

like Gifford Pinchot who thought we could improve on nature to maximise game management, or the US 'wise use' movement that developed from the 1980s as a backlash to the growth of the environmental movement. The new Trump era in the US may well encourage a resurgence of this deregulation and exploitative culture in wildlife management.

Rising to the challenge or changing the agenda?

The rise of the 'suits' has continued, exacerbated by the cutbacks to NRW's budgets. There have been several rounds of redundancies and many of the ecological experts, run down and disillusioned by the lack of support from senior management and the new language, have chosen to take early severance. NRW is now run by corporate managers with no real ecological experience. Welsh Government has been consulting on a range of policy documents such as the 'Natural Resources Management Plan' – this contains no details, no plan, no proposed outcomes and no proposals to stop declines of wildlife. Recent Welsh Government decisions confirm their direction of travel: let's build a motorway over the Gwent levels SSSI (and a culturally and historically significant landscape), let's open up Cardigan Bay Special Area of Conservation to highly destructive scallop dredging, let's give permission (and Government cash) into a motor racing circuit on a peatland site. Let us continue to be the only place in the world on the migratory flyway of the Greenland Whitefronted Goose (a sub-species in serious decline) to still allow this species to be shot. Let's give licences to wealthy landowners to shoot cormorants and goosanders purely on the basis they might eat some fish – in clear breach of the law as no specific evidence that the birds have a 'serious impact' on the fishery has been provided.

We have had a series of environment Ministers with no interest in the environment, and the environment does not even feature in the priorities for this term of the Senedd. Welsh Government claims to be 'evidence based' but does not have the expertise to analyse the evidence. It puts no resources into collecting relevant evidence and it cherry picks the evidence that supports its decisions. The Welsh Government fails to apply the 'precautionary principle' even though it is enshrined in law in the original Wales Act granting devolution.

Halting, hot helping, the culture change in Welsh Government

At a recent debate on the State of Nature Report in the Senedd there were some good and informed contributions from various Assembly Members. However, the Minister merely read a bland prepared statement – there is no passion and no ambition for Nature in Welsh government at a Ministerial level and amongst the officials.

Iolo Willimans is right in that we do not need any more reports. NGOs are getting too allied to government and are simply dealing in policy reports and inappropriate language which helps the new mindset of exploiting nature. What we need is action on the ground before we lose anymore species from Wales.

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The challenge of wild nature conserving itself

The last edition of ECOS had a lot to say about rewilding in its many guises, a spectrum of less wild and more wild. This article looks at how nature conservation is currently seen, and rewilding in particular, as a way towards outlining the wildest end of this continuum. Without this most wild part of the overall picture, humans will never face or even relish the challenges of wild nature while learning as a species to live with it, within it.

MARK FISHER & ALISON PARFITT

Into the unknown?

As advocates for a wilder nature in Britain, we, the authors, build a future vision of wild places on the dynamics of natural systems. We see in that the free will of ecological interplay being inspiration in itself, and which we convey to others in the hope of enthusing acceptance. If there is an imprecision in this vision, then it is because there is no perfect system that can be described, no guarantee of numbers or individual species, or even a temporal consistency other than the variability inherent in all biological systems. It's a tough ask to get across. At its simplest, we know from experience that if we can take people to places where they can see for themselves the vitality of nature without interference, suppression, or manipulation, then it is no longer an act of faith for them to commit to a wilder future, but these opportunities to experience such wilding are just not that plentiful yet. So if you think of a continuum from the not-wild of agricultural surroundings to the most wild, it is the most wild that is missing, as it is the missing bit in us - banished from our psyche. In Britain we don't have anywhere, at any meaningful scale, where we are able to have the full and wholesome relationship that we need to have with wild nature, where we can be most wild. Instead, we have to work with the knowledge and concerns that each person has for our natural world and make an offer that holds more than just hope for its future. It is challenging, as any unknown can be, and so we have to be imaginative as well as honest, and be clear in seeking a natural justice for wild nature, but also for the aspiration we believe there is, and will show, for the long-term protection and thriving of wild nature.

We don't see this as "losing control". The Editorial in the last edition of ECOS used the former as a metaphor for the growing pains of "rewilding", the theme of the edition, but then we don't now use the term "rewilding" either. We have taken the conscious decision to use wilding instead, for the reasons that our colleague Steve Carver described in that edition, that we want to look forward to nature-led lands and life, not back, and because "rewilding" has become freighted with so many different meanings, often seemingly to suit the purposes of particular agendas.¹ Our distinction may not be obvious, and we may be swimming against the tide

given the general resonance of “rewilding”. The various meanings of “rewilding” appear to us to be less robust ecologically, as well as unchallenging because of that. We are not advocating wilding for everywhere, to the most wild, but we do see it as true nature conservation - it is wild nature conserving itself.

