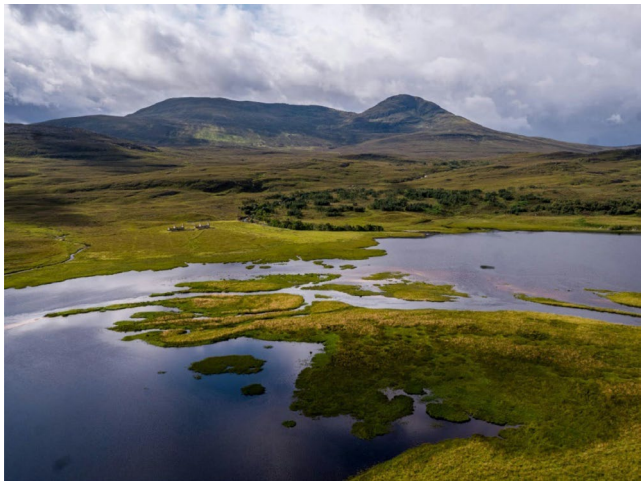

FIGURE 4 Mountainous terrain of the Scottish Highlands. Photo credit: Callam Barnes.

[3]Wilding, the movie, released 2024: https://www.wildingmovie.com/.

fourth question: whose identities, histories, and visions are prioritised in rewilding?

Framed as a 'wilderness in pupation, deep in the Scottish Highlands' (Alladale Wilderness Reserve, 2024a), Alladale's plans focus on constructing wilderness both ecologically and aesthetically. While no specific temporal baseline is provided, the language on Alladale's website invokes pre-agricultural visions of the environment the reserve aims to restore. The current environment is described as a 'sterile dead zone' overrun by deer and sheep (Alladale Wilderness Reserve, 2024b), contrasting with the rewilded land portrayed as a 'sanctuary in the heart of the Scottish Highlands,' offering luxury, seclusion, and raw beauty (Alladale Wilderness Reserve, 2024c).

A human geography lens helps us explore the aestheticisation of places such as the Scottish Highlands, where place is theorised as meaningful and connected to people's experiences (Cresswell, 2006; Tuan, 1977). Invoking imaginaries of sterility and emptiness of the Scottish Highlands helps to legitimise restorative activity in these locations as normative, moral and good (Wartmann & Lorimer, 2024). Through rewilding, the 'dead zone' is transformed into a meaningful place, benefiting those who can afford to access it as a tourist destination; but ignores that this place was neither dead nor devoid of meaning for communities with ties to these areas which were historically disrupted. During the Highland Clearances in the 18th and 19th centuries small-scale farmers were forcibly and violently evicted to make way for more economically profitable sheep farming. This historical context shapes ongoing struggles over land ownership and the definition of what the Highlands should look like (Richards, 2020). Collaborative research in the Scottish *Gàidhealtachd*, the Scottish Highlands and Islands and their associated Gaelic-speaking culture, reveals the inaccuracies of contemporary Highland aesthetic projections as empty and wild. Rather than being devastated, empty spaces, these areas are richly 'peopled and historied' (Mhathúna, 2021, 252). In the case of Alladale, the idea of fostering 'wild' landscapes without people is thus highly political. Its aesthetic framings of the Highlands overlook local histories and cultures, affecting who is seen as belonging and who is excluded (Grenier, 2005). Imagining the landscape as sterile erases cultural ties and influences who is considered part of the Highlands' future (Wartmann & Lorimer, 2024). Aesthetic framings of the Highlands, and their desirable and non- desirable states, thus have justice implications in how they value or devalue distinct identities, histories, cultures and relations of belonging (Grenier, 2005). Applying a human geographical perspective enables the 're-situating' (Mustonen et al., 2022) of local communities and indigenous peoples into the conservation context. Such a perspective can also work to cultivate what historian Kate Brown (2019) has called landscape 'literacy'; a way of reading landscapes by paying attention to the long-term and often unforeseen ecological effects of human–landscape interactions. Such literacy can help to find pathways for more sustainable human–nature exchanges by understanding how such interactions through time have shaped the structure and function of landscapes we see today (Swanson et al., 2021). In this way rewilding projects can collaboratively shape more just future projections for the places they aspire to care for, by paying attention to the identities, histories and cultures which are embedded within them.

2.3.5 | Question 5: Who participates in rewilding decision-making and how? A sociological perspective on Carpathia

Rewilding efforts in Eastern Europe have been ongoing for over a decade (Lorimer & Driessen, 2014), but they are gaining increasing support from philanthropic organisations. One such initiative in the Southern Carpathian Mountains in Romania (Figure 5), called the 'Yellowstone of Europe' (Tree, 2024), is led by Foundation Conservation Carpathia. The Foundation aims to create a large wilderness reserve in the Southern Carpathian Mountains, covering over 250,000 hectares and supporting key populations of brown bear, grey wolf, and lynx. The Foundation is working to acquire, protect, and manage forests and grasslands to create a reserve that can support large carnivores and allow natural processes to occur. Their activities include tree planting, reintroducing species including bison and beavers, stopping trophy hunting in certain areas, and offering compensation for livestock losses due to predators. The Foundation plans to return the land to the public as a National Park (Foundation Conservation Carpathia, 2024a). In our fifth case study, we use a sociological perspective to explore who is involved in rewilding decision-making and how.

Philanthropic foundations like Carpathia play a key role in environmental governance, not only by providing funding but also by influencing social, economic, and political agendas. They shape discussions on specific issues or regions and push for preferred solutions to environmental challenges (Betsill et al., 2022). Board members of Carpathia are entrepreneurial, influential individuals and part of a so-called transnational network of 'conservation elite' (Holmes, 2011; Vesalon & Anghel, 2023) mobilising around

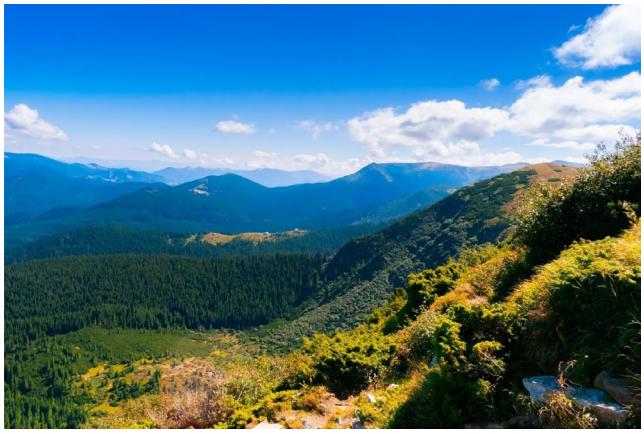

FIGURE 5 The Carpathian Mountains are rich in biological and cultural diversity. Photo credit: Max from Pixabay.

conservation projects globally to deliver their vision for a more biodiverse future. A look at the composition of the board of this Foundation (as of January 2025) reveals how decision-making power is distributed—of 10 board members, all are white, middle-aged to elderly males, of which three are Romanian. Backed by philanthropists and conservationists from the UK and central Europe, the Foundation's non-Romanian board members include prominent rewilding advocates such as Paul Lister (owner of Alladale Wilderness Reserve), Danish entrepreneur Anders Holch Povlsen (owner of Glenfeshie and other estates in Scotland), and Charlie Burrell (owner of Knepp Castle estate) (Foundation Conservation Carpathia, 2024b). Such a board composition may well be reflective of the power dynamics common in many globally operating companies, which also influences philanthropic circles. Nonetheless, it is noteworthy that the board is predominantly composed of British and Swiss philanthropists who endeavour to rewild the Carpathians.

