

Y Pwyllgor Newid Hinsawdd, Amgylchedd a Materion Gwledig | Climate Change, Environment and Rural Affairs Committee

Ymchwiliad Bioamrywiaeth | Biodiversity Inquiry

Ymateb gan : Y Gymdeithas Frenhinol er Gwarchod Adar

Evidence from : Royal Society for the Protection of Birds (RSPB) Cymru

Headline points:

- We welcome the proposed Public Goods Scheme. There is a clear case for this, based on environmental/biodiversity need and value for money.
- A significant increase in funding is needed to achieve Welsh Government's environmental commitments via land management including restoring biodiversity.
- The best examples of agri-environment and woodland grant schemes provide a proof of concept for an expanded and more ambitious future environmental land management programme for Wales. Better targeting, good quality advice, evidence-based interventions and buy-in from farmers and land managers are all required to deliver the necessary 'step change' to drive landscape scale environmental improvements.
- Investment in monitoring and evaluation, including for focal species is essential to understand the effectiveness of future policy interventions.
- A new Public Goods Scheme is only one way for Welsh Government to meet its biodiversity commitment, other measures include maintaining and enforcing environmental standards and protections, completing Wales' designated site networks, securing an ambitious Nature Recovery Action Plan, for land and sea, and establishing statutory targets or milestones to drive cross government action.
- We expect Area Statements to identify spatial priorities for delivery against the challenges, priorities and opportunities set out in the Natural Resources Policy. This includes reversing biodiversity decline and building resilient ecological networks.

RSPB Cymru's response:

Almost 90% of Wales is farmed. How this land is managed has a huge impact on biodiversity and the essential public goods nature provides society, including drinking water, carbon sequestration as well as our ongoing capacity to produce food.

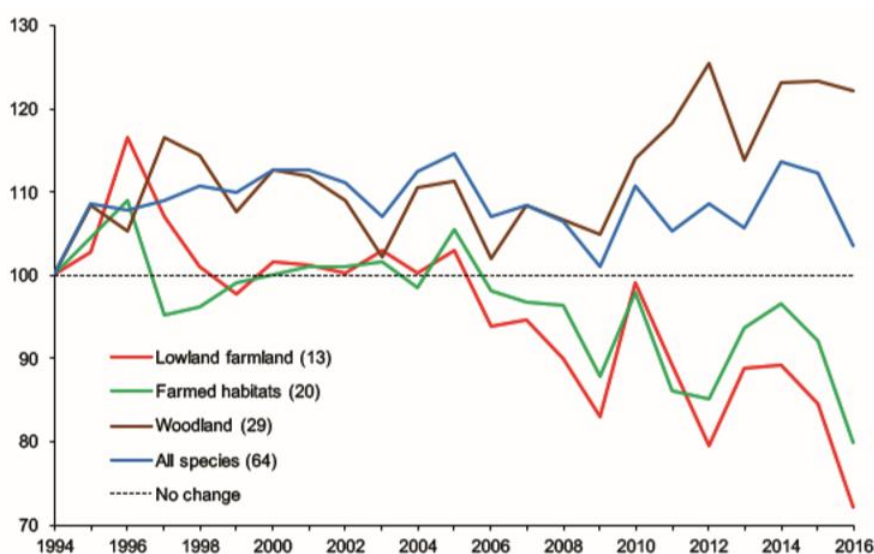
1. Wales' first State of Natural Resources Report (SoNaRR) states that **none of Wales' ecosystems, on which we all depend, are resilient**¹; the ongoing decline in native species and habitats is a clear signal of this. The State of Nature 2016² highlights the extent of these biodiversity declines including:
 - **56% of UK species monitored have declined and**
 - **1 in 14 species in Wales is threatened with extinction with 57% wild plants, 60% butterflies and 40% birds in decline**³

¹ Natural Resources Wales. 2016. The State of Natural Resources Report, 2016.

