Human rewilding : Practical pointers to address a root cause of global environmental crises

Routledge Handbook of Rewilding

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https://doi.org/10.4324/9781003097822-39

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HUMAN REWILDING

Practical pointers to address a root cause of global environmental crises

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Introduction[1]

Since its inception in the 1980s, the concept of rewilding has been primarily concerned with ecological dimensions, particularly the restoration of self-regulating ecosystems (Soulé & Noss, 1998). While there has always been some reference to human or societal dimensions of rewilding since the idea was conceived (Foreman, 2018; Kopnina et al., 2019), it is only in recent years that these dimensions have been receiving more elaborate attention (Bekoff, 2014; Durant et al., 2019; Kopnina et al., 2019; Carver et al., 2021; Martin et al., 2021). Indeed, it is explicitly recognised that the success of rewilding efforts is highly dependent on both ecological and social contexts (Torres et al., 2018), and that rewilding has 'become a social as much as an ecological phenomenon' (Martin et al., 2021). In rewilding literature, humans largely appear to fall into three more or less distinct categories. First, as stakeholders in rewilding efforts (Martin et al., 2021; Schulte to Bühne et al., 2021); second, as project leaders and mediators (Light & Higgs, 1996; Foreman, 2018; Jepson 2019); and, third, as engaged components of rewilding projects that desire some form of rewilding themselves (Monbiot, 2013; Bekoff, 2014; Clayton, 2019).

In this chapter, we are concerned with the final grouping. We argue that human rewilding is a comprehensive agenda capable of addressing a root cause of current global environmental crises, namely the disconnection between humans and nature. Ecological rewilding, in a strict sense, will restore nature but struggles to move beyond symptomatic relief, as the crucial underlying cause of ecosystem destruction and biodiversity loss remains unaddressed. The call for human rewilding, however, often remains a rather abstract suggestion. What could human rewilding actually, and practically, entail?

Drawing on personal experiences, this chapter offers two very tangible case studies: rewilding daily life and rewilding education. With regard to the first case, we detail a personal experiment in which we aimed to spend a year living outside. In the second case we explore our ongoing work in rewilding educational frameworks in a university setting. These case studies are anchored in the six touchstones of the 'wild pedagogies' framework by Jickling et al. (2018)—(1) agency and the role of nature as co-teacher; (2) wildness and challenging ideas of control; (3) complexity, the unknown, and spontaneity; (4) locating the wild; (5) time and practice;

 DOI: 10.4324/9781003097822-39

and (6) cultural change—and where appropriate we indicate parallels between the experiences and the touchstones for reference and further inspiration. For context, we suggest that human rewilding, like ecological rewilding, is not about turning back the clock (Jørgensen 2015), but about recognising that sensitivity to human evolutionary history is pivotal in restoring relationships with nature in a contemporary context. Human rewilding, we assert, focuses on a relational (head, heart, hands) approach to nature experience, and nurtures qualities of technique over technology (as deceleration over acceleration, and immersion over short-lived experiences).

Evolutionary aspects of human rewilding

Through the unprecedented, destructive impact that humans have had on Planet Earth, the current geological epoch has infamously earned the title of 'the Anthropocene'. Although, as Harroway (2016) suggests, the term 'Capitalocene' may be a more appropriate reflection of how negative environmental impacts occur through existing global economic systems. Rapid biodiversity loss indicates that a sixth mass extinction is currently underway (Ceballos et al., 2015), and the planetary boundaries model presents a stark overview of the dire state of the planet; emphasising 'the need to address multiple interacting environmental processes simultaneously' (Steffen et al., 2015). Yet, it should also be acknowledged that in the 250 years since the beginning of the industrial revolution, global living standards have been positively altered, with reductions in extreme poverty and improvements in health and literacy standards (Roser, 2020). This peak of prosperity is a happy consequence of the human evolutionary path that sought to disconnect from, or overcome, the challenging conditions of the natural environment—a path of 'dewilding'.

If we accept that, in a modern-day context, the vast majority of humans no longer live in a 'wild' manner, it seems logical to ask 'when did they?' Similar questions asked in ecological restoration—'when was nature wild?'—led to discussions on temporality (Higgs, 2003; Marris, 2009; Jørgensen, 2015), authenticity (Arts et al., 2016; Drenthen, 2018) and on epistemologies of assessing restoration success (Torres et al., 2018). However, at least one common thread permeates these discussions, that of valuing the complex web of life on Earth and the long evolutionary path that precedes it (Carver et al., 2021).