Romania's post-socialist status adds complexity to the region's sociological context. Socio-economic, institutional, and political changes have shaped land use in the Southern Carpathian Mountains (Knorn et al., 2012). The fall of Nicolae Ceaușescu's Communist party regime in 1989, following the Romanian Revolution and his execution, led to agricultural land abandonment, rural depopulation, and trends of both reforestation and deforestation (Munteanu et al., 2014). During the shift from socialism to market economies, land was privatised through restitution and distribution (Lerman et al., 2004), with state and non-state actors, such as former landowners, agricultural managers, and entrepreneurs, negotiating land rights and access (Vasile, 2008). Romania has also implemented EU nature laws aimed at expanding and connecting protected areas (Knorn et al., 2012). In this context, nature conservation has become a significant focus, supported by various NGOs, partly driven by efforts to combat illegal logging (Vasile & Iordăchescu, 2022). Carpathia's wilderness vision is located in an area home to diverse communities and traditional land-use practices that have existed for centuries (Iordăchescu, 2018). These practices include herding, foraging, plant growing, and extensive forestry, all of which have shaped the cultural landscapes of the Carpathian Mountains (Elbakidze & Angelstam, 2007). With government support, the Foundation has expanded its land holdings by purchasing property and asking local communities to give up their rights to forest commons, areas that are held collectively by communities (Iordăchescu, 2021). As a result, the 'Yellowstone of Europe' has become a focus of critical social science research, viewed as a textbook example of neoliberal conservation (Aastrup, 2020; Iordăchescu, 2018, 2021; Vesalon & Anghel, 2023).

While the Foundation promotes community outreach and education (Foundation Conservation Carpathia, 2025), ethnographic research (Iordăchescu, 2018, 2021) shows that the methods used to create this wilderness are similar to those in Yellowstone, where local communities experience dispossession and restrictions on their activities. For example, the construction of fences has limited access for forest-dependent communities and local pastoralists, leading to fines, confiscations, and conflict (Iordăchescu, 2021). Local Roma communities (Rudari), already disadvantaged by unclear land tenure and poor infrastructure, have had their livelihoods severely impacted by restrictions on access to forests and foraging areas (ibid). Despite claims of community education, the conservation approach resembles previous fortress conservation approaches implemented in Africa and Latin America (West et al., 2006).

A sociological perspective adds significant value in this case by highlighting the diverse range of actors involved—local communities, authorities, government officials, and conservationists—each with varying levels of decision-making power and sometimes conflicting interests (Aastrup, 2020). Power imbalances affect individuals' ability to act, with powerful organisations or individuals often shaping outcomes to serve their own purposes, leaving others marginalised (Ruano-Chamorro et al., 2021). While Foundation Conservation Carpathia has the resources and influence to push its vision of a wilderness reserve through land purchases and access negotiations, this creates a disconnect between the decision-makers and the people affected by these decisions (Adams, 2017). Participatory injustice arises when marginalised voices are excluded from decision-making processes. A sociological perspective helps us understand the political and socio-cultural dynamics that conservation projects intersect with, shedding light on the causes of social issues. To create more inclusive, grounded, and just conservation, consideration must be given to the different ways cultural groups value nature and protected areas (Bobowski & Fiege, 2023).

2.4 | Comparative analysis of case studies

Looking at these five rewilding projects, we see that issues of historical equity are often overlooked in rewilding decisions, whether in novel ecosystems or those based on past practices. Common justice-related themes emerge across the projects discussed in this article.

The use of scientific frameworks to justify actions is rooted in a Western scientific view that prioritises certain values, marginalising other knowledge and ways of valuing nature. The idea of wolf-based wilderness from Yellowstone continues to influence global rewilding projects, such as the Alladale Wilderness Reserve, where the proposed reintroduction of wolves has sparked both media debate and scientific research on its feasibility (Sandom et al., 2012, 272). The scientific labelling of animals as ecosystem engineers at places such as Yellowstone and Oostvaardersplassen reflects current environmental values, but these same scientific views once justified their culling. Environmental knowledge is partial, selective, and political (Turnhout, 2018). While public pressure on state-owned sites may lead to changes in management decisions (e.g. Oostvaardersplassen), privately owned sites, like Knepp, are less accountable. At Knepp, estate owners control which scientific research and researchers are allowed access, effectively gatekeeping certain types of knowledge and actors while excluding others (Tate, 2020). By producing knowledge to optimise certain aspects of nature valued by high-value visitors and investors, these rewilding sites are shaped by economic and social structures that prioritise consumptive value (Turnhout, 2024).

This rewilding model, driven by individual landowners, is hard to integrate into policy and planning, meaning biodiversity outcomes may not align with regional or national conservation goals. However, it is still seen as an apolitical force for good, even though nature-based solutions and market-driven values are the main factors in decision-making. This type of neoliberal or 'fictitious' conservation (Büscher & Fletcher, 2015) focuses on technological solutions rather than social change (McAfee, 1999) and uses tools such as biodiversity offsetting and carbon science to measure and manage nature while seemingly addressing biodiversity loss and human-induced climate change (Dunlap, 2023).

In privately owned rewilding projects, alongside the idea of restorative actions, colonial ideas of empty wilderness and safari aesthetics are used as conservation spectacles (Igoe, 2010, 2013) to attract high-value tourism. Much like Yellowstone's preservation, which relied on exclusive access and maintaining natural spaces to a specific aesthetic (Murdock, 2021), rewilding projects today share similar goals, with Yellowstone inspiring conservation efforts in Eastern Europe. At Carpathia, Knepp, and Alladale, powerful conservation elites shape aesthetic values and prioritise tourism and commercial development to satisfy global capital (Gelves-Gomez et al., 2024). This commodification of 'wild nature' risks disconnecting local communities from the land they have traditionally worked, as areas are enclosed for conservation. Despite focusing on ecological science, our analysis shows that these initiatives often reflect exclusionary ideologies and narratives about who and what belong in these landscapes. Critical social science reveals these decisions as neo-colonial erasures of local identities and land connections, repeating historical patterns of slow violence (Nixon, 2011) and dispossession for elite agendas, now focused on ecotourism rather than resource production.

3 | DISCUSSION

Through these rewilding examples, we have demonstrated how ideas and knowledge about rewilding do not simply diffuse equally, they 'travel' along particular 'knowledge networks' (Phelps et al., 2012) and get variously adopted, and sometimes adapted, according to contexts. Understanding these shifts across time and space helps explain why certain interpretations of rewilding are embraced in different places.

As we have highlighted, nostalgic visions influence rewilding. While nostalgia can be productive (De Vroey, 2023), it needs to account for the specific histories, memories, and traditions that shape the cultural heritage of places. By addressing issues of justice, such as participatory, recognition, and distributive justice, we encourage those engaging in rewilding to consider who is shaping visions of future landscapes and what inequalities different rewilding models may reproduce. Through powerful myths and stories, conservation can legitimise social injustice by ignoring problems or focusing on more valued aspects, like charismatic species (Brockington, 2004; Lorimer, 2007). Critical social science helps reflect on these narratives and the knowledge behind them, questioning whether they reinforce existing ideas or open space for more inclusive and just approaches.