What do people think about conserving nature?

It wasn't clear to us, from the various articles in that *ECOS* edition, where the nexus between nature conservation and wilding would lie, given that none of the authors were disinterested in one way or the other. A recent attitude survey on biodiversity was conducted as part of the Special Eurobarometer series of the European Commission. Biodiversity was defined in the survey as the term given to the variety of life on Earth (like plants, animals, genes, but also ecosystems such as forests, oceans, etc.). The survey shows a level of public concern in the UK at 80% for the decline and possible extinction of animal and plant species, natural habitats and ecosystems, and with a similar level of commitment to a responsibility to look after nature.² This is a clear indicator of concerns and fears about loss. It also appears, now we are leaving the EU, that the public have greater faith in European nature conservation legislation. A YouGov poll carried out after the vote to leave shows that 83% believe Britain should pass laws providing a higher (46%) or the same (37%) level of protection for wild areas and wildlife species than current EU laws, with only 4% wanting lower protection.³ What is most disturbing though from the Eurobarometer survey, and which probably gets to the heart of the matter, is that 61% of people in the UK do not feel informed about the loss of biodiversity.

How are people informed about nature and conservation?

We are all familiar with the churning of news releases in the mainstream media, a reasonable assumption being that the public rarely get past the headlines to read the reports on which the news releases are based. The recent yearly update of government indicators to assess progress in England against the Natural Environment White Paper⁴ was described in the media as a “pretty grim picture of how our wildlife is faring in the countryside”.⁵ It shows a long term decline in woodland birds and butterflies, and farmland breeding birds and butterflies, combined with 75% of 213 “priority” species across the country falling in number, but don't expect from the report and accompanying datasets to find out which particular species.⁶

An update on the UK State of Nature report, compiled by NGOs and research organisations, is more illuminating about particular species, but paints a similar picture, albeit covering the whole of the UK.⁷ Thus 56% of UK species studied have declined over the past 50 years, and of almost 8,000 species assessed by the report, 15% are at risk of disappearing. It is not surprising that the media uniformly picked up on the assessment in the report that “we are among the most nature-depleted countries in the world”.⁸ It is the evidence of these reports that must give rise to that high level of public concern elicited in the Eurobarometer survey.

Another illuminating aspect in the State of Nature report was the use of species reintroductions as a conservation tool, with examples given of the large blue butterfly, hazel dormouse and pine marten. In relation to pine marten, the report expressed

the hope that “boosting a native carnivore population will have wider implications for the ecosystem”. We can only agree, as the ecological incompleteness from a lack of carnivores in their controlling interaction with prey is unbalancing for wild nature.⁹ These species reintroductions attract high profile media coverage, but we wonder whether the public understands the extent of habitat management and manipulation that goes on behind the stories, because the coverage ensures that it is involuntarily seen through a prescribed lens of a conservation industry news release. Thus the media reports that “scrub clearance and careful grazing” is required for the reintroduction of large blue butterfly¹⁰ but the State of Nature report identifies farming pressures as having by far the largest negative impact on nature, across all habitats and species. The media also reports that “dormice depend on well-managed woodlands”¹¹ but an evaluation report on dormice reintroduction cautioned that it would be unreasonable and impractical to expect management of woodland to be devoted entirely to maximising dormouse populations when the need is to maintain woodland species diversity as a whole, rather than just a single species.¹² The media reports that “special den boxes” had to be designed for the recent reintroduction of pine marten in Wales¹³ the lack of arboreal denning sites necessitating the provision of den boxes, and indicating the lack of maturity of our woodlands in providing enough old trees with cavities.

We should learn from pine marten about what is missing from our woodland, the impact woodland management has had. Dead wood in parts of the stems or branches of standing trees, as well as standing and fallen dead trees are indicators for naturalness¹⁴ but the UK has one of the lowest volumes of standing and lying deadwood across European countries.¹⁵ Doesn't this call into question one of the England Natural Environment Indicators (5. Land Use) that seeks an increase in active management of woodland, and which likely cuts a swathe through its natural ecology, denying many species an existence? This is about a proportionality in approaches to nature conservation. In the same way that we are not seeking to sweep away all agro-ecological systems of nature conservation through wilding, we don't expect every woodland to be left unmanaged. However, achieving natural justice for wild nature is about giving it opportunities to thrive without our interference, opportunities that are not that widespread at present.

