Does conservation need an exit strategy? The case for minimal management

The spectrum of potential conservation philosophies contains the ideals of preservationists towards one end and rewilding at the other. A long-term antagonism between these two schools will almost certainly be to the detriment of non-human nature. This article suggests conservation management 'exit strategies' that would separate the impacts of active conservation from ecological process such as evolution, without undermining the short-term focus on preserving threatened species. It also explores the case for a more dynamic natural world, in particular by looking at what the field of ecological ethics can tell us.

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A century on – which conservation fashion?

What will be the state of Great Britain's mainland network of protected areas 100 years from now?

- A series of vibrant and expanded cores that are buffered by gentle-use zones and connected by wildways?
- An array of persisting isolated fragments, each managed to maintain a hand-picked set of cherished species?
- A scattering of privately owned reserves, whose sparseness bears witness to a political failing – in the face of the dual mounting pressures of overpopulation and overconsumption – to leave any of the island's landmass for non-human nature?
- Or something different still?

As alluded to in the third of these scenarios, the answer will relate, in part, to the extent to which human pressure on the land increases. But it will also depend on the effectiveness of conservation strategies and, perhaps most significantly of all, the evolution of the philosophy that underpins them. Regarding the latter of these, John Fryxell and colleagues, in *Wildlife Ecology, Conservation and Management*,[1] describe seven fashions that summarize the evolving and expanding set of objective that have been applied to protected areas over the past 150 years, starting out with the relatively simple desire to conserve scenery. The most recent addition to the set, which is presented as a 1981 quotation from Otto Frankel and Michael Soulé,[2] is "to maintain, hopefully in perpetuity, a highly complex set of ecological, genetic, behavioural, evolutionary and physical processes and the coevolved compatible populations which participate in these processes."

For the purpose of the present article, the spectrum of potential philosophies will be simplified into two schools:

- "Preservationists", whose overarching goal is to maintain viable populations and meta-populations of extant priority species within static or cyclical habitat states.
- "Rewilders", who not only advocate the reintroduction of extirpated species but also seek a landscape-level reshaping of our island's wilder areas that would allow a rekindling of nature's dynamics.

Evolution or cultivation?

The pages of this journal have, for many years, extolled the rationale for rewilding in Britain, and there are several admirable projects in various stages of maturity that reflect the discipline's ethos, at least in part. These include Trees for Life, the Cambrian Wildwood, the Carrifran Wildwood, and Wild Ennerdale.

However, the preservationist school, in practice, remains dominant in the application of conservation across the UK. As such, we are left contemplating the possibility of a baseline shift to a landscape in which a bird box or a reptile mat is considered as natural an element as a veteran tree or a well-sunned rock. And something else that might shift is the evolutionary path of non-human nature. In a recently published anthology titled *Protecting the Wild*,[3] Christof Schenck (Executive Director of the Frankfurt Zoological Society) cautioned that: "Human-directed conservation is changing species in the long run. This means that even in conservation areas, set aside for nature protection, humans take a lead in evolutionary processes, with limited understanding of the results."

Schenck's comment is made as part of a well-reasoned attack on the contemporary application of biodiversity as "justification for conserved cultivation." He goes on to argue: "What counts for biodiversity is the natural diversity of genes, species, and ecosystems. And all three levels are not static. They emerged from natural processes, and only by allowing the processes to continue will we be able to keep the biodiversity we inherited."

In other words, the goal of rewilders to rekindle nature's dynamics goes far beyond a nostalgic affection for untrammelled land to applying an enriched definition of biodiversity to the definition of thriving nature.

We would add to Schenck's argument the observation that humans in any career struggle to make impartial, emotion-free decisions, and that conservationists are no exception. The more actively that land is being managed for conservation purposes, the greater the scope there is for personal value judgements, unwittingly or otherwise, to influence the relative prospects of different species. We speculate that this might be facilitated by a greater potential success of fundraising campaigns targeting more visually appealing creatures.

So how might conservationists begin to disentangle themselves from evolutionary processes? We are certainly not advocating that all bird boxes be suddenly torn down

and every reptile mat shredded. Such tools not only provide potential lifelines for threatened species in anthropogenically degraded habitats but also, in the context of scientific experiments, represent invaluable means of standardizing data capture. Furthermore, a long-term antagonism between rewilders and preservationists will almost certainly be to the detriment of non-human nature, given the urgency of effective solutions that is driven by the imminence of a mass extinction event.[4] It seems that we cannot afford the luxury of protracted scientific conflict.