In particular, we advocate for today's conservationists to pay attention to the framings and language used in their aspirations for these environments. Language matters, and narratives shape public perceptions and acceptance of conservation initiatives (Kong et al., 2024). At Knepp Wildland, while the use of safari terminology for their wilding tourism may be borne from a desire and marketing standpoint for broad appeal, together with aspects of the biography of the Burrell family, this speaks to some of the colonial shadows this aesthetic is casting into the present; but which is not directly addressed or reappraised from a historical perspective. Given conservation strategies in Africa continue to propagate environmental, socio-economic and racial injustices we question whether the decision to reflect safari aesthetics at Knepp contributes to the 'continued pedestalisation of southern African conservation' (Thakholi et al., 2024, 5), and the socially unjust model it represents. Knepp's successful framing in national policy (Cary & Wartmann, 2024), alongside their prominence in public discourse (Tree, 2018; Weston, 2022), means the owners of this estate are powerful players in the production and validation of rewilding knowledge. As part of a network of conservation elites, their sphere of influence extends to projects globally. As a high-profile project, Knepp Wildland has the potential to forge pathways which delink from global capitalism and usher in epistemic and distributive justice in nature conservation; as such, Knepp Wildland could play a leading role in reflecting on aspects of social inclusivity and value pluralism and inspire other projects to follow suit. Likewise, to bring about more convivial outcomes (Büscher & Fletcher, 2019; Massarella et al., 2022) in protected areas, Foundation Conservation Carpathia could revisit its decision-making structure to dismantle patriarchal norms (Bossert et al., 2024) and ensure that marginalised voices are heard, and that already marginalised nature-dependant groups are not further affected. This approach would promote participatory justice and reimagine protected areas as places of shared stewardship, where both ecological and cultural resources are valued by diverse communities (Bobowski & Fiege, 2023).

By including social scientists, alongside natural scientists, conservationists can advocate for a more culturally sensitive framing of rewilding which pays attention to human interactions with place, nature and each other. Incorporating traditional ecological and embodied knowledge into conservation projects more broadly may help bridge the gap between different worldviews and enhance recognition justice by acknowledging and respecting identities, histories and cultures (Mhathúna, 2021). At Alladale in Scotland, this could mean that the Gaelic cultural concept of *dùthchas*, which conveys both sense of place and belonging and encompasses notions of landscape, geography, history, experience and home, takes its place at the decision-making table, to counterbalance the dominant narratives that currently shape conservation and sustainability in the Scottish Highlands (Mhathúna, 2021, 259).

In order to achieve more just outcomes, rewilding decision-making must be open to critical examination and co-creation. This is essential for social justice and to unlock the 'transformative potential of conservation' (Bennett & Roth, 2019, 6A). As Swanson et al. (2021) point out, when we reshape landscapes, we often forget what was there before, assuming that social, economic, political, and ecological dynamics are fixed, when they are recent and constantly changing. This 'forgetting' is also called 'shifting baseline syndrome', where newly shaped landscapes become the accepted reality, even in conservation (Nassauer, 1995). Human geography highlights how what we see as 'pristine' landscapes are shaped by human history and culture (Gan et al., 2017). While it is challenging to reconcile different views on how landscapes should look, and who should have access, considering aspects such as historical authenticity, sense of place, and regional identity in landscape management can reveal the cultural layers within them (Drenthen, 2018). We see such multidisciplinary engagement as key for rewilding and other conservation initiatives to better align decision-making and practice with justice principles, and to help deliver transformational benefits for people and nature.

4 | OUTLOOK

Achieving a balance of environmental interests requires integrating different types of knowledge. The social sciences are valuable here, offering philosophical, theoretical, and methodological perspectives to analyse conservation solutions and their justice outcomes (Moon et al., 2019). We examined some of the social motivations behind rewilding projects, thus going beyond the justification of ecological functions, and viewing rewilding decisions as influenced by underlying ideologies (Gammon, 2018b). In this way, rewilding becomes more than just a conservation tool. It serves to explore core political and justice issues related to land use, governance, power imbalances, and trade-offs between different values.

By focusing on five questions, discussed through five case studies, we have shed light on different and sometimes difficult questions we must ask of conservation projects. We have advanced the conversation by aligning rewilding decision-making with social justice principles, focusing on specific rewilding models to reveal the social motivations and ideologies which factor into rewilding decision-making and allowing us to reflect on the justice trade-offs involved. We go beyond existing research in this area and work across disciplines to get beneath surface appearances and situate rewilding decisions in wider social and historical settings. Through this, we aim to constructively contribute to key critical social research debates around the specificity of knowledge, structural relations of inequality and oppression, and wider advocacy for social justice in conservation (Muncie, 2006).

We hope to provide readers with an overview and some inspiration on questions to ask, and suggest that future research takes these questions as the basis for future ethnographic work to achieve deeper empirical and conceptual engagement. We acknowledge that our choice of case studies does not capture the full diversity of rewilding practices. Future research could explore the justice aspects of rewilding initiatives with different governance models, such as community-driven projects or informal reintroductions outside fenced or managed areas. This could offer valuable insights into the socio-ecological dynamics of more inclusive models and help guide the implementation of just rewilding practices. While our study was constrained by necessary limitations in scope, we encourage future cross-disciplinary dialogue and recognise the wide range of disciplines, both within and beyond the social sciences and humanities, that can contribute to this ongoing conversation.

AUTHOR CONTRIBUTIONS

Emma Cary: Conceptualisation; writing—original draft; project administration; visualisation; writing—review and editing. Karen Jones: Conceptualisation; writing—original draft. Virginia Thomas: Conceptualisation; writing—original draft; writing—review and editing. Signe Brieghel: Writing—original draft. Ana Payo Payo: Writing—review and editing; visualisation. Flurina M. Wartmann: Conceptualisation; writing—original draft; funding acquisition; writing—review and editing.

FUNDING INFORMATION

This research was financially supported by NERC and the University of Aberdeen through the QUADRAT DTP award of Emma Cary, and the workshop was financed through the starting grant of Flurina M. Wartmann from the University of Aberdeen.

CONFLICT OF INTEREST STATEMENT

The authors report there are no competing interests to declare.

DATA AVAILABILITY STATEMENT

All data underlying the results are available or referenced as part of the article, and no additional source data are required.

ORCID

Emma Cary https://orcid.org/0000-0002-4020-2374
Virginia Thomas https://orcid.org/0000-0002-4947-3023
Flurina M. Wartmann https://orcid.org/0000-0003-4788-2963

REFERENCES

Aastrup, M. L. (2020). Conservation narratives and conflicts over protected areas in post-socialist Romania. *Journal of Political Ecology*, *27*, 84–104. https://doi.org/10.2458/V27I1.23481

Adams, W. M. (2017). Geographies of conservation II: Technology, surveillance and conservation by algorithm. *Progress in Human Geography*, *43*, 337–350. https://doi.org/10.1177/0309132517740220

Aisher, A., & Damodaran, V. (2016). Introduction: Human-nature interactions through a multispecies lens. *Conservation and Society*, *14*, 293–304.

Alladale Wilderness Reserve. (2024a). *Building wilderness*. Alladale. https://alladale.com/building-wilderness/

Alladale Wilderness Reserve. (2024b). *Nature at Alladale*. Alladale. https://alladale.com/nature/

Alladale Wilderness Reserve. (2024c). *Retreats at Alladale*. Alladale. https://alladale.com/retreats/

Anderson, R. M., Buitenwerf, R., Driessen, C., Genes, L., Lorimer, J., & Svenning, J. C. (2019). Introducing rewilding to restoration to expand the conservation effort: A response to Hayward et al. *Biodiversity and Conservation*, *28*, 3691–3693. https://doi.org/10.1007/s10531-019-01845-1

Arts, K., Fischer, A., & van der Wal, R. (2012). Common stories of reintroduction: A discourse analysis of documents supporting animal reintroductions to Scotland. *Land Use Policy*, *29*, 911–920. https://doi.org/10.1016/J.LANDUSEPOL.2012.01.009

Bennett, N., & Roth, R. (2019). Realizing the transformative potential of conservation through the social sciences, arts and humanities. *Biological Conservation*, *229*, A6–A8. https://doi.org/10.1016/J.BIOCON.2018.07.023

Betsill, M. M., Enrici, A., Le Cornu, E., & Gruby, R. L. (2022). Philanthropic foundations as agents of environmental governance: A research agenda. *Environmental Politics*, *31*, 684–705. https://doi.org/10.1080/09644016.2021.1955494

Bobowski, B., & Fiege, M. (2023). Elegant conservation: Reimagining protected area stewardship in the 21st century. *Ecology and Society*, *28*(1), art25. https://doi.org/10.5751/ES-13788-280125

Bossert, L., Crompton, T., Dutta, A., & Seager, J. (2024). Mapping the patriarchy in conservation. *npj Biodiversity*, *3*(1), 38. https://doi.org/10.1038/s44185-024-00072-4

Brieghel, S. S. (2020). *Intensifying growth: Danish agro-food worlds at the scale of proteins*. Det Humanistiske Fakultet, Københavns Universitet.

