PROTECTED AREAS AND NATURE RECOVERY

Achieving the goal to protect 30% of UK land and seas for nature by 2030





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SUGGESTED CITATION

Bailey J. J., Cunningham, C. A., Griffin, D. C., Hoppit, G., Metcalfe, C. A., Schéré, C. M., Travers, T. J. P., Turner, R. K., Hill J. K., Sinnadurai, P., Stafford R., Allen D., Isaac N., Ross B., Russi D., Chamberlain B., Harvey Sky N., McKain S. (2022). *Protected Areas and Nature Recovery. Achieving the goal to protect 30% of UK land and seas for nature by 2030.* London, UK. Available at: www.britishecologicalsociety.org/protectedareas.

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It was **reviewed** by Graeme Buchanan (RSPB), Nigel Dudley (Equilibrium Research and the IUCN World Commission on Protected Areas), Brian Eardley (Inverness, UK), Christine Edwards (Natural Resources Wales), Colin Galbraith (JNCC), David Hampson (RSPB), Peter Jones (University College London), Bradley Ken (DAERA), Sir John Lawton (York, UK), Andy Nisbet (Natural England), Chris D. Thomas (University of York).

ACKNOWLEDGEMENTS

The authors would like to acknowledge the contribution of:

Penny Anderson (Consultant Ecologist - retired), Colin Armstrong (DAERA Marine Conservation & Reporting), Sue Berrisford (Independent), Rachael Bice (Yorkshire Wildlife Trust), Peter Bridgewater (Advanced Wellness Research Centre, Sheffield Hallam University), Greame Buchanan (RSPB), Kirsten Carter (RSPB), Robert Clark (Association of IFCA). Jane Clarke (RSPB Northern Ireland), Ken Collins (University of Southampton), Sarah Cunningham (NatureScot), Howard Davies (Independent), Nigel Dudley (Equilibrium Research and IUCN World Commission on Protected Areas), Ben Fraser (Natural England), David Genney (NatureScot), Phillipa Gillingham (Bournemouth University), Richard D. Gregory (RSPB/UCL). David Hampson (RSPB), Alister Harman (Independent), Meriel Harrison (RSPB Cymru), Roger Herbert (Bournemouth University), Kate Jennings (RSPB), Peter Jones (University College London), Tariro Kamuti (University of Cape Town), Keith Kirby (University of Oxford), Dylan Lloyd (Natural Resources Wales), Ilya Maclean (University of Exeter), Aideen McChesney (DAERA Marine Biodiversity Policy), Chris McGonigle (Ulster University), Sara McGuckin (Northern Ireland Environment Agency), Isobel Mercer (RSPB Scotland), Ruth Mitchell (The James Hutton Institute), Nathaniel Page (Fundatia ADEPT Transilvania), Adrian Phillips (Chair IUCN's WCPA between 1994 and 2000), Karen Ramoo (Scottish Land & Estates), Nina Schönberg (Ulster Wildlife), Nadia Shaikh (RSPB), Andrew Suggitt (Northumbria University) and Mark Wright (Northern Ireland Environment Agency).

The views and recommendations presented in this report are not necessarily those of the organisations to which the authors, the Steering Group members, the reviewers and the contributors belong, and should, therefore, not be attributed to those organisations.

ACRONYMS

AONB	Area of Outstanding Natural Beauty	NR	Nature Reserves
ASSI	Area of Special Scientific Interest	NSA	National Scenic Area
CBD	Convention on Biological Diversity	NTZ	No-Take Zone
CSM	Common Standards Monitoring	OECM	Other effective area-based conservation measure
Defra	Department for Environment, Food and Rural Affairs	PA	Protected Areas
FCS	Favourable Conservation Status	PAME	Protected Area Management Effectiveness
IFCA	Inshore Fisheries and Conservation Authority	RSPB	Royal Society for the Protection of Birds
IUCN	International Union for the Conservation of Nature	SAC	Special Area of Conservation
LNR	Local Nature Reserve	SI	Statutory Instrument
MCZ	Marine Conservation Zone	SPA	Special Protection Area
MNR	Marine Nature Reserve	SSSI	Sites of Special Scientific Interest
MPA	Marine Protected Area	UK	United Kingdom
NI	Northern Ireland	VMCA	Voluntary Marine Conservation Area
NNR	National Nature Reserve	WWF	World Wide Fund for Nature
NP	National Parks		