In this instance, if we adopt the industrial revolution as an indicative point of 'dewilding', then we can trace a potted history through our evolutionary past to find the emergence of contemporary humans. This could begin with the appearance of *Homo sapiens* as a separate species around 200,000 years ago in East Africa, or, much later, with the arrival of language approximately 70,000 years ago, which marked the cognitive revolution and the spread of *sapiens* out of Africa (Harari, 2014; Ellis et al., 2021). Whichever point in time we choose, it follows that humans have spent over 99.99% of their evolutionary time in close interaction with their local natural environment. Thus, a friction emerges between the world in which people have evolved to exist and how many experience modern day life (Louv, 2005), which plays out in every societal sphere, from health (Triguero-Mas et al., 2017; Bratman et al., 2019; Antonelli et al., 2021) to politics (Light and Higgs, 1996; Schulte to Bühne et al., 2021).

Subdisciplines of evolutionary psychology, biology, and anthropology, among others, have been studying human behaviour for many years, and it is important to note that, from an evolutionary perspective, the past does not need to serve as a moral guideline in human rewilding. Instead, it should be a factor in understanding both human nature, and human relationships with nature. Just as in ecological rewilding, human rewilding is about restoring a connection

with nature in a contemporary context, bridging the rigid human–nature dichotomy (Birch, 1990), and acknowledging the role that human evolutionary history plays in this relationship.

Alongside evolution, it is also worth considering how language fits in to this idea of bridging the human–nature dichotomy. Viewed through a Western lens, the etymological history of 'wild' is most likely derived from the Old English root of 'will', which refers to something uncontrollable or self-willing. Importantly, before the origin of the word 'wilderness'—that is, wil-dēor-ness, the place of the self-willing animals, from the Old English poem *Bēowulf*—'will' probably referred to the human sphere (Nash, 2001; Jørgensen, 2015). Consequently, human rewilding has both an evolutionary and etymological stem. Moreover, if we also distinguish between 'wilderness' as biophysical reality and 'wildness' as a quality thereof which must be experienced or interpreted, it falls to the subject, to us, to find or recognise wildness (McMorran et al., 2008; Arts et al., 2012). It is from this perspective of 'finding wildness', that we undertook a personal experiment in human rewilding.

Rewilding daily life

If we try to define nature as 'natural' i.e. independent of humans (McKibben, 2003; Ellis et al., 2021), then we can conclude that there is no 'real' nature any more. Attempts to find 'real' nature—or wilderness—are often paradoxical. The 'last wilderness' can be found in Alaska, Siberia, Antarctica, or the Himalayas. Yet, for most reaching these areas requires an element of preparation, travel, and expense, in exchange for a short-lived experience in nature. In the Netherlands, where we (the authors) are based, this kind of rhetoric is abundant, alongside the idea that there needs to be 'new wilderness' (Kopnina et al., 2019) or 'new nature' (Owens & Wolch, 2019). These ideas feed in to a construct that nature—and by extension, wildness—no longer exists (cf. Touchstone 4). In an effort to take a positive, constructive approach to this

Figure 35.1 Rewilding daily life; Koen Arts and Gina Maffey during the year that they spent living outside. Photo by Otto Kalkhoven.

problem, we formulated a simple research question: In a land without wilderness, is it possible to find wildness in everyday life?

We first addressed the root cause of the problem (Figure 35.1). To find wildness we would need to immerse ourselves more in natural environments than human made ones (cf. Touchstones 1, 3, 5). We opted for the timeframe of a year, as this ensured the experience covered a recognisable natural cycle, and stipulated that during this year we would need to spend at least 50% of our time outside (adopting the broadest definition of natural environments). In addition, we added that the 50% rule had to be applied each season, to avoid time outside being biased to more appealing periods of the year. This immediately created a secondary problem in employing the experiment as part of everyday life. The vast majority of our working hours were spent indoors. To compensate for this a second condition arose, to sleep outside for 365 nights consecutively.