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

Brosius, J. P. (2006). Common ground between anthropology and conservation biology. *Conservation Biology*, *20*, 683–685. https://doi.org/10.1111/J.1523-1739.2006.00463.X

Brown, K. (2019). Learning to read the great Chernobyl acceleration: Literacy in the more-than-human landscapes. *Current Anthropology*, *60*, S198–S208. https://doi.org/10.1086/702901

Büscher, B., & Fletcher, R. (2015). Accumulation by conservation. *New Political Economy*, *20*, 273–298. https://doi.org/10.1080/13563467.2014.923824

Büscher, B., & Fletcher, R. (2019). Towards convivial conservation. *Conservation and Society*, *17*, 283–296. https://doi.org/10.4103/CS.CS_19_75

Büscher, B., & Wolmer, W. (2007). Introduction: The politics of engagement between biodiversity conservation and the social sciences. *Conservation and Society*, *5*, 1–21.

Carver, S., & Convery, I. (2021). *Time to put the wild back into rewilding* (Vol. *42*). ECOS.

Carver, S., Convery, I., Hawkins, S., Beyers, R., Eagle, A., Kun, Z., van Maanen, E., Cao, Y., Fisher, M., Edwards, S. R., Nelson, C., Gann, G. D., Shurter, S., Aguilar, K., Andrade, A., Ripple, W. J., Davis, J., Sinclair, A., Bekoff, M., … Soulé, M. (2021). Guiding principles for rewilding. *Conservation Biology*, *35*, 1882–1893. https://doi.org/10.1111/cobi.13730

Cary, E., & Wartmann, F. (2024). Rewilding in the British policy landscape. A qualitative analysis of policy documents related to rewilding. *Scottish Geographical Journal*, *141*(1–2), 113–138. https://doi.org/10.1080/14702541.2024.2322653

Chua, L., Harrison, M. E., Fair, H., Milne, S., Palmer, A., Rubis, J., Thung, P., Wich, S., Büscher, B., Cheyne, S. M., Puri, R. K., Schreer, V., Stępień, A., & Meijaard, E. (2020). *Conservation and the social sciences: Beyond critique and co-optation. A case study from orangutan conservation*. https://doi.org/10.1002/pan3.10072

Convention on Biological Diversity. (2022). *COP15: Nations adopt four goals, 23 targets for 2030 in landmark UN biodiversity agreement*. Official CBD Press.

Cresswell, T. (2006). *Place: A short introduction* (1st ed.). Blackwell.

Crowley, S. L., Hinchliffe, S., & McDonald, R. A. (2017). Nonhuman citizens on trial: The ecological politics of a beaver reintroduction. *Environment and Planning A: Economy and Space*, *49*, 1846–1866. https://doi.org/10.1177/0308518X17705133

Dasgupta, P. (2021). *The economics of biodiversity: The Dasgupta review*. HM Treasury.

De Vroey, L. (2023). Back to the future: Retrospectivity, recovery, and nostalgia in rewilding. *Environmental Ethics*, *45*, 359–380.

Deary, H., & Warren, C. R. (2019). Trajectories of rewilding: A taxonomy of wildland management. *Journal of Environmental Planning and Management*, *62*, 466–491. https://doi.org/10.1080/09640568.2018.1425134

Díaz-Reviriego, I., Turnhout, E., & Beck, S. (2019). Participation and inclusiveness in the intergovernmental science-policy platform on biodiversity and ecosystem services. *Nature Sustainability*, *2*, 457–464. https://doi.org/10.1038/s41893-019-0290-6

Drenthen, M. (2018). Rewilding in layered landscapes as a challenge to place identity. *Environmental Values*, *27*, 405–425. https://doi.org/10.3197/096327118X15251686827732

Dunlap, A. (2023). The green economy as counterinsurgency, or the ontological power affirming permanent ecological catastrophe. *Environmental Science & Policy*, *139*, 1462–9011. https://doi.org/10.1016/j.envsci.2022.10.008

Elbakidze, M., & Angelstam, P. (2007). Implementing sustainable forest management in Ukraine's Carpathian Mountains: The role of traditional village systems. *Forest Ecology and Management*, *249*, 28–38. https://doi.org/10.1016/J.FORECO.2007.04.003

Endangered Species Act. (1973). *L. 93–205, Dec. 28, 1973, 81 Stat. 884*.

Fabinyi, M., Evans, L., & Foale, S. J. (2014). Social-ecological systems, social diversity, and power: Insights from anthropology and political ecology. *Ecology and Society*, *19*, art28. https://doi.org/10.5751/ES-07029-190428

Fisher, B., Turner, R., & Morling, P. (2009). Defining and classifying ecosystem services for decision making. *Ecological Economics*, *68*, 643–653.

Foundation Conservation Carpathia. (2024a). *About—Carpathia*. https://www.carpathia.org/about/

Foundation Conservation Carpathia. (2024b). *Who we are—Carpathia*. Foundation Conservation Carpathia. https://www.carpathia.org/who-we-are/

Foundation Conservation Carpathia. (2025). *Community Outreach*. https://www.carpathia.org/community-outreach/

Friedman, R. S., Law, E. A., Bennett, N. J., Ives, C. D., Thorn, J. P., & Wilson, K. A. (2018). How just and just how? A systematic review of social equity in conservation research. *Environmental Research Letters*, *13*, 053001. https://doi.org/10.1088/1748-9326/AABCDE

Fritts, S. H., Bangs, E. E., Fontaine, J. A., Johnson, M. R., Phillips, M. K., Koch, E. D., & Gunson, J. R. (1997). Planning and implementing a reintroduction of wolves to Yellowstone National Park and Central Idaho. *Restoration Ecology*, *5*, 7–27. https://doi.org/10.1046/j.1526-100X.1997.09702.x

Gammon, A. (2017). *Rewilding—A process or a paradigm?* (Vol. *38*). ECOS.

Gammon, A. (2018a). The many meanings of rewilding: An introduction and the case for a broad conceptualisation. *Environmental Values*, *27*, 331–350. https://doi.org/10.3197/096327118X15251686827705

Gammon, A. (2018b). *"Not lawn, nor pasture, nor mead": Rewilding & the Cultural Landscape*. Radboud University.

Gan, E., Tsing, A., Swanson, H., & Bubandt, N. (2017). Haunted landscapes of the Anthropocene. In A. Tsing, N. Bubandt, E. Gan, & H. Swanson (Eds.), *Arts of living on a damaged planet: Ghosts and monsters of the Anthropocene* (1st ed., pp. G1–G14). University of Minnesota Press.

Gelves-Gomez, F., Carter, J., Beilin, R., & Brincat, S. (2024). "Ordering the wild": How adaptive management is used to maintain nature like a

postcard. *Society and Natural Resources*, *37*, 791–808. https://doi.org/10.1080/08941920.2023.2172241

Glentworth, J., Gilchrist, A., & Avery, R. (2024). The place for people in rewilding. *Conservation Biology*, *38*, e14318. https://doi.org/10.1111/COBI.14318

Green, L. (2022). Paradigm shifts for a planetary emergency: Towards an anthropocenography for urban coastal research at False Bay, Cape Town, South Africa. *South African Journal of Science*, *118*, 1–8.