EXECUTIVE SUMMARY

Joseph Bailey

Area-based conservationⁱ on land and at sea will be a critical component of the United Kingdom's (UK's) efforts towards addressing the connected climate and ecological crises, for which the recovery of nature is crucial. This policy report provides an overview of the available ecological evidence on this topic, synthesised in response to the UK government's policy to protect 30% of all four nations' land and seas for nature by 2030 ('30x30'ii'). The UK has helped lead this international commitment, which many other nations have also adopted, and now the commitments must be implemented to protect nature effectively. Failure to do so within this timeframe could result in continued and irrecoverable declines in biodiversity, ecosystem functions, and the array of associated societal benefits. Area-based conservation, inclusive of protected areas (PAs) and other effective area-based conservation measures (OECMs), will be an essential tool towards this effort.



Note that a terminology table is provided in the *Terminology* section: all terms appear highlighted in the main text where first mentioned in each section.

ii Also referred to as 'thirty by thirty' or '30 by 30'.

There are some excellent examples of PAs that work for biodiversity, enabled by individuals and organisations across the UK's four nations. In domestic UK territories, areas under some sort of designation cover 27.8% of land and over 30% of the seas. However, not all these areas are fully effective at protecting nature. Both marine and terrestrial PAs face internal and external pressures that compromise biodiversity protection and recovery. The coverage of *effectively* protected terrestrial PAs could be as low as about 5% of UK territory.

The UK's protected sites are hugely valuable, and the natural environment is probably better than it would have been without them. However, there are substantial issues that constrain their ability to protect nature and, therefore, contribute to an effective 30x30 target, including insufficient funding, and a wide range of pressures inside and outside their boundaries. These issues extend to the wider network and spaces between PAs. Meanwhile, some of the UK's largest PAs designated as protected landscapes do not (and were not designed to) specifically prioritise biodiversity. Herein lies great potential, given the existence of governance frameworks associated with these designations, which should be adapted to improve nature protection.

The UK government must be cautious about what is counted towards 30x30; what criteria do areas need to fulfil to contribute to the 30%? The areas that count must *effectively* protect nature in practice, and not merely exist as lines on a map. In the UK, the main effort to meet 30x30 is less about designating new areas and more about transforming existing areas so that they can deliver for nature.

To move towards 30x30 requires political will and long-term political and financial commitments. Meaningful area-based conservation also calls for the empowerment and resourcing of statutory agencies, communities, and landowners to support management, monitoring, and enforcement, in a manner that includes and benefits local people as part of an effective and equitable system of governance.

This report recommends that transformative changes in thinking and policy are necessary for the UK to attain 30% coverage of effective area-based conservation designations by 2030, with findings echoing those published previously by others (e.g., the *Making Space for Nature* report). The current portfolio of PAs on land and in the seas across all four nations is extremely valuable for nature, providing substantial opportunities to protect the UK's biodiversity and contribute to the recovery of nature. Still greater ecological and societal benefits can be achieved through improved management and monitoring and reconfiguring PAs and the spaces between them as a connected network. Therefore, the ambitious goals around area-based conservation and the UK's environment are very welcome; now they must be delivered effectively.

QUESTIONS ADDRESSED BY THIS REPORT

Towards making policy recommendations and identifying evidence gaps, this report addresses the central role of PAs in nature conservation, and the important supporting roles of OECMs and the wider environment, by answering eight questions, which form the section headings of the report:

- 1. What kind of PAs are there in the UK?
- 2. What are the benefits provided by area-based conservation, and how can we measure them effectively?
- 3. What is the current state of protected areas and what are their biodiversity trends?
- 4. How can PAs and OECMs contribute to the wider ecological network?
- 5. How can the effectiveness of PAs be improved?
- 6. How can UK area-based conservation support nature's recovery on land and in the sea?
- 7. Which terrestrial area-based conservation approaches should count towards 30x30?
- 8. Which marine area-based conservation approaches should count towards 30x30?