² State of Nature 2016

³ State of Nature 2016

2. **Both reports cite agricultural change as a key factor in the state of our ecosystems.** State of Nature 2016 cites a study led by the RSPB Centre for Conservation Science that reviewed drivers of change across 400 UK species, and found that **agricultural change (with an overwhelmingly negative impact) and climate change (with a mix of positive and negative impacts) were the biggest drivers of change**⁴.
3. The recently published State of Birds in Wales 2018⁵ provides further evidence of the worrying state of Welsh biodiversity and opens with the following headline, **'Long-term monitoring shows that the numbers and distributions of almost a third of Welsh birds are declining significantly'**. Ongoing declines of farmland birds are of particular concern, as illustrated by the following graph taken from the report:



The species driving this decline (curlews, greenfinches, starlings, yellowhammers, kestrels and rooks) use a range of habitats in different ways, indicating that their causes of individual declines are likely to be very different⁶.

4. **RSPB Cymru welcomes Welsh Government's proposal to use a Public Goods Scheme** as a key mechanisms to reverse the decline of biodiversity in Wales. In a recent survey commissioned by RSPB Cymru **65% of people said they would support a sustainable food and farming system that's good for nature**.⁷
5. The concept of 'public goods' in the context of agriculture policy is well established and are identified as those things that farming and land management can provide, but which the market does not deliver⁸. It is the 'publicness' of these goods – the extent to which they are non-rival and/or non-excludable – which makes them difficult or in some cases impossible to secure through markets.
6. **Biodiversity is a particularly 'pure' public good, given the fact it is often nearly completely non-rival and non-excludable.** As a consequence of this, and the fact the current rates of

⁴ <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0151595>

⁵ Bladwell S, Noble DG, Taylor R, Cryer J, Galliford H, Hayhow DB, Kirby W, Smith D, Vanstone A, Wotton SR (2018) The state of birds in Wales 2018. The RSPB, BTO, NRW and WOS. RSPB Cymru, Cardiff.

⁶ Bladwell S, Noble DG, Taylor R, Cryer J, Galliford H, Hayhow DB, Kirby W, Smith D, Vanstone A, Wotton SR (2018) The state of birds in Wales 2018. The RSPB, BTO, NRW and WOS. RSPB Cymru, Cardiff.

⁷ Source – Celtic Charity Awareness Monitor, May – June 2018, nfpSynergy. Base 1000 adults 16+, Wales

⁸ Cooper, T., Hart, K. and Baldock, D. (2009) The Provision of Public Goods Through Agriculture in the European Union, Report for DG Agriculture and Rural Development, Contract No 30-CE-0233091/00-28, Institute for European Environmental Policy: London.

decline present an urgent challenge, biodiversity frequently features prominently in assessments of the strength of the intervention logic for using public money to secure public goods from farming and land management.

7. Prioritising biodiversity delivery through a new sustainable land management policy will be essential if Welsh Government is to meet its commitments and deliver on legal frameworks (discussed further below) to reverse biodiversity decline and establish resilient ecological networks essential to maintaining nature and society. Indeed, **it is not an exaggeration to say that nature's recovery depends upon the design of the new land management policy.** However, a number of other measures are also necessary to secure this objective. Some of these measures are listed below, and touched upon throughout this response. We would be happy to provide additional information about our thoughts on any of these.
8. Other measures necessary to meet Welsh Government biodiversity commitments:
 - **Ensure Brexit does not lead to a lowering of environmental standards and protections.** This means both securing core **environmental principles** and robust arrangements for **environmental governance and enforcement** in domestic law, and ensuring the process of 'domesticating' EU legislation, via statutory instruments, **does not result in any lessening of existing legal requirements.**
 - **Complete Wales' designated site networks** on land and sea and secure their proper protection, management and monitoring.
 - Undertake habitat restoration and creation to **enhance the connections between special sites and priority habitats**, and create **wider resilient ecological networks** providing vital benefits to people and nature.
 - Create **a specific fund to bring back species that are declining towards extinction** in Wales, and finance monitoring and research to increase our understanding of future trends for Welsh species.
 - Address the huge resource gap for delivery of Wales' ambition for nature, e.g. through **re-investing revenues from the natural resources of the government estate (timber and renewable energy) into NRW's natural resource management functions**, and by identifying synergies and opportunities for integrating nature's restoration into other key areas of the Welsh Government budget, such as **preventative approaches to support mental and physical health.**
 - Secure **an ambitious Nature Recovery Action Plan**, for land and sea, that enables all government departments to plan their contribution to nature restoration, and
 - **Establish statutory targets or milestones to drive cross government action.**