Grenier, K. H. (2005). *Tourism and identity in Scotland, 1770–1914: Creating Caledonia*. Routledge.

Haraway, D. (2008). When species meet. In A. Franklin (Ed.), *The Routledge international handbook of more-than-human studies* (pp. 42–78). Taylor & Francis.

Haraway, D. (2018). Staying with the trouble for multispecies environmental justice. *Dialogues in Human Geography*, *8*, 102–105. https://doi.org/10.1177/2043820617739208

Hart, E. E., Haigh, A., & Ciuti, S. (2023). A scoping review of the scientific evidence base for rewilding in Europe. *Biological Conservation*, *285*, 110243. https://doi.org/10.1016/J.BIOCON.2023.110243

Hawkins, S., Beyers, R., Carver, S., & Convery, I. (2023). What is rewilding? In S. Hawkins, R. Beyers, S. Carver, & I. Convery (Eds.), *Routledge handbook of rewilding* (1st ed., pp. 3–10). Routledge.

Hayward, M., Edwards, S., Fancourt, B., & Linnell, J. (2019). *Top-down control of ecosystems and the case for rewilding: Does it all add up?* (M. Hayward, S. Edwards, & B. Fancourt, Eds.). Rewilding.

Hayward, M., Scanlon, R. J., Callen, A., Hayward, M. W., Howell, L. G., Klop-Toker, K. L., Di Blanco, Y., Balkenhol, N., Bugir, C. K., Campbell, L., Caravaggi, A., Chalmers, A. C., Clulow, J., Clulow, S., Cross, P., Gould, J. A., Griffin, A. S., Heurich, M., Howe, B. K., … Weise, F. J. (2019). Reintroducing rewilding to restoration—Rejecting the search for novelty. *Biological Conservation*, *233*, 255–259. https://doi.org/10.1016/J.BIOCON.2019.03.011

Henry, R. C., Arneth, A., Jung, M., Rabin, S. S., Rounsevell, M. D., Warren, F., & Alexander, P. (2022). Global and regional health and food security under strict conservation scenarios. *Nature Sustainability*, *5*, 303–310.

Hilty, J., Chester, C., & Wright, P. (2022). Rewilding case study: Yellowstone to Yukon. In S. Hawkins, I. Convery, S. Carver, & R. Beyers (Eds.), *Routledge handbook of rewilding* (pp. 147–159). Routledge.

Holmes, G. (2011). Conservation's friends in high places: Neoliberalism, networks, and the transnational conservation elite. *Global Environmental Politics*, *11*, 1–21. https://doi.org/10.1162/GLEP_A_00081

Igoe, J. (2010). The spectacle of nature in the global economy of appearances: Anthropological engagements with the spectacular mediations of transnational conservation. *Critique of Anthropology*, *30*, 375–397. https://doi.org/10.1177/0308275X10372468

Igoe, J. (2013). Consume, connect, conserve: Consumer spectacle and the technical mediation of neoliberal conservation's aesthetic of redemption and repair. *Human Geography*, *6*, 16–28. https://doi.org/10.1177/194277861300600102

Iordăchescu, G. (2018). *Making the "European Yellowstone"—Unintended consequences or unrealistic intentions?* Arcadia.

Iordăchescu, G. (2021). The shifting geopolitical ecologies of wild nature conservation in Romania. In E. K. Kovacs (Ed.), *Politics and the environment in Eastern Europe* (pp. 185–209). Cambridge Open Book Publishers.

Iordăchescu, G. (2022). Convivial conservation prospects in Europe—From wilderness protection to reclaiming the commons. *Conservation and Society*, *20*, 156–166. https://doi.org/10.4103/CS.CS_35_21

IPBES. (2022). *Thematic assessment report on the sustainable use of wild species of the intergovernmental science-policy platform on biodiversity and ecosystem services* (J. M. Fromentin, M. R. Emery, J. Donaldson, M. C. Danner, A. Hallosserie, & D. Kieling, Eds.). IPBES Secretariat.

IUCN CEM. (2021). *Rewilding principles*.

Jepson, P. (2019). Recoverable earth: A twenty-first century environmental narrative. *Ambio*, *48*, 123–130. https://doi.org/10.1007/s13280-018-1065-4

Jetzkowitz, J., Van Koppen, C. S., Lidskog, R., Ott, K., Voget-Kleschin, L., & Wong, C. M. (2018). The significance of meaning. Why IPBES needs the social sciences and humanities. *Innovation: The European Journal of Social Science Research*, *31*, S38–S60. https://doi.org/10.1080/13511610.2017.1348933

Jones, K. (2002). *Wolf mountains: A history of wolves along the great divide*. University of Calgary Press.

Jones, K. (2013). Unpacking Yellowstone. The American national park in global perspective. In B. Gissibl, S. Hohler, & P. Kupper (Eds.), *Civilizing nature: A global history of National Parks. The environment in history: International perspectives* (pp. 31–49). Berghahn Books.

Jones, K. (2017). Restor(y)ing the 'fierce green fire': Animal agency, wolf conservation and environmental memory in Yellowstone national park. *BJHS Themes*, *2*, 151–168. https://doi.org/10.1017/BJT.2017.5

Jørgensen, D. (2015). Rethinking rewilding. *Geoforum*, *65*, 482–488. https://doi.org/10.1016/J.GEOFORUM.2014.11.016

Knepp Castle Estate. (2024a). *Grazing ecology*. https://knepp.co.uk/rewilding/grazing-ecology/

Knepp Castle Estate. (2024b). *A wood pasture landscape*. https://knepp.co.uk/rewilding/a-wood-pasture-landscape/

Knepp Castle Estate. (2024c). *Restoration of Repton Park*. https://knepp.co.uk/knepp-estate/history/restoration-of-repton-park/

Knepp Castle Estate. (2024d). *Rewilding background*. https://knepp.co.uk/rewilding/background/

Knepp Castle Estate. (2024e). *Knepp—Rewilding pioneers*. https://knepp.co.uk/

Knepp Castle Estate. (2025). *Wildlife safaris and workshops*. https://knepp.co.uk/safaris/

Knorn, J., Kuemmerle, T., Radeloff, V. C., Szabo, A., Mindrescu, M., Keeton, W. S., Abrudan, I., Griffiths, P., Gancz, V., & Hostert, P. (2012). Forest restitution and protected area effectiveness in post-socialist Romania. *Biological Conservation*, *146*, 204–212. https://doi.org/10.1016/J.BIOCON.2011.12.020

Kong, I., Komossa, F., & Purves, R. S. (2024). *Wild conversations: Comparing media narratives on comeback species in Europe through computational text analysis*. https://doi.org/10.2139/SSRN.5039704

Latour, B., Stengers, I., Tsing, A., & Bubandt, N. (2018). Anthropologists are talking–about capitalism, ecology, and apocalypse. *Ethnos*, *83*, 587–606. https://doi.org/10.1080/00141844.2018.1457703

Leadbeater, S., Kopnina, H., & Cryer, P. (2022). Knepp Wildland. In S. Hawkins, I. Convery, S. Carver, & R. Beyers (Eds.), *Routledge handbook of rewilding* (1st ed., pp. 362–373). Routledge.

Leong, K. M., Gramza, A. R., Duberstein, J. N., Bryson, C., & Amlin, A. (2024). Using applied social science disciplines to implement creative outdoor cat management solutions and avoid the trap of one-size-fits-all policies. *Conservation Biology*, *39*, e14321. https://doi.org/10.1111/COBI.14321

Lerman, Z., Csaki, C., & Feder, G. (2004). *Evolving farm structures and land use patterns in former socialist countries*. The Hebrew University of Jerusalem.