Each of these questions is answered in as much detail as the scientific evidence allows, while highlighting evidence gaps and making policy recommendations, which are summarised in the table in the *Policy Recommendations* section. Evidence has been drawn from academic and non-academic works, as well as through surveying and interviewing experts from conservation charities, non-governmental organisations (NGOs), and various types of research institutions, as well as individuals such as landowners (see *Acknowledgements*).

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., and Wynne, G.R. 2010. *Making Space for Nature: A Review of England's Wildlife Sites and Ecological Network*. Report to Defra. Available at: https://webarchive.nationalarchives.gov.uk/ukgwa/20130402170324mp_/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf [Accessed 07 March 2022]

POLICY RECOMMENDATIONS

Designating an area of land or sea does not automatically make it an effective protected area (PA). Designation is simply the first step in a long process towards ensuring that long-term ecological benefits are delivered for nature and people. To be effective, a PA needs adequate implementation, enforcement, monitoring, and long-term protection.

More effective protection is necessary, but is not in itself sufficient for the recovery of nature in the United Kingdom; an integrated approach for land and sea is required. This means first targeting a core set of protected sites that prioritise nature, extensively complemented by a mix of other designations (including other effective area-based conservation measures (OECMs)), mechanisms, and activities that may not prioritise nature but still provide benefits for biodiversity. Indeed, while PAs are essential for nature's recovery, it is imperative to remember that no matter what their level of protection is, they cannot achieve the recovery of nature without the wider areas in between them working towards that same goal, nor without political will and societal responsibility for a sustainable environment.

A network of well-implemented and well-resourced PAs will deliver a wide range of environmental and socio-economic benefits. Partnerships between different sectors of society, supported by governance structures, are fundamental to realising this vision, alongside effective management, monitoring, and enforcement. This arrangement will support desirable outcomes for both nature and the people who live in, work in, benefit from, and visit these places.

The UK government and the three devolved administrations have committed to protect 30% of the land and sea of the four nations by 2030. In order to progress towards this objective, and the wider recovery of nature, UK governments need to expand and improve the existing network of PAs and complement it with OECMs across land and seas.

RECOMMENDATIONS FOR AN AREA TO COUNT TOWARDS 30X30

Based on evidence synthesised by this report, recommendations are presented around a set of 'ABCD' criteria (also see Section 6 of this report). These should be used to determine and inform: (i) what a site must achieve to be counted towards 30x30, and (ii) how these sites can be supported by the wider network. The 'ABCD' criteria apply both to protected sites and landscape designations.

A. Area delivers for nature in the long term

- i. To be considered for the 30x30 target, a PA or OECM must deliver effectively for nature in the long term. Effectiveness and outcomes should be assessed by 2030 where there is available and reliable data.
 - 1. Where it is not possible to reliably assess effectiveness by 2030, which will be the case for many sites because of data shortfalls, the area must be legally committed to actions that will result in long-term nature protection.

- 2. In this case, a mechanism that will allow effectiveness to be reliably assessed must exist by 2030.
- ii. Pressures, both internal (e.g., damaging fishing activities, unsustainable land management, wetland drainage) and external (e.g., pollution from outside the PA), need to be addressed. This includes the need for areas to be valued holistically in the planning process (e.g., for infrastructure projects), with considerations going beyond just their direct economic value (e.g., fishing, agriculture) to include their wider benefits for nature and society.
- iii. OECMs can be very important towards achieving 30x30 and offer a wide range of societal benefits, but an area can only qualify as an OECM if the longevity of nature protection is ensured. This will require legislation for this novel type of area-based conservation.
- iv. A transformational change is needed for the UK's sizeable protected landscapes (including National Parks and Areas of Outstanding Natural Beauty) if they are to provide long-term protection for nature and count towards 30x30 as a continuous area (i.e., in places where they do not overlap with protected sites). Specific recommendations for these areas are detailed below the ABCD criteria.

B. Build ecological resilience and improve biodiversity in the face of climate change and other environmental pressures (e.g., population expansion, land use change).