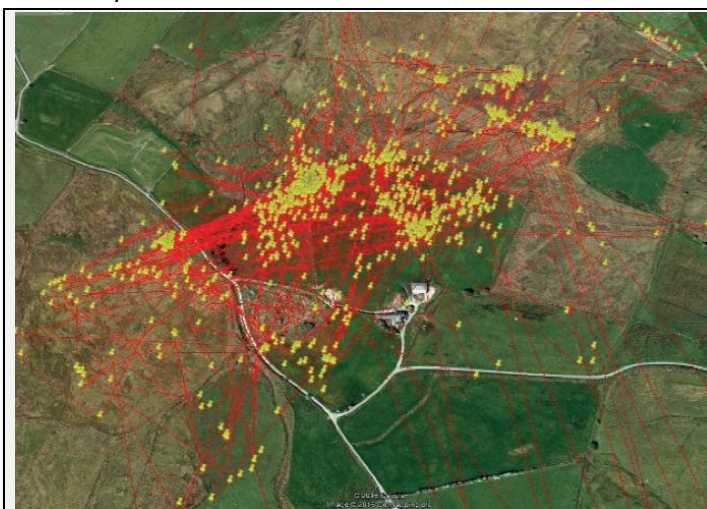
Question 1: How could the Welsh Government's proposed Public Goods Scheme, set out in Brexit and our Land, be applied to restore biodiversity?

9. **The importance of the wider legislative framework.** To be effective a future Public Goods Scheme **must operate within a wider legislative framework that successfully enshrines new**

arrangements for environmental standards and governance, and secures core environmental principles, such as *polluter pays* in Welsh law. This framework must also include **new statutory targets or milestones for nature's recovery** (which the Public Goods Scheme will help meet) that would enable Government and public bodies to be held to account over the delivery of the variety of policies affecting the management of the environment, and provide a check on effectiveness.

10. **Building on experience from previous Agri-Environment Schemes (AES).** Previous Public Goods type schemes (e.g. Tir Gofal and Glastir) designed to benefit biodiversity have been met with varying success. **Whilst they have had some positive impact on habitats they have largely failed to maintain and/or restore priority species⁹.** There are several reasons for this including scheme popularity, overly prescriptive interventions and inadequate provision of advice and guidance. To address these failings, we believe **future initiatives must be more inclusive of farmers and land managers and, where appropriate adopt a more flexible approach to decision making and delivery based on results and outcomes at the appropriate scale.** For biodiversity, the *appropriate scale* means being large enough to provide the full ecological requirements to support viable populations of target species, typically landscape scale, especially for highly mobile species such as curlew – see box 1. Ongoing and appropriate advice and guidance will be essential in securing successful outcomes.

Box 1: GPS tracking data showing the usage of different habitats by breeding curlews at field and landscape scale:



In 2016 RSPB and BTO used GPS to track 3 breeding male curlews near Ysbyty, Migneint. The results show how wide ranging the birds are with individual territories ranging from 40 hectares to 4000 hectares. One bird regularly overnights 3 km away from his daytime roost.

See State of Birds in Wales 2018 for the full report.

11. Despite limited success to date, **RSPB Cymru believes that the concept of *agri-environment as a means of restoring/maintaining biodiversity is sound (see box 2).*** To establish an effective Public Goods Scheme Welsh Government must build upon the last three decades of experience and act on independent recommendations to improve scheme design and delivery¹⁰. For the sake of clarity, we believe a future Public Goods Scheme, designed to restore and maintain biodiversity, requires the following elements:

⁹ CEH, 2016. Glastir Monitoring and Evaluation Final Report.