Lorimer, J. (2007). Nonhuman charisma. *Environ Plan D*, *25*, 911–932. https://doi.org/10.1068/D71J

Lorimer, J., & Driessen, C. (2013). Bovine biopolitics and the promise of monsters in the rewilding of heck cattle. *Geoforum*, *48*, 249–259. https://doi.org/10.1016/j.geoforum.2011.09.002

Lorimer, J., & Driessen, C. (2014). Wild experiments at the Oostvaardersplassen: Rethinking environmentalism in the Anthropocene. *Transactions of the Institute of British Geographers*, *39*, 169–181. https://doi.org/10.1111/TRAN.12030

Louder, E., & Wyborn, C. (2020). Biodiversity narratives: Stories of the evolving conservation landscape. *Environmental Conservation*, *47*, 251–259. https://doi.org/10.1017/S0376892920000387

Martin, A., Akol, A., & Gross-Camp, N. (2015). Towards an explicit justice framing of the social impacts of conservation. *Conservation and Society*, *13*, 166–178. https://doi.org/10.4103/0972-4923.164200

Martin, A., Coolsaet, B., Corbera, E., Dawson, N. M., Fraser, J. A., Lehmann, I., & Rodriguez, I. (2016). Justice and conservation: The need to incorporate recognition. *Biological Conservation*, *197*, 254–261. https://doi.org/10.1016/J.BIOCON.2016.03.021

Martin, A., Fischer, A., McMorran, R., & Smith, M. (2021). Taming rewilding—From the ecological to the social: How rewilding discourse in Scotland has come to include people. *Land Use Policy*, *111*, 105677. https://doi.org/10.1016/J.LANDUSEPOL.2021.105677

Martin, D. (2017). Ecological restoration should be redefined for the twenty-first century. *Restoration Ecology*, *25*, 668–673. https://doi.org/10.1111/rec.12554

Massarella, K., Krauss, J. E., Kiwango, W., & Fletcher, R. (2022). Exploring convivial conservation in theory and practice: Possibilities and challenges for a transformative approach to biodiversity conservation. *Conservation and Society*, *20*, 59–68. https://doi.org/10.4103/CS.CS_53_22

Massarella, K., Nygren, A., Fletcher, R., Büscher, B., Kiwango, W. A., Komi, S., Krauss, J. E., Mabele, M. B., McInturff, A., Sandroni, L. T., Alagona, P. S., Brockington, D., Coates, R., Duffy, R., Ferraz, K. M. P. M. B., Koot, S., Marchini, S., & Percequillo, A. R. (2021). Transformation beyond conservation: How critical social science can contribute to a radical new agenda in biodiversity conservation. *Current Opinion in Environment Sustainability*, *49*, 79–87. https://doi.org/10.1016/j.cosust.2021.03.005

Massenberg, J. R., Schiller, J., & Schröter-Schlaack, C. (2022). Towards a holistic approach to rewilding in cultural landscapes. *People and Nature*, *5*, 45–56. https://doi.org/10.1002/PAN3.10426

Mathevet, R., & Marty, P. (2020). Can environmental and conservation research do without social scientists? A comment on Victoria Y. Martin (2019). *Bioscience*, *70*, 277. https://doi.org/10.1093/BIOSCI/BIAA016

McAfee, K. (1999). Selling nature to save it? Biodiversity and green developmentalism. *Environ Plan D*, *17*, 133–154.

Mhathúna, D. N. (2021). Traditional ecological knowledge and the relevance of Dùthchas in Gàidhealtachd environmental futures. *Scottish Affairs*, *30*, 251–261. https://doi.org/10.3366/SCOT.2021.0364

Monbiot, G. (2013). *For more wonder, rewild the world|TED talk*. TEDGlobal.

Monbiot, G. (2014). *Feral: Rewilding the land, the sea, and human life*. University of Chicago Press.

Montgomery, R. A., Kabra, A., Kepe, T., Garnett, S., & Merino, R. (2024). Re-centering social justice in conservation science: Progressive policies, methods, and practices. *Biological Conservation*, *294*, 110600. https://doi.org/10.1016/J.BIOCON.2024.110600

Moon, K., & Blackman, D. (2014). A guide to understanding social science research for natural scientists. *Conservation Biology*, *28*, 1167–1177. https://doi.org/10.1111/cobi.12326

Moon, K., Blackman, D. A., Adams, V. M., Colvin, R. M., Davila, F., Evans, M. C., Januchowski-Hartley, S. R., Bennett, N. J., Dickinson, H., Sandbrook, C., Sherren, K., St. John, F. A. V., van Kerkhoff, L., & Wyborn, C. (2019). Expanding the role of social science in conservation through an engagement with philosophy, methodology, and methods. *Methods in Ecology and Evolution*, *10*, 294–302. https://doi.org/10.1111/2041-210X.13126

Muncie, J. (2006). *The SAGE dictionary of social research methods*. Sage.

Munteanu, C., Kuemmerle, T., Boltiziar, M., Butsic, V., Gimmi, U., Halada, L., Kaim, D., Király, G., Konkoly-Gyuró, É., Kozak, J., Lieskovský, J., Mojses, M., Müller, D., Ostafin, K., Ostapowicz, K., Shandra, O., Štych, P., Walker, S., & Radeloff, V. C. (2014). Forest and agricultural land change in the Carpathian region—A meta-analysis of long-term patterns and drivers of change. *Land Use Policy*, *38*, 685–697. https://doi.org/10.1016/J.LANDUSEPOL.2014.01.012

Murdock, E. G. (2021). Conserving dispossession? A genealogical account of the colonial roots of Western conservation. *Ethics Policy Environ*, *24*, 235–249. https://doi.org/10.1080/21550085.2021.2002625

Mustonen, T., Scherer, A., & Kelleher, J. (2022). We belong to the land: Review of two northern rewilding sites as a vehicle for equity in conservation. *Humanities and Social Sciences Communications*, *9*, 402. https://doi.org/10.1057/s41599-022-01424-w

Nassauer, J. (1995). Messy ecosystems, orderly frames. *Landscape Journal*, *14*, 161–170.

Newell, P., & Mulvaney, D. (2013). The political economy of the "just transition". *The Geographical Journal*, *179*, 132–140. https://doi.org/10.1111/geoj.12008

Nixon, R. (2011). *Slow violence and the environmentalism of the poor*. Harvard University Press.

Nyssa, Z., Winkler-Schor, S., Lobo, D., Eyster, H. N., & Wright, A. J. (2024). A framework for promoting disciplinary diversity and inclusion through epistemic justice. *Conservation Biology*, *38*, e14409. https://doi.org/10.1111/COBI.14409

Ogden, L. A., Hall, B., & Tanita, K. (2013). Animals, plants, people, and things: A review of multispecies ethnography. *Environment and Society*, *4*, 5–24. https://doi.org/10.3167/ARES.2013.040102

Overstreet, K. (2018). *"A well-cared for cow produces more milk": The biotechnics of (dis)assembling cow bodies in Wisconsin dairy worlds*. University of California, Santa Cruz.