- i. This can be achieved using existing feature-based designations (e.g., where a site is designated for a particular habitat), but must also consider the wider ecosystem, including the areas between PAs (inclusive of buffer zones, habitat corridors and OECMs).
- ii. Climate change is driving shifts in species' ranges. A resilient network should be pursued because it will help minimise negative impacts for some species (e.g., population declines and extinctions), and produce positive outcomes for others as they move around the PA network tracking climatic conditions into an uncertain future.
- iii. The network, comprising PAs, OECMs, and the areas between, must support overall ecosystem health through representative habitat provision and connectivity across land, sea, freshwater, and coasts, accounting for the range of ecological functions within each.
- iv. The networks will be more effective if coordinated between nations within the UK, and across international borders, so collaboration is encouraged.

C. Conservation outcomes achieved through effective management and monitoring

- A site must be managed to ensure it delivers conservation outcomes, and monitored so that management can be adjusted when necessary.
- ii. This will require site-specific management and monitoring approaches, the goals of which should be specified such that they benefit the whole network and national nature recovery efforts.
- iii. The requirement to set goals that demonstrate clear improvements to biodiversity and monitor progress should be legislated to ensure consistency and accountability; this will also ensure reliable evidence for future assessments.
- iv. Identification and monitoring of key ecosystem functions, and their maintenance and restoration, will enhance the UK's natural capital, therefore benefiting people and nature.
- v. This increased need for management and monitoring will require substantial and sustained funding and resourcing across the four nations to ensure information is collected at regular time intervals to effectively monitor change and inform management. The increased availability of standardised data will be important for modelling future scenarios under climate change, taking species range shifts into account, thus supporting adaptive management efforts locally, regionally, and nationally.
- vi. Monitoring should align with existing international standards where possible. This will enable better reporting of UK PAs.
- vii. Greater participation from non-governmental organisations (NGOs) and citizens should be encouraged, as part of a consistent and coordinated monitoring approach.
- viii. A coordinated effort is required to create a central inventory of habitat restoration and re-creation across the UK.

D. Developed and delivered inclusively

- Co-designed systems of governance should be embedded to ensure that conservation goals, incentives, and penalties (to limit pressures on nature) are developed with local communities in partnership with landowners, NGOs, researchers, government agencies, and other stakeholders.
- ii. In particular, incentives must make nature restoration worthwhile for landowners (e.g., through payments for ecosystem services), while meeting Criterion A regarding longevity. Skillsets, familiarity with local environments, and social relations take time to develop, but they are key to ensuring the acceptance, effectiveness, and long-term success of conservation goals.
- iii. Schemes should carefully consider complementary public and private funding opportunities.

RECOMMENDATIONS FOR PROTECTED LANDSCAPE DESIGNATIONS

Sites designated as protected landscapes (including National Parks and Areas of Outstanding Natural Beauty) present unique opportunities for biodiversity in the UK. Given that they encompass a wide range of habitats and environmental conditions, their contribution to nature's recovery and society more generally could be immense. Protected landscape authorities have excellent relationships with people who own and work the land, which means change could be rapid, given adequate resourcing. However, until significant reform is delivered, this category of PA should not be automatically included in the 30x30 targetⁱ. This is because, while these areas may provide some biodiversity benefits, they do not necessarily deliver for nature in the long term in their totality. This is in no small part the result of chronic under-resourcing for actions on the ground, despite people who work for relevant authorities being passionate about nature.

Essentially, protected landscapes do not currently meet the ABCD criteria, so there are questions of what they must do and by when in order to meet these criteria and be considered for 30x30 by delivering for nature. Commitments to enhance biodiversity were made by these designations as part of the *Putting Nature on the Map*ⁱⁱ initiative in 2014, but this has not translated to changes on the ground due to underfunding. Substantial and sustained resourcing is required towards developing and actioning an aspirational roadmap.

A transformational change should repurpose protected landscapes to ensure nature's recovery, while ensuring that the goals of different protected landscape designations are complementary. This repurposing should make use of existing governance structures associated with these designations and ensure positive outcomes for the people who live in, work in, benefit from, and visit these special places, in line with recommendations made by the *Glover Review*ⁱⁱⁱ for England.

