



Reimagining the wilderness ethic to include “people and nature”

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Abstract

The concept of the “wilderness ethic” is at an impasse. Despite calls for action to conserve wilderness, any notion of wilderness thinking still resides outside of most major global environmental policy mechanisms. We posit the wilderness ethic must evolve with haste, to better reflect contemporary conservation framings; that is a “people and nature” focused approach. Only once the central role and rights of people are incorporated into the traditional wilderness ethic, will policy better allow the navigation of pathways towards sustainability.

Keywords Conservation framings · Conservation policy · Human Rights · Sustainable Development Goals.

Introduction

At first glance, the wilderness ethic, that is, the set of moral principles that underpin the rationale and conduct when engaging with wilderness conservation, has a deceptive concreteness (Nash 2014). However, widely agreed-upon and accepted definitions of what the wilderness ethic is, and which spatial areas are to be considered wilderness, are still eluding, because it is subjective and context specific (Cronon 1996; Callicott and Nelson 1998; Gomez-Pompa and Kaus 1998; Nash 2014; Fletcher et al. 2021). Nonetheless, the contemporary conservation science literature calls for its preservation (e.g. Venter et al. 2016;

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Watson et al. 2016; Watson et al. 2018a; Watson et al. 2018b; Di Marco et al. 2019; Allan et al. 2020).

Albeit variably defined in the literature (for instance see Leihy et al. 2020), the traditional or classical wilderness ethic is the view that wilderness is a place primarily shaped by natural forces, possessing natural origins and being free of high densities of human inhabitants and structures. Any notion of wilderness still resides outside of global policy mechanisms, particularly the Sustainable Development Goals (SDGs), and is not mentioned in the 2030 Agenda for Sustainable Development. The reasons for this omission likely lie in the definitions and framing of the wilderness ethic itself, which in most cases does not explicitly consider well-being of people or human rights as part of wilderness. For example, The USA's Wilderness Act (1964) defines wilderness as "an area where the earth and its community of life are untrammelled by man, where man himself is a visitor who does not remain". Since its philosophical origins are markedly global north-western, the concept has also come under pronounced critique, particularly for being considered cult like, reinforcing contempt for places that are not intact nature, and marginalizing, subjugating, and in some cases forcibly removing indigenous peoples (Cronon 1996).

The notion that wilderness is somehow separate from humanity is false. While the human defined wilderness ethic can be argued to merely be an anthropocentric fabrication, even when adopting a range of scientific definitions (i.e. Leighy et al. 2020), they demonstrably physically exist (see 'The evolving wilderness ethic'). Indeed, humanity affects wilderness areas, and wilderness itself deeply affects human thought and society. Apart from the contemporary work above, this is reflected in the long history of indigenous people with wilderness areas, especially in Australia (Gammage 2012; Pascoe 2015; Bridgewater 2021), Africa (Archibald et al. 2012) and the Americas (Kohn 2013; Roos et al. 2021), and longstanding ideas on the connections of indigenous people with wilderness. For instance, how the Runa people of the upper Amazon conceive of human-nature interrelationships (Kohn 2013), or how San people's use of tracking is argued to be the very origin of scientific thought (Liebenberg 1990). In consequence, it is unclear why the importance of wilderness across different sectors of society, and in both historical and contemporary times, has not been recognized in global conservation policy. Has modernization, industrialization and urbanization over the past century, or even the very framing of the wilderness ethic itself, created an artificial, yet psychological very real, separation between humanity and wilderness?

We posit that a modernized wilderness ethic should articulate how it incorporates contemporary conservation perspectives, or framings *sensu* Mace (2014), and explicitly include human rights and well-being of people – i.e. re-joining people and wilderness (see previous paragraph). We highlight where this perspective could usefully be applied to better align wilderness thinking with the SDGs, and discuss where some of the benefits and costs of such an approach may lie. The traditional wilderness ethic, which imposes exclusivity expressed in traditional "fortress" conservation concepts, contrasts with human rights and rights to use concepts increasingly embedded in national constitutions and conservation ethics. If it is to alter global environmental policy, the historical ideology of the wilderness ethic must broaden to include more contemporary conservation framings, and quickly, to better match changing attitudes in conservation (Mace 2014).