Perkins, H. A. (2020). Killing one trout to save another: A hegemonic political ecology with its biopolitical basis in Yellowstone's native fish conservation plan. *Annals of the American Association of Geographers*, *110*, 1559–1576. https://doi.org/10.1080/24694452.2020.1723395

Peterson, R. B., Russell, D., West, P., & Brosius, J. P. (2010). Seeing (and doing) conservation through cultural lenses. *Environmental Management*, *45*, 5–18. https://doi.org/10.1007/S00267-008-9135-1/FIGURES/2

Pettorelli, N., Barlow, J., Stephens, P. A., Durant, S. M., Connor, B., Schulte to Bühne, H., Sandom, C. J., Wentworth, J., & du Toit, J. T. (2018). Making rewilding fit for policy. *Journal of Applied Ecology*, *55*, 1114–1125. https://doi.org/10.1111/1365-2664.13082

Phelps, C., Heidl, R., & Wadhwa, A. (2012). Knowledge, networks, and knowledge networks: A review and research agenda. *Journal of Management*, *38*(4), 1115–1166. https://doi.org/10.1177/0149206311432640

Prior, J., & Ward, K. J. (2016). Rethinking rewilding: A response to Jørgensen. *Geoforum*, *69*, 132–135. https://doi.org/10.1016/J.GEOFORUM.2015.12.003

Pritchard, J. (2022). *Preserving Yellowstone's natural conditions: Science and the perception of nature*. University of Nebraska Pres.

Ramp, D., & Bekoff, M. (2015). Compassion as a practical and evolved ethic for conservation. *Bioscience*, *65*, 323–327. https://doi.org/10.1093/BIOSCI/BIU223

Randall, C. (2010). *A rewilding triumph: Wolves help to reverse Yellowstone degradation*. The Guardian. https://www.theguardian.com/environment/2020/jan/25/yellowstone-wolf-project-25th-anniversary

Redford, K. H. (2011). Misreading the conservation landscape. *Oryx*, *45*, 324–330. https://doi.org/10.1017/S0030605311000019

Rewilding Europe. (2023). *Charlie Burrell joins the board of Rewilding Europe*. https://rewildingeurope.com/news/sir-charles-burrell-joins-the-board-of-rewilding-europe/

Rewilding Europe. (n.d.). *Nature-based economies*. Rewilding Europe. https://rewildingeurope.com/rewilding-in-action/nature-based-economies/

Richards, E. (2020). *A history of the highland clearances: Agrarian transformation and the evictions 1746–1886*. Routledge.

Richardson, K., Steffen, W., Lucht, W., Bendtsen, J., Cornell, S. E., Donges, J. F., Drüke, M., Fetzer, I., Bala, G., von Bloh, W., Feulner, G., Fiedler, S., Gerten, D., Gleeson, T., Hofmann, M., Huiskamp, W., Kummu, M., Mohan, C., Nogués-Bravo, D., … Rockström, J. (2023).

Earth beyond six of nine planetary boundaries. *Science Advances*, *9*, eadh2458. https://doi.org/10.1126/sciadv.adh2458

Rifkin, J. (1992). *Beyond beef: The rise and fall of the cattle culture*. Dutton Books.

Ripple, W. J., & Beschta, R. L. (2004). Wolves and the ecology of fear: Can predation risk structure ecosystems? *Bioscience*, *54*, 755. https://doi.org/10.1641/0006-3568(2004)054[0755:WATEOF]2.0.CO;2

Robbins, P. (2001). Fixed categories in a portable landscape: The causes and consequences of land-cover categorization. *Environment and Planning A: Economy and Space*, *33*, 161–179. https://doi.org/10.1068/A3379

Robbins, P. (2006). The politics of barstool biology: Environmental knowledge and power in greater northern Yellowstone. *Geoforum*, *37*, 185–199. https://doi.org/10.1016/J.GEOFORUM.2004.11.011

Robertson, M. M. (2006). The nature that capital can see: Science, state, and market in the commodification of ecosystem services. *Environ Plan D*, *24*, 367–387. https://doi.org/10.1068/D3304

Ruano-Chamorro, C., Gurney, G. G., & Cinner, J. E. (2021). Advancing procedural justice in conservation. *Conservation Letters*, *15*, e12861. https://doi.org/10.1111/conl.12861

Samanta, A., Eanes, F. R., Wickerham, B., Fales, M., Bulla, B. R., & Prokopy, L. S. (2020). Communication, partnerships, and the role of social science: Conservation delivery in a brave new world. *Society and Natural Resources*, *33*, 914–926. https://doi.org/10.1080/08941920.2019.1695990

Sandom, C., Bull, J., Canney, S., & Macdonald, D. W. (2012). Exploring the value of wolves (*Canis lupus*) in landscape-scale fenced reserves for ecological restoration in the Scottish highlands. In M. J. Somers & M. Hayward (Eds.), *Fencing for conservation: Restriction of evolutionary potential or a riposte to threatening processes?* (pp. 245–276). Springer.

Schreer, V., Thung, P., Freeman, S., Anirudh, N. B., Campbell-Smith, G., Eghenter, C., & Spehar, S. (2024). Doing social science with conservation: Co-reflexivity on the project model in conservation. *Oryx*, *59*(1), 81–90. https://doi.org/10.1017/S0030605324000747

Schulte to Bühne, H., Ross, B., Sandom, C. J., & Pettorelli, N. (2022). Monitoring rewilding from space: The Knepp estate as a case study. *Journal of Environmental Management*, *312*, 114867. https://doi.org/10.1016/J.JENVMAN.2022.114867

Shackleton, R. T., Walters, G., Bluwstein, J., Djoudi, H., Fritz, L., Lafaye de Micheaux, F., Loloum, T., Nguyen, V. T. H., Rann Andriamahefazafy, M., Sithole, S. S., & Kull, C. A. (2023). Navigating power in conservation. *Conservation Science and Practice*, *5*, e12877. https://doi.org/10.1111/CSP2.12877

Sherow, J. E. (2007). *The grasslands of the United States: An environmental history*. Bloomsbury Publishing USA.

Shoreman-Ouimet, E., & Kopnina, H. (2015a). Reconciling ecological and social justice to promote biodiversity conservation. *Biological Conservation*, *184*, 320–326. https://doi.org/10.1016/J.BIOCON.2015.01.030

Shoreman-Ouimet, E., & Kopnina, H. (2015b). *Culture and conservation: Beyond anthropocentrism*. Routledge.

Smith, D., & Bangs, E. (2009). Reintroduction of wolves to Yellowstone National Park: History, values and ecosystem restoration. In M. W. Hayward & M. J. Somers (Eds.), *Reintroduction of top-order predators* (pp. 92–125). Wiley-Blackwell.

Smith, M. (1998). *Social science in question: Towards a postdisciplinary framework*. Sage Publications.

Srinivasan, K. (2022). Crafting scholarly alliances for multispecies justice. *Dialogues in Human Geography*, *12*, 79–83. https://doi.org/10.1177/20438206221080571

Stanley, T., Hirons, M., Turnbull, J., Lorimer, J., Kumeh, E. M., Hafferty, C., Anderson, L. M., & McDermott, C. L. (2025). Just nature recovery: A framework for centring multispecies and multi-dimensional justice in land management. *Environmental Science & Policy*, *164*, 103992. https://doi.org/10.1016/J.ENVSCI.2025.103992

Star, S., & Griesemer, J. (1989). Institutional ecology, "translations" and boundary objects: Amateurs and professionals in Berkeley's Museum of Vertebrate Zoology. *Social Studies of Science*, *19*, 387–420.

Stark, K. J., Bernhardt, A. L., Mills, M., & Robison, J. A. (2022). Re-indigenizing Yellowstone. *Wyoming Law Review*, *22*, 397–487. https://doi.org/10.59643/1942-9916.1467

Svenning, J. C. (2017). Future megafaunas: A historical perspective on the potential for a wilder anthropocene. In A. L. Tsing, N. Bubandt, E. Gan, & H. A. Swanson (Eds.), *Arts of living on a damaged planet: Ghosts and monsters of the Anthropocene* (pp. G67–G86). University of Minnesota Press.