For the inclusion of protected landscapes in 30x30, this report's recommendations are:

- 1. The development of a clear aspirational roadmap that commits protected landscapes to tangible actions that will benefit people and deliver for nature and landscapes. Pledged actions must align with the ABCD criteria.
 - a. Substantial resources will have to be committed to support actions on the ground, including the ability of authorities to use their powers as part of their duty of regard.

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This is in agreement with the UK Government's response to the Glover Review, which states "At present, under their current statutory purposes, level of protection and management, protected landscapes cannot be said to contribute towards 30 by 30 in their entirety, and they must do more to drive the recovery of nature." https://www.gov.uk/government/publications/landscapes-review-national-parks-and-aonbs-government-response/landscapes-review-national-parks-and-aonbs-government-response. The Nature Recovery Green Paper also states that "Our current and future National Parks and Areas of Outstanding Natural Beauty (AONBs) could play an important role in achieving our 30 by 30 commitment, but we know that they must do more to drive the recovery of nature. Under their current statutory purposes, level of protection and management, it is our view that they cannot be said to contribute towards 30 by 30 at this time". https://consult.defra.gov.uk/nature-recovery-green-paper/nature-recovery-green-paper

^{II} Crofts, R., Dudley, N., Mahon, C., Partington, R., Phillips, A., Pritchard, S. and Stolton, S., 2014. *Putting Nature on the Map: A Report and Recommendations on the Use of the IUCN System of Protected Area Categorisation in the UK.* United Kingdom: IUCN National Committee UK. [online] Available at: https://portals.iucn.org/library/sites/library/files/documents/2014-040-Summary.pdf [Accessed 08 March 2022].

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- b. Commitments made must be associated with a formal follow-up process by government and statutory bodies to assess actions and outcomes. This recommendation is largely based on the fact that a consistent follow-up process was not set up for the commitments made in 2014 as part of the Putting Nature on the Map process.
- Landscapes and nature should be considered in tandem, meaning that their objectives should align towards mutual benefits.
- d. Some protected landscape designations will be better placed to deliver for nature according to their original designation, but all have potential to deliver for nature and should be supported to do this as a network.
- 2. If protected landscapes are to deliver for nature as effective PAs or OECMs, they should be treated as such, so that pressures (e.g., from infrastructure projects) are limited (see Criterion A). This extends to valuing the land within them beyond their agricultural value, and ensuring their true value is reflected in planning.
- 3. Protected landscape authorities should be given the resources to encourage and support landowners and farmers in coming together and accessing government schemes to support the recovery of nature across large areas. Protected landscapes cannot succeed as PAs without agricultural policies that support nature.
 - a. Where agricultural schemes are tiered (e.g., Defra's Environmental Land Management schemes in England) or where more than one is on offer, higher level schemes that best protect nature should be prioritised across as wide an area as possible.
 - Measuring effectiveness should take precedence over assessing promised actions. However, there will not be time to assess effectiveness by 2030 in most protected landscapes due to limited data availability. Therefore,

- if proposed commitments meet the ABCD criteria (in particular, that they are likely to be effective and will be long term), individual sites could contribute to 30x30.
- c. In line with the ABCD criteria, monitoring would then be used to demonstrate effectiveness beyond 2030. This should be embedded in the landscape's aspirational roadmap.
- d. At a larger scale, if these qualifying areas cover a sufficiently large proportion of the designated protected landscape in combination with other existing designations (e.g., Sites of Special Scientific Interest (SSSIs)), such that the area holistically meets the ABCD criteria, this may qualify the whole designated landscape for inclusion in 30x30.
- e. The boards of all protected landscape authorities should include nature experts, who should, as a matter of urgency, review the landscape's mandate to bring them in line with the ABCD criteria and policy recommendations towards 30x30.
- 4. Where areas using government schemes do not meet the ABCD criteria (e.g., because the protection is short term) they cannot count towards 30x30. However, their contribution to nature should still be recognised because they will improve prospects for the nature recovery network as a whole by making the space between PAs less hostile to nature.
- 5. This report is addressing inclusion of these landscapes in 30x30 according to the ABCD criteria and not recommending whether a given landscape should be considered a PA or an OECM. This should be based on the extent to which a protected landscape prioritises biodiversity, being an OECM if biodiversity benefits but is not the priority and a PA if biodiversity is prioritised.

