

Rewilding: Position Statement CIEEM England Policy Group June 2020

THE CHARTERED INSTITUTE OF ECOLOGY AND ENVIRONMENTAL MANAGEMENT (CIEEM) IS THE PROFESSIONAL BODY FOR ECOLOGISTS AND ENVIRONMENTAL MANAGERS WORKING TO MANAGE AND ENHANCE THE NATURAL ENVIRONMENT IN THE UK AND IRELAND. THIS POSITION STATEMENT HAS BEEN COMPILED BY THE CIEEM POLICY TEAM AND MEMBERS OF THE CIEEM ENGLAND POLICY GROUP.



The concept of 'rewilding' has been gaining traction around the world for many years. There have already been several notable rewilding projects within the UK and Ireland. However, the definition of rewilding has been widely contested, with the confusion around its meaning leading to some controversy.

What is rewilding?

Rewilding is a form of ecological management which aims to allow for recovery by restoring natural processes and then allow the natural succession of habitats and species to occur. This lends itself to a more 'hands-off' approach than traditional conservation techniques which can involve prescriptive ongoing management of habitats to restore and maintain high levels of biodiversity; for example, the techniques used in agricultural schemes.

The main elements of rewilding are setting aside large core areas of land for nature, restoring natural processes and connecting these habitats across landscapes to allow for the movement of species. In some cases, it may be considered necessary to reintroduce missing keystone species to re-establish natural processes¹. There is sometimes the assumption that rewilding is based around the reintroduction of top predators'. However, to restore natural processes, rewilding projects may seek to reintroduce a wide variety of species, including grazing animals to create a mosaic of habitats; ecosystem engineers such as beaver; small carnivores such as pine marten; as well as plant species^{2,3}.

Another key part of rewilding is natural regeneration, for example, where woodlands develop from seeds that fall from existing tree stock⁴. This can significantly reduce costs, maintain local adaptation to conditions and, in woodlands, create a varied age structure. Consideration



will need to made of the means to financially support natural regeneration and this may require changes to policies and target setting.

While rewilding can require large areas of land to be set-aside, it can also be applied on a smaller patch-scale, integrating wild places into agricultural lands and urban areas. These small-scale projects are essential for developing connectivity between the larger core habitat areas; however, they will likely require a greater degree of management⁵.

Arguably one of the most well-known cases of rewilding is the Knepp Estate in West Sussex. Once an intensively farmed estate, the site has seen rapid results for biodiversity following the restoration of a natural grazing regime to create a diverse range of habitats⁶. The Wild Ennerdale project in Ennerdale Valley in Cumbria is another example which seeks to reduce human intervention. the project began with a large-scale tree planting project in the valley of over 40,000 native tree species; however, natural uphill expansion of woodlands is now encouraged. The site is now home to over 100 bird species, England's largest marsh fritillary population and has seen a 1000% increase in the numbers of Arctic charr following the removal of a concrete pipe bridge in 20097. Rewilding can also be achieved in urban areas: the Wandle Trust has restored features to provide habitat, created passages to allow for natural migration of eels and restocking the river with trout8.

Why is rewilding important for ecologists and environmental managers?

Ecologists and environmental managers will be at the forefront of delivering governments' ambitions, for example, the UK Government's 25 Year Environment Plan, and addressing the ongoing climate emergency and biodiversity crisis.

Their work with developers, local authorities, statutory agencies and other key stakeholder will be essential to the successful delivery of rewilding projects. They will need a good understanding of ecological processes and the management of species reintroductions. Unlike many habitat restoration plans, rewilding projects have no fixed end point so will require a different approach to monitoring and assessment of delivery.