A snapshot of views on rewilding

The vote to leave the EU undoubtedly opened a space in which to consider the future of our natural environment, not least when the parliamentary Environmental Audit Committee (EAC) launched an inquiry that sought views about the implications for UK biodiversity.¹⁶ (The meaning of biodiversity was not defined by the Inquiry, and neither was the term defined by respondents who used it.) Amongst a series of questions on which written submissions were invited, one sought views on developing our own agri-environment policy and funding, and there was a paired question on the future risks and opportunities of managed rewilding to innovative land practices, and on the role that rewilding can play in conservation and restoration of habitats and wildlife. We sought clarification from the EAC of the unfamiliar term “managed rewilding” in the inquiry questions, but none was forthcoming before the submission deadline.

Having to wade through 160 written submissions for evidence of how rewilding is currently regarded was made easier by nearly half of them ignoring all together the questions on rewilding.¹⁷ Of the 84 that did respond, a quarter of those noted the confusion arising from the many meanings of rewilding, so that the Dorset Local Nature Partnership questioned whether it meant ‘Monbiot rewilding’ or ‘Knepp rewilding’, and the Countryside Alliance saying that there was no single definition of rewilding. The latter organisation was one of 12 that were against rewilding, the Heather Trust saying that it is a misnomer, and that it will have very little role in conservation and restoration of habitats and wildlife; farmer Richard Bruce says it is not conservation; botanist Dr Margaret Bradshaw is concerned at a loss of biodiversity; and the Welsh Wildlife Trusts believe that in Wales in particular, they don’t see any value in promoting a policy which involves removing people from a landscape.

These concerns about loss of biodiversity and of cultural heritage from rewilding were also shared by some of the 72 that were in favour, albeit that nine of those were only tentative in their support, such as Society for the Environment saying that it is not a fix-all solution and should only be used where appropriate, echoed by Natural England who say rewilding alone is not a ‘golden bullet’, RSPB a ‘silver bullet’. There were 18 submissions in favour that noted a concern for a loss of biodiversity from rewilding, Plant LINK cautioning with a common theme that existing species, communities, habitats and wider areas should not be lost or damaged through adoption of rewilding. As we expected, loss of cultural heritage was also a concern of 10 of those in favour: the Foundation for Common Land noted that traditional grazing practices are an integral part of the much valued cultural heritage of common land, so that rewilding would be at odds with creating a landscape that is the combined works of nature and man; and the Malvern Hills Conservators saying that the special qualities of the cultural landscape of the Malvern Hills, with character, habitats and heritage dependent upon extensive management, would be lost through an inappropriate rewilding scheme.

We had some notions about how managed rewilding would be interpreted by respondents, and thus it was no surprise that 24 submissions that were in favour wanted a managed approach to rewilding to constrain it within prescribed limits of transformation. Thus the Kent Nature Partnership thought that rewilding can lead to a lower cost option for conservation and regeneration if well managed; Fauna and Flora International talked of properly managed rewilding; and the British Ecological Society saying that managed rewilding will require human intervention, especially in the early phases. We would have expected a correlation between the 16 in favour that advocated some form of funding, mostly agri-environment funding, to incentivise rewilding with those that advocated a managed approach, but this was not the case. Perhaps the latter is implicit for those advocating agri-environment funding, because that is often the nature of the purpose of that funding.

Unfortunately, the level of knowledge of examples of what we would consider good wilding were scarce in the submissions, the most commonly identified being two with high media profile, but which we consider typical of what could



One amongst many bird-assisted seeding of rowans surviving on Baildon Moor, West Yorkshire, since sheep were removed from the common land after Foot and Mouth disease in 2001.

Photo: Mark Fisher

be the managed approach to rewilding in having extensive cattle grazing that is heavily subsidised with agri-environment funding (Knepp, Ennerdale).¹⁸ We don’t believe these examples are evidence of a total commitment to wilding with all its challenges, as their aim is still in maintaining a biocultural landscape.¹⁹ However, we are pleased that there were some positive responses to the benefits of rewilding: the Cornwall and Isles of Scilly Local Nature Partnership and the Cornwall Area of Outstanding Natural Beauty Partnership saying that it had proved to be successful in the quick establishment of functioning ecosystems capable of supporting healthy wildlife populations, particularly where keystone species can be introduced; the North East Local Nature Partnership noting that it can initially be a difficult ‘sell’ but bring fantastic results where the idea has been fully bought into; and the Durham Bird Club believing that rewilding can significantly help wildlife and should be encouraged wherever it is possible.