KEY FINDINGS AND EVIDENCE GAPS

A summary of the questions addressed in this report, the answers to them (all sections) and evidence gaps identified (Sections 1-5).

SECTION	ANSWER	EVIDENCE GAPS	
What kind of protected areas are there in the UK?	The UK's conservation portfolio comprises statutory and non-statutory protected sites and protected landscapes. 27.8% (land) and 38.2% (seas) are designated, but do not always prioritise or deliver for nature. For example, protected landscapes (recognised internationally as a type of PA) are included but are not designated primarily for biodiversity.	OECMs can help achieve 30x30, but more research is needed to define how they can be best deployed to support and enhance existing PAs in meeting the 30x30 target.	
2. What are the benefits provided by areabased conservation, and how can we measure them effectively?	PAs have the potential to be one of the most effective tools for protecting biodiversity and delivering a wide range of ecosystem services, including human health and socio-economic benefits. OECMs can complement PAs and contribute to nature recovery and conservation while delivering other societal benefits.	Further research is needed to define which biodiversity metrics can be practically and usefully implemented to ensure that conservation targets can be transparently set and assessed, accounting for the dynamics of ecosystems and climate change.	
3. What is the current state of protected areas and what are their biodiversity trends?	Only 43% – 51% of statutory protected sites are in favourable condition, but differences in reporting make it difficult to generalise and assess how many are recovering. Biodiversity data are limited, but it seems that representation of species' distributions within PAs is low. Overall, PAs support higher species richness than unprotected sites.	Information on the condition of key features and biodiversity are needed to fully understand ecological change in PAs. Up-to-date information on statutory site condition is often missing (with no data at all for many non-statutory sites) because of lack of resources, making it difficult to reliably monitor site condition at scale. There is no scheme to consistently assess biodiversity in PAs and for comparable areas outside PAs. There is no central inventory of habitat recreation and restoration, meaning the planned scale and pace of efforts is unknown.	
4. How can PAs and OECMs contribute to the wider ecological network?	PAs are valuable for supporting biodiversity in the wider environment, but the current UK terrestrial PA portfolio does not constitute a functional or resilient ecological network; MPAs may be better but there are still large knowledge gaps. Where unfavourable conditions exist, positive change may be slow or impossible if external pressures are too substantial. Spaces between PAs need to be hospitable for species to move, which will benefit PAs and the wider environment.	Evaluations of PA networks are incomplete, particularly in terms of connectivity. Further research, supported by new modelling techniques, should focus on what is needed to create a resilient network. More work is needed on the potential role of rewilding as part of nature's recovery, where it could be most effective, and implications for monitoring rewilded sites.	
5. How can the effectiveness of protected areas be improved?	PA effectiveness can be improved by ensuring that they can effectively address negative pressures, deliver positive management, and have the right monitoring in place to inform this. Combining top-down and bottom-up approaches to PA governance enhances landowner and stakeholder buyin, promoting equitability and ownership.	Few empirical studies examine UK PAs through the eyes of the people on the ground and the communities who have a direct impact on their effectiveness through ownership and management. More research is needed to explore the potential of bottom-up initiatives, how to integrate them with top-down initiatives, and how to encourage and support them.	
6. How can UK area- based conservation support nature's recovery on land and in the sea?	Effectiveness and coverage of PAs both matter. The effectiveness of existing area-based conservation can be assessed by the ABCD criteria: that the Area delivers for nature in the long term; Builds ecological resilience and maximises biodiversity; achieves Conservation outcomes through effective management and monitoring; and is Developed and delivered inclusively.		
7 and 8. Which terrestrial and marine area-based conservation approaches should count towards 30x30? The success of PA networks cannot be based purely on coverage. Large differences exist between and their effectiveness for nature conservation. To be counted in the 30x30 target, conserved a meaningfully to nature recovery (by meeting the ABCD criteria), producing positive outcomes for nature conservation.		n the 30x30 target, conserved areas should contribute	