Our position

- Rewilding is part of a wider 'conservation toolkit'
 and can be used alongside traditional management
 techniques to benefit a wider variety of species.
 The approach used should be appropriate for each
 individual site which should be selected following
 an Ecological Impact Assessment and according to a
 strategic plan.
- To combat the climate emergency and biodiversity crisis, habitats must be protected, restored and joined-up, whether by direct management or using a rewilding approach9. The process of rewilding, which seeks to restore and join often large-scale areas of natural habitat, offers a useful tool for achieving these aims and increasing the resilience of ecosystems. Rewilding of habitats can have a significant role in carbon sequestration, for example, estimates of whole tree carbon stocks are greatest in unmanaged forest nature reserves compared to other forest management types¹⁰. This does, however, need to balance against other goals, such as for biodiversity, using a wholeecosystem approach. Sites for rewilding should be identified strategically, for example as part of England's Nature Recovery Network¹¹, which will be underpinned by Local Nature Recovery Strategies to create a joinedup landscape that also delivers on local objectives.
- Natural regeneration of woodlands should be supported in targets for woodland expansion. Tree planting should be used where necessary, following the principle of using the 'right tree in the right place'. Consideration should also be given to species composition as planted areas may be species selective.
- Any rewilding project should fully engage, and be developed with, stakeholders. Particularly where reintroductions are being considered. We agree with the Woodland Trust's position that reintroduction of animals should be undertaken only when sufficient and suitable habitat exists for viable populations of the reintroduced species¹². Reintroductions should also follow the IUCN Guidelines for Reintroductions and Other Conservation Translocations¹³.

Next steps

The replacement across the UK of the Common Agricultural Policy with outcomes-based approaches for the environment presents new opportunities to 'rewild' areas to increase the provision of ecosystem services,



including carbon sequestration, biodiversity restoration and access to nature. It is essential that a planned approach is taken, with advice given by skilled professionals. Other opportunities are presented by conservation covenants in England, as laid out in the Environment Bill 2019-21¹⁴, natural capital approaches and the delivery of biodiversity and wider environmental net gains¹⁵. However, there may be challenges in using biodiversity net gain funding as a mechanism for implementing rewilding due to the need to agree acceptable outcomes for 'Net Gain Timeframes'¹⁶.

There is an ongoing need for more research on how rewilding delivers benefits for biodiversity and ecosystem resilience.



References

- 1. Keystone species are those whose impact on the ecosystem in which it is found, is disproportionately large relative to its abundance. Power et al. (1996) Challenges in the Quest for Keystones: Identifying keystone species is difficult—but essential to understanding how loss of species will affect ecosystems, BioScience, 46(8), pp. 609–620.
- 2. https://www.rewildingbritain.org.uk/rewilding/reintroductions/#results
- 3. Woodland Trust (2017) 'Rewilding': Working with Nature. Available at: https://www.woodlandtrust.org.uk/media/1718/rewilding-position-statement.pdf
- 4. https://www.forestresearch.gov.uk/research/lowland-native-woodlands/natural-regeneration-of-broadleaved-trees-and-shrubs/
- 5. Sandom C., Donlan C.J., Svenning J. and Hansen D. (2013) Rewilding, in MacDonald D.W. and Willis K.J., Key Topics in Conservation Biology, Second Edition, Wiley-Blackwell p.430-451.
- 6. Knepp Wildland (no date) Free-roaming Herbivores. Available at: https://knepp.co.uk/the-drivers
- 7. http://www.wildennerdale.co.uk/wildlife/
- 8. https://www.wandletrust.org/
- 9. Lawton J.H., Brotherton P.N.M., Brown V.K., Elphick C., Fitter A.H., Forshaw J., Haddow R.W., Hilborne S., Leafe R.N., Mace G.M., Southgate M.P., Sutherland W.J., Tew T.E., Varley J., & Wynne G.R. (2010) Making Space for Nature: a review of England's wildlife sites and ecological network. Report to Defra.
- 10. Natural England (2012) Carbon storage by habitat: Review of the evidence of the impacts of management decisions and condition of carbon stores and sources (NERR043). London: Natural England. Available at: http://publications.naturalengland.org.uk/publication/1412347
- 11. HM Government (2018) A Green Future: Our 25 Year Plan to Improve the Environment
- 12. Woodland Trust (2017) 'Rewilding': Working with Nature. Available at: https://www.woodlandtrust.org.uk/media/1718/rewilding-position-statement.pdf
- 13. IUCN/SSC (2013) Guidelines for Reintroductions and Other Conservation Translocations. Version 1.0. Gland, Switzerland: IUCN Species Survival Commission, viiii + 57 pp.
- 14. https://services.parliament.uk/bills/2019-21/environment.html
- 15. https://cieem.net/i-am/current-projects/biodiversity-net-gain
- 16. Johnathon Wentworth (2019) Net Gain, POSTbrief 34, London: UK Parliament Post. Available at: http://researchbriefings.files. parliament.uk/documents/POST-PB-0034/POST-PB-0034.pdf



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