It would be fair to say that the benefits of wilding have a slim evidence base. Thus ClientEarth notes that given the long time-scale of rewilding, there is currently limited scientific research into its long-term implications, but that there is evidence that it can have positive effects for biodiversity. We acknowledge that long time-



Oyster Mushroom (*Pleurotus* spp.) on a standing dead oak in Walker Wood, an ancient woodland in West Yorkshire.
Photo: Mark Fisher

scale for wilding is so much longer than those of mainstream conservation, and thus it is easy for commentators to raise unease in the public mind when the initial outcomes of wilding may not seem beneficial. However we note that there were also some submissions that saw rewilding on a strategic level: the Partnership for Cranborne Chase Area of Outstanding Natural Beauty says that there is a need for national and regional policy development about wild lands, their restoration, creation and preservation; the Chartered Institute of Ecology and Environmental Management echoing this by believing that rewilding must form part of a long-term ambitious vision for each devolved nation; Professor Richard Brazier of the University of Exeter saying there is a need for a wildlands policy that frees natural processes by developing supportive regulations relating to, for instance, species reintroductions; and the Council for the Protection of Rural England recommends that rewilding should be considered further by government as part of a suite of responses to the urgent challenge of the restoration of nature and healthy ecological functioning of landscapes in England.

Ways forward with wilding

There is a danger that rewilding has settled into an approach of large herbivores, nestled into the familiar agri-environment approaches and funding so that it is close

to farming as we know it, and in that process shedding the challenges to ecology and the challenges to us, as well as colluding with the decline in nature that we acknowledge, but struggle to comprehensively address (other than a species here and a species there). We believe that it is the axiom in Britain that a withdrawal of farming is a pre-condition of moving landscapes substantially along the wild land continuum.¹⁹ Because our natural resource management has created highly modified landscapes, we identify a priority of wilding as being a need for ecological restoration of natural vegetation. The gains in diversity from a returning wild nature, and which have been seen in examples where farming has been withdrawn, must be given permanency and protection, and this is very unlikely to be achieved under agri-environment approaches and funding, where there is no commitment to that permanency. Thus outside of land held in beneficial ownership where there is a de facto inalienability and we see a commitment to that permanency, it will be publicly owned land, free from the burden of exploitation, where an increasing public aspiration for wild land will be realised. This argues for a national system of publicly owned and protected wild land, as is the case in most of Europe.²⁰

We would suggest that the possible loss of cultural landscape association and comfort can be minimised in this way, and can anyway be countered with a more profound point about wilding encouraging changing attitudes and feelings so that we the human species are more resilient, we are wilder. This means that we can live with ever changing nature with delight and enthusiasm rather than fear. And potentially be with, rather than resist, the challenges that climate change, land use change and shifting populations will bring. This change of minds and hearts will probably take generations; wilding can markedly help it along.

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Wolf watchers in Lamar Valley, Yellowstone National Park.
Photo Steve Carver



Rewilding and ecosystem health: parallels with human health care

There are instructive parallels between ecosystem health management and human health care. Evidence based practice with its emphasis on a systematic approach to what we know and what we don't know can help develop a more informed inclusive approach in both cases. Rewilding is a complex idea which needs attention to definitions and clear objectives. Assumptions about how actions should or can be applied in Britain need to be questioned objectively and openly before they are incorporated into public rewilding advocacy.

ANDREW BLEWETT

Complex systems

My initial response to the opportunity to write an opinion piece about rewilding was to reflect that there are already quite a lot of opinions about, but then that the continuing flow of opinion is a necessary response to an overwhelming global ecological crisis. The updated UK National Ecosystem Assessment (2011) and State of Nature Report (2016) make it clear that in general the decline of nature measured by ecosystem health and biodiversity is progressing relentlessly as the intensification and simplification of land use in Britain continues, despite conservation work, policy and statutory protection. As a response to this alarming scenario, rewilding is proving to be a stimulating concept as demonstrated by number of publications, dedicated third sector organisations and environmental advocates whose messages make for a compelling case.

For those of us interested in human health care, there are strong parallels between recent public health care history and the national response to ecosystem decline. Human health and especially my specialty of psychological health involves model formulation and decision making in a world of complexity and uncertainty. Views are often entrenched and conflicted, solutions nuanced by difficult trade-offs and an ethical requirement for a more inclusive decision-making process. The ecosystem health equivalent includes the importance of engaging citizens who don't view themselves as experts, but also I suggest an entirely different attitude towards non-human species and natural processes. It seems to me that rewilding grants a 'voice' to wild nature in a dialogue between humanity and the rest of the biosphere. By reducing human management in favour of nature, rewilding offers de-domesticating nature more space to make 'decisions' on its own terms. Of course this language is metaphorical but acknowledging some form of identity in nature can be an expression of a new 'mutualism' replacing traditional ideas about