¹⁰ Wales Audit Office. 2014. Glastir.; Joyce, I. Radley, G. and Williams, A. 2016. Glastir Advanced Evaluation

- **A robust (enforced) regulatory baseline**, with the continued application of the polluter pays principle, above which payments for public goods will be made to secure value for money.
- **Widely available land management payments**. Available to all farmers and land managers to address challenges such as declining farmland wildlife, degraded soils and climate change, amongst others. Given lessons from previous ‘broad and shallow’ schemes, securing value for money should be a particular focus and payments should only be made for *additionality*. For biodiversity, this would include payments for (a) continuing existing good habitat management (beyond that required by regulation) essential for restoring and maintaining wildlife populations and/or (b) appropriate new management for the same reasons.
- **Payments for more targeted and complex interventions**. Restoring and creating priority/complex habitats, recovering priority species and improving the condition of designated sites will necessarily require more intensive, targeted effort.

12. Whilst RSPB Cymru supports outcomes/results based payments we also believe that actions/prescriptive based payments (that secure value for money) remain important, particularly to achieve high-level uptake. It’s likely that delivery of a future Public Goods policy for biodiversity will require a combination of both approaches.

13. To be effective an ambitious future land management programme incorporating public goods (biodiversity) delivery will have to include:

- A **degree of targeting**, to ensure that management interventions are at the right scale, and in the right place for a given objective^{11 12}.
- Investment in **expert, trusted advice**^{13 14 15}, central to securing value for money and the buy-in of the farming and land management community.
- A **strong evidence base** as to the effectiveness of different management interventions¹⁶, and the scale at which they need to be deployed.
- Ensure **collaborative action** where appropriate, to secure outcomes at the required scale. This approach will be essential in securing the full ecological requirements of many species, particularly highly mobile ones.
- Investment in **monitoring and evaluation**, including for focal species to understand the effectiveness of any policy intervention, and to drive constant improvements in design and delivery.
- **Farmer buy-in**¹⁷ as a prerequisite to success, that can drive uptake even where the management interventions are challenging and ambitious.

Box 2: The following case study illustrates the effectiveness of the approach described above in securing positive outcomes for nature:

¹¹ Perkins, A.J. (2011). Adaptive management and targeting of agri-environment schemes does benefit biodiversity: a case study of the corn bunting *Emberiza calandra*, *Journal of Applied Ecology*, 48 (3), pp 514-522

¹² Wood, T. J. et al (2015) Targeted agri-environment schemes significantly improve the population size of common farmland bumblebee species, 24, 1668–1680

¹³ Defra (2013), Review of Environmental Advice, Incentives and Partnership Approaches for the Farming Sector in England.

¹⁴ Lobley M, Saratsi E, Winter M, Bullock JM. (2013) Training farmers in agri-environmental management: the case of Environmental Stewardship in lowland England. *Int. J. Agric. Manag.* 3, 12–20. (doi:10.5836/ijam/2013-01-03

¹⁵ Jones N, et al. (2015) ES quality assurance programme, 2013/14: Assessing the role of advice and support on the establishment of HLS agreements. Natural England Contract Reference LM0433

¹⁶ Mountford, J.O. & Cooke, A.I. (editors), Amy, S.R., Baker, A., Carey, P.D., Dean, H.J., Kirby, V.G., Nisbet, A., Peyton, J.M., Pywell, R.F., Redhead, J.W. & Smart, S.M. 2013. Monitoring the outcomes of Higher Level Stewardship: Results of a 3-year agreement monitoring programme. Natural England Commissioned Reports, Number 114

¹⁷ Lastra-Bravo, X. B. et al (2015). What drives farmers’ participation in EU agri-environmental schemes?: Results from a qualitative meta-analysis, *Environmental Science & Policy*, 54, pp 1-9

Nant Ffrancon Twite Recovery Project - RSPB Cymru, National Trust, British Trust for Ornithology, Snowdonia National Park Authority and six farm businesses are co-operating to change farm practices and encourage the flowering and seeding of meadow plants to provide adequate food for the local population of twite, a small finch that is a very scarce breeding bird in Wales. The key delivery mechanism is Glastir and by working with local farmers the project has been successful in establishing a mosaic of habitats across participating farms, which collectively secure the right types and amounts of habitats to support the species. Individual farms, operating in isolation could not achieve this outcome. Key to success has been the involvement of the farmers from the beginning to ensure management for nature is integrated with their wider business models and the provision of appropriate advice and guidance throughout the delivery phase of the project¹⁸.