Broadly speaking, to many conservationists the current wilderness ethic is mostly aligned to the first three conservation framings defined by Mace (2014), namely *nature for itself*

(“nature has intrinsic value”; prevalent since 1960s), *nature despite humans* (“nature needs to be protected from humans”; prevalent since 1980s) and *nature for people* (“nature providing services for people”; prevalent since 2000). The fourth and most recent framing that have emerged since around the 2010s, namely *people and nature*, takes a social-ecological view of conservation with resilience, adaptability and environmental change as central concepts, but without denying nature’s intrinsic value, the negative impact humans can have on nature or the fact that humanity is dependent on nature. We argue that conservationists robustly discuss what this most recent conservation framing means for the wilderness ethic, and subsequently explore innovative ideas in order to reimagine wilderness ethic and various ways it may play out in different wilderness contexts (e.g. developing versus wealthier nations). This framing acknowledges that there are inevitable trade-offs in conservation, and sets a goal of negotiating the costs and benefits (both tangible and intangible), in a way that is acceptable to most parties when implementing conservation actions (Swemmer et al. 2017).

The evolving wilderness ethic

Defining a more contemporary “wilderness ethic” that is well-accepted by multiple stakeholders is not trivial, but it is a challenge that must be overcome if it is to alter global conservation policy. From a purely quantitative perspective, wilderness is defined as relatively large tracks of land sparsely populated by humans and constituting biologically intact ecosystems, where human disturbance is rare or minimal (Watson et al. 2016). Ever increasing sophistication in remote sensing and mapping techniques have now comprehensively mapped the wildernesses of the world under that definition of limited land transformation and low human densities. At least 24 such areas exist outside of Antarctica, all over ten thousand square kilometres, that are still >70% untransformed and have comparably low human densities (Mittermeier et al. 2003). These areas are considered to provide ecosystem services in terms of carbon sequestration and storage, climate regulation, and act as vital refuges for many components of biodiversity, and preserve cultural diversity (Di Marco et al. 2019). An unknown number of indigenous people are supported in such areas, and they are often the key historical stakeholders in, and custodians of, wilderness areas. Over the last two decades, one tenth of wilderness areas covering 3.3 million square kilometres have been lost to conversion for human use, particularly in the forested areas of central Africa and the Amazon (Venter et al. 2016; Watson et al. 2016). Despite their added conservation and ecosystem services benefits to the global portfolio (Allan et al. 2020), it remains unclear why policy has failed to respond adequately to conserve wilderness areas.

Global conservation and policy efforts, particularly multi-lateral agreements, still tend not to explicitly recognize any wilderness ethic as a mechanism for providing benefits both for biodiversity and humans. There is no explicit mention of wilderness concepts in the SDGs, despite vociferous arguments that “time is running out to safeguard the health of the planet” (Watson et al. 2018b). The SDG Goal 15 is closest aligned to the wilderness ethic, namely to “Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss”. However, it does not explicitly mention or track intact ecosystems, nor incorporate any wilderness aspects. Furthermore, indicators for SDG 15 are biased towards

tropical forests, which the largest proportion of wilderness regions are not. Many goals aim to reverse trends in degraded lands, which contrasts to maintain historically intact areas that make up wilderness in the first place.

Changing conservation framings

As argued by Mace (2014), new conservation framings do not supersede or replace previous framings, but merely that additional dimensions need to be considered (i.e. an expansion rather than replacement of earlier rationales for conservation). A new wilderness ethic should defer from clutching to notions of fortress based conservation, but in a manner where such shifts do not erode either the biological value or sense of place of these areas, but rather ensure the social, financial and ecological sustainability of these areas (Smith et al. 2021). Most conservation scientists agree that intact nature untouched by human influences no longer exists (Sandbrook et al. 2019), and so to think of most wilderness globally as areas without any human impact is not tenable. Indeed, many ecosystems considered as “wild” have co-evolved with humans (e.g. fire and grazing regimes in Africa; Archibald et al. 2012). In consequence, the concrete pathways toward potential human-rights wilderness framings can be operationalized, especially by strengthening and applying existing indigenous-knowledge systems (for instance see Vinyeta and Lynn 2013; Whyte 2017), and by promoting biocultural diversity (see Bridgewater and Rotherham 2019).