Svenning, J. C., Buitenwerf, R., & Le Roux, E. (2024). Trophic rewilding as a restoration approach under emerging novel biosphere conditions. *Current Biology*, *34*, R435–R451. https://doi.org/10.1016/J.CUB.2024.02.044

Swanson, H., Svenning, J.-C., Saxena, A., Swanson, H. A., Muscarella, R., Franklin, J., Garbelotto, M., Mathews, A. S., Saito, O., Schnitzler, A. E., Serra-Diaz, J. M., & Tsing, A. L. (2021). History as grounds for interdisciplinarity: Promoting sustainable woodlands via an integrative ecological and socio-cultural perspective. *One Earth*, *4*, 226–237. https://doi.org/10.1016/j.oneear.2021.01.006

Tate, W. (2020). Anthropology of policy: Tensions, temporalities, possibilities. *Annual Review of Anthropology*, *49*, 83–99. https://doi.org/10.1146/ANNUREV-ANTHRO-010220-074250

Tedesco, A. M., López-Cubillos, S., Chazdon, R., Rhodes, J. R., Archibald, C. L., Pérez-Hämmerle, K. V., Brancalion, P. H. S., Wilson, K. A., Oliveira, M., Correa, D. F., Ota, L., Morrison, T. H., Possingham, H. P., Mills, M., Santos, F. C., & Dean, A. J. (2023). Beyond ecology: Ecosystem restoration as a process for social-ecological transformation. *Trends in Ecology & Evolution*, *38*, 643–653. https://doi.org/10.1016/J.TREE.2023.02.007

Thakholi, L., Koot, S., & Büscher, B. (2024). Introduction: Fallen from grace? The legacy and state of southern African conservation. *Environment and Planning E: Nature and Space*, *7*, 3–21. https://doi.org/10.1177/25148486231222145

Thomas, V. (2022). Actors and actions in the discourse, policy and practice of English rewilding. *Environmental Science & Policy*, *132*, 83–90. https://doi.org/10.1016/J.ENVSCI.2022.02.010

Torres, A., Fernández, N., Ermgassen, S. Z., Zu Ermgassen, S., Helmer, W., Revilla, E., Saavedra, D., Perino, A., Mimet, A., Rey-Benayas, J. M., Selva, N., Schepers, F., Svenning, J. C., & Pereira, H. M. (2018). Measuring rewilding progress. *Philosophical Transactions of the Royal Society, B: Biological Sciences*, *373*, 20170433. https://doi.org/10.1098/RSTB.2017.0433

Tree, I. (2018). *Wilding: The return of nature to a British farm*. Pan Macmillan.

Tree, I. (2023). *The book of wilding: A practical guide to rewilding, big and small*. Bloomsbury.

Tree, I. (2024). *A Yellowstone for Europe? Inside the bold effort to rewild the continent*. National Geographic Magazine.

Tsing, A., Deger, J., Saxena, A. K., & Zhou, F. (2020). *Feral atlas: The more-than-human Anthropocene*. Stanford University Press.

Tuan, Y. (1977). *Space and place. The perspective of experience*. University of Minnesota Press.

Turnhout, E. (2009). The effectiveness of boundary objects: The case of ecological indicators. *Science and Public Policy*, *36*, 403–412. https://doi.org/10.3152/030234209X442007

Turnhout, E. (2018). The politics of environmental knowledge. *Conservation and Society*, *16*, 363. https://doi.org/10.4103/CS.CS_17_35

Turnhout, E. (2024). A better knowledge is possible: Transforming environmental science for justice and pluralism. *Environmental Science & Policy*, *155*, 103729. https://doi.org/10.1016/J.ENVSCI.2024.103729

U.S. National Park Service. (n.d.). *U.S. National Park Service visitation statistics—Yellowstone National Park 2014–2018*. U.S. National Park Service. https://www.nps.gov/yell/planyourvisit/visitationstats.htm

van der Maten, R., Carballo-Cárdenas, E. C., & Van Tatenhove, J. (2022). Resistance to change: A case study on framing and policy change of a controversial nature area. *Ecology and Society*, *27*(1), art29.

Vasile, M. (2008). Nature conservation, conflict and discourses on forest management: Communities and protected areas in meridional Carpathians. *Sociologie Românească*, *6*, 87–100.

Vasile, M., & Iordăchescu, G. (2022). Forest crisis narratives: Illegal logging, datafication and the conservation frontier in the Romanian Carpathian Mountains. *Political Geography*, *96*, 102600. https://doi.org/10.1016/J.POLGEO.2022.102600

Vatn, A., Pascual, U., Chaplin-Kramer, R., Termansen, M., Arias-Arévalo, P., Balvanera, P., Athayde, S., Hahn, T., & Lazos, E. (2024). Incorporating diverse values of nature in decision-making—Theory and practice. *Philosophical Transactions of the Royal Society, B: Biological Sciences*, *379*, 20220315. https://doi.org/10.1098/RSTB.2022.0315

Veland, S., & Lynch, A. H. (2016). Scaling the Anthropocene: How the stories we tell matter. *Geoforum*, *72*, 1–5. https://doi.org/10.1016/J.GEOFORUM.2016.03.006

Vera, F. W. M. (2000). *Grazing ecology and forest history*. CABI Publishing.

Vera, F. W. M. (2002). The dynamic European forest. *Arboricultural Journal*, *26*, 179–211. https://doi.org/10.1080/03071375.2002.9747335

Vera, F. W. M. (2009). Large-scale nature development—The Oostvaardersplassen. *British Wildlife*, *20*, 28–36.

Vesalon, L., & Anghel, R. G. (2023). The "European Yellowstone": Entrepreneurs of the wilderness and transnational elites in the Romanian Carpathians. *Antipode*, *56*, 1047–1067. https://doi.org/10.1111/ANTI.13002

Von Essen, E., & Allen, M. (2016). Wild-but-not-too-wild animals: Challenging goldilocks standards in rewilding. *Between the Species*, *19*, 80–108.

Ward, K., & Prior, J. (2020). The reintroduction of beavers to Scotland. *Conservation and Society*, *18*, 103–113.

Wartmann, F. M., & Lorimer, J. (2024). Messy natures: The political aesthetics of nature recovery. *People and Nature*, *6*, 2564–2576. https://doi.org/10.1002/PAN3.10743

West, P., Igoe, J., & Brockington, D. (2006). Parks and peoples: The social impact of protected areas. *Annual Review of Anthropology*, *35*, 251–277. https://doi.org/10.1146/ANNUREV.ANTHRO.35.081705.123308

Weston, P. (2022). *Knepp estate: Why the king and queen of rewilding are farming again after 20 years*. The Guardian.

White, P., Garrott, R., & Plumb, G. (2013). *Yellowstone's wildlife in transition*. Harvard University Press.

Widenhorn, S. (2013). Towards epistemic justice with indigenous peoples' knowledge? Exploring the potentials of the convention on biological diversity and the philosophy of Buen Vivir. *Development*, *56*, 378–386. https://doi.org/10.1057/DEV.2014.6

Woroniecki, S., Wendo, H., Brink, E., Islar, M., Krause, T., Vargas, A. M., & Mahmoud, Y. (2020). Nature unsettled: How knowledge and power shape "nature-based" approaches to societal challenges. *Global Environmental Change*, *65*, 102132. https://doi.org/10.1016/j.gloenvcha.2020.102132

Wynne-Jones, S., Holmes, G., & Strouts, G. (2018). Rewilding in Wales: Reimagining or abandoning a cultural heartland? *Environmental Values*, *27*, 377–403. https://doi.org/10.3197/096327118X15251686827723

Yellowstone to Yukon Conservation Initiative. (2024). Yellowstone to Yukon Conservation Initiative. https://y2y.net/

How to cite this article: Cary, E., Jones, K., Thomas, V., Brieghel, S., Payo Payo, A., & Wartmann, F. M. (2025). Five critical questions we should ask of rewilding projects—And that social science can help us answer. *People and Nature*, *7*, 2119–2135. https://doi.org/10.1002/pan3.70100