14. **Supporting High Nature Value (HNV) farming:** In developing future policy to help restore and maintain biodiversity consideration must be given to how best to support High Nature Value (HNV) farming (and associated extensive, mixed grazing systems) so that these farms can continue to provide and manage valuable habitats for wildlife, many of which are designated as Sites of Special Scientific Interest (SSSIs) - see map below. HNV farming is typically found in the uplands and other marginal parts of Wales, is usually the most economically vulnerable and at greatest risk from policy change. **However, whilst many HNV farms struggle to make money when meat production is the only objective this type of farming could benefit significantly from a policy that rewards public goods (including biodiversity) delivery** as highlighted by the following maps¹⁹. The maps show that the uplands are well placed to benefit from a Public Goods scheme, **however opportunities extend right across Wales**, especially in relation to biodiversity where losses have been most significant in lowland areas²⁰.

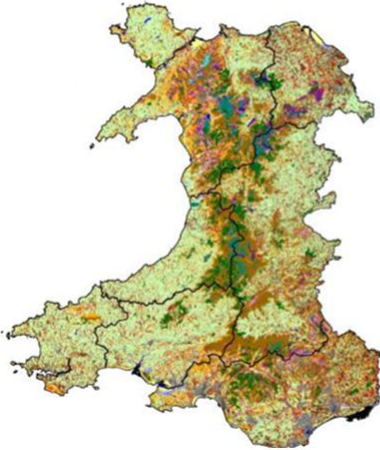
¹⁸ Similar approaches have been used elsewhere in the UK to reverse population declines for Cirl Buntings in Devon and Cornwall, Stone Curlew in East Anglia and Corn Crane in the Hebrides.

¹⁹ Biodiversity areas highlighted have additional, diverse public goods value, &/or the potential to deliver public goods e.g. water management, carbon sequestration etc.

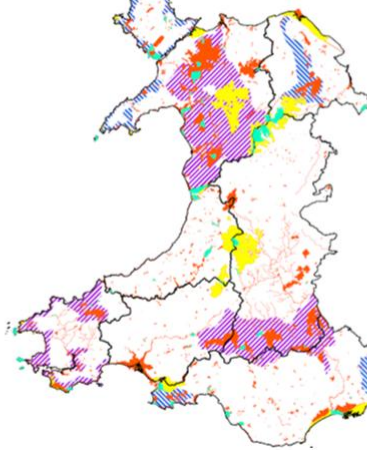
²⁰ State of Nature 2016 and State of Birds in Wales 2018.

Maps showing the correlations between High Nature Value farming and biodiversity:

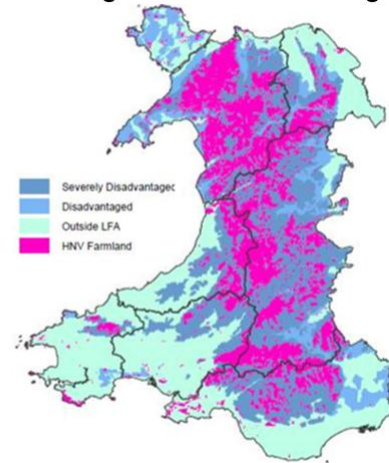
Land classification (habitat areas)



Protected sites (SSSIs)



High Nature Value Farming



15. **Adequate funding for a Public Goods Scheme.** To be effective a **future public goods scheme must be adequately funded** to meet objectives. RSPB, National Trust and the Wildlife Trusts have already established that Wales will require a minimum of £210 million per annum to enable Welsh Government to meet biodiversity and wider environmental commitments²¹. Much of this would be paid to farmers and other land managers in return for land management that secures desired outcomes including helping restore and maintain biodiversity.