As the year began, on the autumn equinox, we quickly embraced learning techniques over employing technological interventions, as it offered a logical way to engage with the natural world more fully. Primary needs such as shelter and warmth leapt to the fore—sleeping outside is an enriching experience until the cold and the damp set in—and fire quickly embodied a central role in our daily life. The necessity of fire also underpinned our decision to adopt a simple shelter for the winter. Here, we paid heed to European communities that retain a lifestyle embedded in nature and used a modern tipi modelled on the lávuu of the Sami people (Skogvang, 2021). Importantly, the tipi acted just as a shelter, not a barrier to the outdoors, and accommodated a fire in its centre. The environmental and health impact of the trend in using indoor wood-burners is currently questioned (le Page, 2017), but outdoors, during the winter months, fire held invaluable roles beyond comfort for heating, cooking, drying, and socialising.

From a human evolutionary perspective, fire has altered sapiens physiology (e.g., smaller jaws, shorter gut) and behaviour (e.g., hunting, language development; Scott et al., 2014). Pausas and Keeley (2009), hypothesise that 'the world cannot be understood without considering fire' and we certainly saw how this could be true. Fire use has had a historical impact on both ecosystems and natural processes, but also on the human relationship with that environment. During the year, preparation became imperative: locating dead trees, collecting tinder, felling, transporting, and splitting were all physical processes that required time. Yet, the repetition of these tasks could become almost meditative in nature (cf. Touchstone 5). Contrary to adding pressure to a working day it provided time to decelerate, focus, and relax more fully. The mental benefits of nature engagement are well known (Triguero-Mas et al., 2017; Bratman et al., 2019; Antonelli et al., 2021) yet many activities require an individual to 'make time' to engage with nature. During the year we found that enforced interaction through necessity was rapidly normalised and enjoyable.

As the previous examples demonstrate, the experiment gave nature a prominent role in our everyday life, but also a feeling of reciprocity that brought meaning and happiness (cf. Touchstone 1; Buijs and Jacobs, 2021). Foraging for edible plants highlighted variation and diversity in local flora, and stimulated reflection on consumption patterns, food production chains and broader sustainability issues. Our actions had an impact globally and on the species in our immediate surroundings. We observed changes in species behaviour over time and identified local individuals, at different scales, from orb-weaver spiders on balconies, to red deer in nature reserves. We engaged with the natural world at all times of the day, dawn, noon, dusk, and night and we slept better and felt more rested, which, in turn, our senses seemed to function better for; we were quicker to spot things, heard more, smelt more (Touchstones 3, 4, 5).

These responses were all ones that we hoped for and contributed to a feeling of optimism in being able to 'find wildness'. There were however, unanticipated insights during the year

(Touchstones 2, 3). Firstly, our shared experience did not result in a shared perspective of the environment. Our biological sex influenced different physiological responses to air temperature (Kim et al., 1998) and psychological responses to solo excursions (Van den Berg & Ter Heijne, 2005). This variation caused us to reconsider the role and value of social connection in relation to nature connection. Such a spectrum of experiences is also important to consider in order to ensure that discussions on human rewilding are framed in an inclusive and accessible way (cf. Touchstone 6).

In ecological rewilding Carver et al. (2021) recognise a wilderness continuum. During the year, we saw how human experiences can also sit on a wildness continuum. There is a collection of instances where we spent all of our time outside, foraged more and actively avoided digital interaction. However, much of the year we took a pragmatic approach, making use of hot showers, cars and laptops. Yet, it was precisely in the grey areas between nature and culture that we identified more opportunities to find wildness than we originally thought possible (cf. Touchstones 3, 4). To this end, we reflect on the experiment as a success. Nevertheless, it remains an experiment rather than a blueprint for human rewilding. The legacy of the year has been to demonstrate how easy it is to both dilute *and* restore a connection with the natural world (cf. Touchstone 6). It is this understanding that we have used to inform further experiments in higher education settings in the Netherlands.

Rewilding education

Nature-based learning is garnering increasing interest—with growing confirmation in academic literature of the multiple benefits for students, such as 'academic learning, personal

Figure 35.2 Rewilding education; students work together to make fire bows following discussions on the role of fire in human evolutionary history and ongoing conservation efforts. Photo by Georgina Maffey.

development and environmental stewardship' (Kuo et al., 2019). Much research appears to be focused on young learners, which likely reflects societal concerns on increasing digital engagement (Selwyn, 2009) and nature deficit disorder (Louv, 2005). This focus is one that we could relate to. For much of our childhood we were engaged with nature through play, hobbies and studies. Yet, as we began to work in the discipline of nature conservation, we increasingly became 'digital conservationists'—viewing nature as a series of data points, while being inspired to protect the natural world on a meta level. The insight was painful; that we were embodying the strict imperialistic, dichotomy between humans and nature (cf. Touchstone 6; Birch, 1990; Cronon, 1995).