So is there another way? What if management plans for protected areas that are currently run with a preservationist remit were appended with longer-term goals that would allow the habitat to return to a self-willed state while supporting a rich and dynamic mix of species? With poetic licence, we might describe these additions to traditional conservation plans as 'exit strategies', although long-term minimal management goals is perhaps a more appropriate descriptor for our idea.

Lessons from ecological ethics

One way to appraise our idea is to examine what the field of ecological ethics can tell us. There were already stirrings of an awareness in pre-modern Western society that the moral considerations of humans extend beyond the sphere of our own species to other living forms. In the late 16th century, French philosopher Michel de Montaigne wrote:

> "There is a kind of respect and a duty in man as a genus which link us not merely to the beasts, which have life and feelings, but even to trees and plants".[5]

This idea of an extended ethical sphere resurfaced in the conservation community during the 1930s through the work of Aldo Leopold, a forest ecologist in the US.[6] In his *Land Ethic*, Leopold made a compelling case for the ethical duty of land managers to conserve and protect not only inhabitant species but abiotic components of the ecosystem too, including soil and water. Several variations on ecocentrism appeared in subsequent decades.[7]

As the gravity of the ecological crisis has become more apparent, it has also been realized that simply because humans are the relevant valuers, what they value need not be restricted to other humans. Readers seeking a contemporary statement are directed to an essay written in 2004, by Ted Mosquin and the late Stan Rowe, titled *A Manifesto for Earth*.[8]

A particularly important specification of ecocentrism with respect to the present article is as follows: ecological processes that spatially and temporally connect biotic and abiotic ecosystem components, including evolution, should also be given ethical consideration. So just as species have an ethical right to exist, they also have one for that existence to be dynamic.

Exiting to what?

Returning land to a self-willed state does not necessarily equate to an eventual absence of active management of any form. Anthropogenic climate change, for

instance, may throw up fundamental challenges to the viability of some species in their existing ranges over the coming decades that necessitate interventions of some kind. As another important example, we believe that exotic invasives introduced by humans should still be considered as being potentially in need of control, for the greater good of the ecosystem. Any persisting Rhododendron ponticum in a woodland, for instance, might be a candidate for continued active management.

In this latter aspect, our views differ from those expressed by environmental journalist Fred Pearce in *The New Wild: Why Invasive Species Will Be Nature's Salvation* (reviewed in the book reviews section of this edition).[9] In his introduction to the book, he states: "Conservationists who want to cosset nature like a delicate flower, to protect it from the threat of alien species, are the ethnic cleansers of nature, neutralizing the forces that they should be promoting."

A light-hearted example of how management interventions and ecological processes can become entangled. June 2014, Blean Woods, Kent.

Photo: Joe Gray

Critically, he sees intervention in controlling invasive species as being necessary only for human benefits, writing: "we should be clear that when we do this, it is for ourselves and not for nature." In contrast, while we are advocating a future for nature conservation with less active forms of management, we believe that a truly ecocentric outlook will, in certain cases, involve control of invasive species, especially when those species are a result of human interference, when their impact is non-benign, and when such control restores ecocentrically directed evolutionary processes.

Committing to long-term thinking and action

The idea of incorporating long-term minimal management goals – or exit strategies – into the conservation plans of today is proposed as a means of reconciling a remit of short-term protection with one of rewilding. If disentangling the active management of conservationists from nature's dynamic forces is not explicitly written into plans as a long-term goal, it is difficult to see how current nature hotspots will be properly incorporated into a wilder network of protected areas.

We do not wish to imply that the idea presented in this article should be universally applied. For instance, where there is a compelling reason to preserve cultural

heritage – which may be the case with some coppiced land, as just one example – then there would be a clear case of incompatibility. However, the idea is a practical one that can be implemented today under a range of circumstances, all with the goal of helping to get us, in the long term, to that series of vibrant and expanded core areas buffered by gentle-use zones and connected by wildways.

And the time-scale for enacting long-term minimal management goals? As quickly as funding and nature will allow.

References and notes

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Rewilding in progress? The difference that grazing pressure makes at Bwlch Llyn Bach, Gwynedd.
Photo: Mick Green