16. **Public investment in restoring and maintaining biodiversity will also secure wider benefits for society and help Welsh Government meet other international, environmental commitments such as climate change and water quality.** For example, the restoration/management of habitats such as blanket bog and woodland will help mitigate climate change through carbon storage and sequestration and aid water management, both quality and flow. **Securing wider natural resource benefits will also ensure we maintain our capacity to produce food for this and future generations.** RSPB Cymru also believe farmers and other land managers should be able to access both the Public Goods and Economic Resilience Schemes, and that **the two schemes should combine to help them maximise the biodiversity value of their land and produce food (and other commodities) as efficiently as possible.**

²¹ (2017), Matt Rayment. Assessing the costs of Environmental Land Management in the UK.

Question 2: How could the various existing Welsh Government policies and legislation for biodiversity restoration be applied in the design and implementation of the proposed Public Goods scheme?

17. **The legal and policy framework for biodiversity in Wales identifies spatial priorities which the Public Goods scheme must make a major contribution to delivering if it is to support the recovery of Wales' nature.** These include Sites of Special Scientific Interest (under the Wildlife and Countryside Act 1981, as amended), Special Protection Areas/SPAs and Special Conservation Areas/SACs and Ramsar sites (wetlands of international importance that are treated in the same way as SACs and SPAs). These are all sites designated for their nature conservation importance, with bespoke conservation objectives and legal requirements for their protection, management and monitoring.
18. **The management and monitoring of designated sites is chronically under-resourced and in many cases they are failing to meet their objectives.** For example, the SoNaRR reports that only a quarter of SAC habitats are in a favourable condition and the condition of SAC and SPA species features on sites in Wales, as reported in 2013, remains mostly unfavourable (55%)²². Natural Resources Wales' 'LIFE Natura 2000 Programme for Wales: Summary Report'²³ costed priority management actions to bring all Natura 2000 sites into favourable conservation status at just over £120m. There has been no condition assessment of Wales' nationally important sites for biodiversity (Sites of Special Scientific Interest) since CCW's 'Rapid Review' in 2006, and **the budget for management agreements to enable land managers to enhance the status of protected site features continues to diminish.**
19. In addition to protected sites, **we expect Area Statements (under the Environment (Wales) Act) to identify spatial priorities for delivery against the challenges, priorities and opportunities set out in the Natural Resources Policy (which include reversing biodiversity decline and building resilient ecological networks).** For example, this may mean identifying key opportunities for habitat restoration or creation to enhance ecosystem resilience (by creating larger areas of habitat, enhancing connectivity between existing important areas), or key areas for focused actions to address declines in priority species (species listed under section 7 of the Environment (Wales) Act). Box 3, below, provides information about a RSPB commissioned research on biodiversity and the area based approach.
20. As noted in our answer to question 1, **we expect payments to be widely available under the future public goods scheme, and accompanied by a robust regulatory floor. The impact of this should be to enhance ability of nature to thrive throughout the countryside, and to reduce the pressure on protected sites resulting from surrounding land management.** The more complex and targeted interventions funded by the public goods scheme should be guided by the spatial priorities set out above. This will make it a vital new source of funding to contribute to the delivery of Wales' commitments and ambitions for biodiversity and resilient ecosystems, which our legislation recognises as key to socio-economic resilience and well-being.

²² <https://naturalresources.wales/media/679581/chapter-3-state-and-trends-final-for-publication.pdf>

²³ Natural Resources Wales, 2016. LIFE Natura 2000 Programme for Wales: Summary Report.

Box 3: RSPB commissioned research considering how to secure biodiversity benefits via Area Statements:

RSPB Cymru commissioned the Sustainable Places Institute at Cardiff University to produce a research report on **Biodiversity and the area-based approach in Wales**²⁴. The research included a stakeholder workshop, and a key finding was that biodiversity needs and priorities are not automatically visible to participants, highlighting the need for expert input and direction. The report identified the following principles for the preparation of Area Statements which have been welcomed by NRW:

- ensure that existing biodiversity priorities and objectives across land and sea are understood by all involved as integral to achieving SMNR
- support the delivery of SMNR at local level, while communicating how it links to national policy
- catalyse action through strong local leadership
- secure effective coordination and communication between stakeholders, and SMNR and biodiversity specialists
- use appropriate tools to visually represent data to facilitate understanding of the spatial linkages between biodiversity, ecosystem services and priority actions
- widen and deepen stakeholder participation to ensure it is meaningful and give the time needed to build strong relationships and understanding