It is striking that practical nature interaction becomes increasingly rare as individuals enter the higher education spheres. Imbued by our own personal learning experiences in university environments we began to question *why* the accepted approach for higher education was a theoretical one. Beyond data collection, passionate students who will go on to become future leaders in conservation and sustainability are rarely encouraged to engage with their own local environments through learning (cf. Touchstone 6). In 2021, we developed a free elective course at Wageningen University under the title of 'Anthropology of elementary natural skills' (Figure 35.2). 36 students participated full-time in a month-long, multidisciplinary course. The course was divided between practicing basic natural skills such as making fire, tracking and natural navigation, and theoretical learning through analytical exercises.

As in our year outside, we adopted a relational approach, connecting cognitive, emotional, and physical elements with didactic interaction. Teaching was conducted outside in green spaces as much as possible and self-study outdoors encouraged (cf. Touchstones 4, 5). There was a degree of criticism in the pursuit, as interested parties questioned what more this course offered than, for example, scouting (cf. Touchstones 6). However, contrary evidence was apparent in the exam results and course evaluations.

Students valued the teaching approach for how they were able to ingest knowledge: 'I don't think I'll forget anything I've learned, unlike normal subjects where you forget half of it after the exam.' With some referring to feelings of being 'very calm', 'more alive', and 'more free'. They reflected on 'how important someone's connection with nature is. At first, I felt like nature was something that was around me, I did not take part of it', and how they were 'part of the larger story', with one student saying 'that, even though people state that they are equal to nature, our behaviour, techniques and mechanisms are still grounded in the old ideas that people are above it'.

As with ecological rewilding, rewilding education is a context dependent pursuit. Students will bring their own perceptions and understanding to teaching. However, nature as a setting for relational learning can be a great enabler, providing a place to develop more grounded, creative, and reflective pupils, who have a holistic understanding of their own place in the (natural) environment (cf. Touchstones 1, 3, 6; Lotz-Sisitka et al., 2015; Loynes, 2018; Fenton et al., 2020).

In this instance, we developed the course from scratch to look specifically at topics that align with human-nature interactions, and purposefully creating opportunities for deeper, transformative connections by adopting qualities of technique over technology, for example (Fenton et al., 2020). However, there is scope to apply a wild pedagogies approach to other domains, such as architecture, urban planning, diet, food production, and economics, in order to challenge the frameworks that fuel environmental crises. In this respect, the label of 'rewilding' may be irrelevant, but it does offer a captivating approach to unite multi-disciplinary efforts.

Conclusion

During the inception of ecological rewilding, Soulé and Noss (1998) foresaw that the 'greatest impediment to rewilding is the unwillingness to imagine it'. There is a need to address this impediment by ensuring that human rewilding and ecological rewilding can embody a reciprocal or cyclic relationship. Consequently, ecological rewilding can occasionally be criticised for treating only the symptom rather than the cause, for not paying enough attention to societal context, which fortifies the necessity for ecological rewilding in the first place. As such, people can only ever adopt roles as initiators, stakeholders, managers, or spectators. While ecological rewilding may inspire people to connect with nature, human rewilding has the potential to *involve* people on physical, emotional, and cognitive dimensions. It can be a form of deep restoration that forges bonds beyond a solely human sphere, thus perhaps helping humans to enter what Haraway (2016) calls the era of the Cthulucene.

Human rewilding resolves a human–nature dichotomy, combines the knowledge of the old with the innovation of the new and acknowledges that this is a point in an ongoing socio-ecological journey. The potential for ecological rewilding to take place in all manner of spaces (Ward, 2019) makes it one of the most optimistic environmental narratives (Jepson, 2019) that captivates people's imagination (Durant et al., 2019). In the same thread, human rewilding can be a motivating endeavour, as no matter where on the spectrum someone sits there is a chance to be 'more' wild. In what is often a bleak planetary perspective, human rewilding offers optimism and hope.

Note

1 This chapter is an adapted version of a Dutch text, Arts & Maffey (2022) 'Menselijke rewilding'. In: *Rewilding in Nederland. Essays over een offensieve natuurstrategie.* Arts, Bakker, Buijs (eds), Zeist, KNNV Uitgeverij, pp. 73–81.

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