Although all four contemporary framings defined by Mace (2014) remain relevant (more may develop), and should be retained in reimagining the wilderness ethic, the contemporary wilderness ethic has been slow to more explicitly embrace the more modern framings which emerged around the last two decades. How this framing will alter the wilderness ethic is a field wide challenge for conservation science and practice, and would require fundamental shifts in thinking across multiple hierarchies. But it must be explored and become part of the wilderness narrative, as it broadens to ensure wilderness thinking stays aligned with contemporary conservation framings and global policy. This idea is in sharp contrast to transcendentalist origins of wilderness thinking, where a select few privileged individuals seek solitary experiences, surrounded by intact wilderness, away from the trappings of society, enlightened by a reconnection to nature. But unless society acknowledges the reasons for establishing and maintaining wilderness is at least partly anthropocentric, it will only perpetuate the “fortress-based” notions of conservation – that is, conserving nature to the exclusion of people (Swemmer et al. 2017).

Including contemporary conservation thinking into the wilderness ethic has tangible and intangible benefits. It explicitly considers that multiple human actors will shape the future of wilderness. It adopts and applies contemporary conservation values, which are reflective of both the Universal Declaration of Human Rights (<https://www.un.org/en/about-us/universal-declaration-of-human-rights>), and underpin the SDGs. Acknowledging and incorporating the rights and responsibilities of people in wilderness regions may aid its mainstreaming into global policy. A redefined wilderness ethic can and should seamlessly integrate into broader goals of the SDGs. Wilderness can be used as a tool or policy mechanism for the preservation of indigenous culture, the conservation of biodiversity, escapist recreation, health benefits, local and regional ecosystem services, research opportunities and forming baselines for comparing with more transformed areas to planetary scale ecosystem

services, like climate regulation. Nevertheless, the central, if nuanced, shift is required to balance a fundamental biocentric approach with elements of an anthropocentric approach, acknowledging that humans are part of, rather than visitors to wilderness. This will allow a more holistic wilderness ethic to be included in the SDGs. Sustainable Development Goal 11 Target 4 (“Strengthen efforts to protect and safeguard the world’s cultural and natural heritage”) implicitly does so, but falls short of recognizing wilderness explicitly as a mechanism to achieve the target. Wilderness areas are critical to simultaneously maintain some of the world’s biodiversity, ecosystem services and many peoples, cultural practices and languages. Preserving wilderness regions can help to achieve SDGs 3 (Good Health and Well-being); 6 (Clean Water and Sanitation); 8 (Decent Work and Economic Growth); 11 (Sustainable Cities and Communities); 12 (Responsible Consumption and Production); 13 (Climate Action); 15 (Life On Land); 16 (Peace, Justice, and Strong Institutions); 17 (Partnerships for the Goals). The 2030 Agenda for Sustainable Development (<https://www.un.org/sustainabledevelopment/development-agenda>) does recognize human rights as central to achieving aspirational SDGs, but does not mention preserving wilderness as a mechanism to do so, at all. We argue that this is a remarkable global policy oversight, and could serve as a mechanism to ensure wilderness conservation as a tool for achieving various human well-being and biodiversity outcomes.

Including a modern conservation framing into the wilderness ethic may have costs. Since it defies its ecocentric roots, it will be challenging for traditional proponents to accept. But to polarise the debate into a false dichotomy of wilderness or not (or ecocentric versus anthropocentric), fails to acknowledge that a range of trade-offs will need to be made as a more contemporary wilderness ethic navigates the Anthropocene. Addressing the human rights aspects in the wilderness ethic also risks that the ethical pendulum swings too much toward a purely anthropocentric view, which ignores that humans are dependent on and part of nature, that humans can impact nature negatively and that nature has inherent value (Kopnina et al. 2018). Another risk is that measuring conservation “success” from a people and nature perspective can be difficult, as this framework has fewer agreed-upon indices, and can be more context-specific and nuanced than other species and protected areas metrics (Mace 2014). Nonetheless, the main risk of not addressing the centrality of humans in the traditional wilderness ethic, is that it will then continue to remain outside of the remit of global policy mechanisms, which now squarely address human well-being.

Wilderness must become an enabler of both human and environmental flourishing through its contribution to various SDGs. This reimagining of the wilderness ethic does not necessarily have to detract from the traditional conservation and spiritual value of these areas (i.e. wilderness areas can still be low densities of people living in largely untransformed land), but the added dimension will further enrich the wilderness ethic and celebrate the true role of these areas for planetary sustainability and ability to thrive.

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