21. It's important to highlight an critical current source of funding for nature that is at risk as a result of Brexit: the EU Life Nature fund. **LIFE is the EU's main fund for ambitious species recovery and environmental projects. Its budget for 2014-2020 is £3.1bn.** The fund provides for targeted work necessary for species and habitat recovery, LIFE projects are directed at major strategic environmental goals and therefore tend to be funded at scale (£1-4million per project), **allowing it to tackle large-scale issues and create significant change. UK environment projects receive c.£20 million per year from LIFE.** Since 1992 a total of 249 UK projects have been co-financed, a total investment of €585 million, of which €272 million has been contributed by the EU. This includes €127 million in LIFE grants for 71 nature conservation projects. **20 of these nature and conservation projects took place in Wales with a total value of over €85 million.** Many of our biggest species and habitat recovery projects of the past 25 years have been built upon LIFE funding. LIFE is the only fund dedicated to this work and while other funds (such as the diminishing Heritage Lottery Fund (HLF)) can support this work through match-funded projects, they cannot replace them. **The loss of this fund will significantly reduce critical action to meet biodiversity commitments.**

Question 3: What lessons can be learned from the Glastir Monitoring and Evaluation Programme to ensure effective monitoring and evaluation of schemes to support the restoration of biodiversity. How should the new Environment and Rural Affairs Monitoring and Modelling Programme be designed and implemented effectively for this purpose?

22. **Agri-Environment Scheme Monitoring between 2009 – 2012.** Agri-environment schemes in Wales have employed various methods of monitoring. The results of AES species monitoring between 2009 – 2012 have recently been accepted as a peer-reviewed article in the Journal of

²⁴ RSPB Cymru, Cardiff University. 2018. Biodiversity and the area-based approach in Wales How can the sustainable management of natural resources (SMNR) framework deliver nature recovery?

Applied Ecology²⁵. The monitoring included components that focused on ecosystem services, habitats, species and included dedicated field work to survey a range of taxa: arable plants, grassland fungi, bats (six species), butterflies (three species), birds (five species), and terrestrial mammals (two species), with AES sites selected on the basis of the presence of prescriptions predicted to be beneficial to the taxa in question. This spatial approach predated the use of resurveying used in GMEP. **The results indicated limited benefits of AES management, although taxa dependent on arable habitats were more likely to be more abundant or species-rich in farms or fields under AES agreements than non-AES farms or fields.**

23. **Glastir Monitoring and Evaluation Programme.** The approach taken by GMEP towards species monitoring differed from this earlier monitoring in two key respects. **Firstly, it employed a re-surveying strategy, allowing for changes over time to be detected,** and enabling the effects of AES management to be more confidently attributed. We are very much in favour of this. **Secondly, it did not target dedicated field work to species of conservation concern; rather, it developed indices of taxonomic groups, and reported habitat quality.** This latter approach may be understandable when carrying out a national monitoring programme, as scarce species are more difficult to detect when sampling sites are randomly located.
24. **Nevertheless, we strongly recommend that ERAMMP takes account of scarce species.** The ecological needs of some species are imperfectly known, and effects other than habitat quality e.g. predation pressure, may mean that measures of habitat quality may not accurately reflect the impact of AES on the species they are intended to benefit.
25. **Planning and carrying out a species-focused monitoring programme in Wales has been possible in the past, and should form part of ERAMMP. This would be additional to the existing survey methods used by GMEP: considering the amounts paid in agricultural subsidies, a small fraction of these resources for effective monitoring should be considered an investment rather than a cost.**
26. Finally, we also recommend that the design of the new public goods scheme should include more specific aims/objectives for species. This would allow monitoring to evaluate the scheme against targets, rather than non-specific aspirations. These aims need not be onerous or unrealistic, but they would assist in providing an honest appraisal what we hope to provide through public funds.

²⁵ <https://besjournals.onlinelibrary.wiley.com/doi/full/10.1111/1365-2664.13329>