

GWCT Wales Feedback on the Sustainable Farming Scheme: Outline Proposals for 2025

Who we are

This paper has been produced by GWCT, a research and education charity which has been going for 90 years and has produced more than 1300 scientific papers in peer-reviewed journals on issues relating to the conservation of farmland and biodiversity. On the basis of our scientific expertise and credibility, we regularly provide advice to such statutory bodies as Defra, Nature Scot, Natural Resources Wales and Natural England. We also provide practical advice to farmers, land managers and other conservation organisations on how to manage their land with a view to improving biodiversity. Our Advisory team have, for many years, run industry-leading best practice predation management training courses. These courses are based on practical experience backed up by GWCT science.

1. Points of interest from Sustainable Farming Scheme Outline Proposals

1.1. Role of hedgerows

The Climate Change Committee has identified hedgerow planting as a way to help reach the UK Government's zero carbon target for agriculture by 2050.

We believe that hedgerows should be included within the 10% tree cover required by the Sustainable Farming Scheme. There will be farms where tree planting up to the required 10% is impractical, either in terms of suitable soils, or where there would be adverse impact on farm resilience or negative effects on biodiversity. Allowing hedgerows to be recognised for the carbon they deliver would encourage greater uptake from farmers.

Research shows that hedgerows sequester carbon at twice the rate of woodland because of their three-dimensional linear structure.

Similar to the Woodland Carbon Code, GWCT are developing a 'Hedgerow Carbon Code' to become the quality assurance standard for hedgerows and aims to generate hedgerow carbon credits.

GWCT's Allerton Project has been researching the value of hedgerows for both biodiversity and carbon sequestration. It is calculated that there are some 402,000 km of hedgerows in the UK along with an additional 145,000 km of relict hedgerows in need of management. Wales is no exception, indeed with the switch to ranch style sheep farming in upland Wales many hedges have been neglected and there is considerable capacity to plant new multispecies hedges to the benefit of improved biodiversity, animal welfare, on-farm biosecurity and carbon capture. The improvement and creation of new hedgerows would bring the same benefits to all forms of livestock and arable farming in Wales.

Our 'Hedgerow Carbon Code' is a matrix used to calculate a baseline for stored carbon both in biomass and in the soil beneath. This matrix can also project the increase in stored carbon created by different management of hedges making it a valuable tool for the calculating 'additionality' where carbon is sequestered by growing existing hedges out over the long-term or planting new hedges will contribute to the potential creation of carbon credits.

If you would like further information regarding the GWCT Hedgerow Carbon Code, please follow the links below:

- Hedgerow Carbon Code: "good news for UK agriculture, climate change and British wildlife" Game and Wildlife Conservation Trust (gwct.org.uk)
- Proposed Hedgerow Carbon Code could unlock more than £60m income for farmers, as development project receives £81k funding - Game and Wildlife Conservation <u>Trust (gwct.org.uk)</u>

1.2. Role of predation control

It is noticeable that the current draft of the SFS has omitted reference to predation control as a tool for the restoration of species of conservation concern. In Wales curlew rank as the species of highest conservation concern amongst several threatened ground nesting bird species. Poor breeding success, often attributable to predation, typically by foxes, stoats, crows and gulls, is a mechanism for decline. In Europe over half of published studies quote less than the 0.5-0.6 fledglings per pair per year required to offset adult mortality and to maintain a stable population.

The GWCT does not believe that predation caused the decline of these species, although it may have contributed. We have evidence that predation is playing a key role in preventing recovery even in the presence of sufficient quality habitat. We can demonstrate that legal, often seasonal predation control, as prescribed by current wildlife and welfare laws, including the General Licences, is an important 'tool' in the conservation recovery 'toolbox' and that, for some species like curlew, every measure in this 'toolbox' should be available to avoid curlew extinction in Wales. This is now the consensus of the stakeholders involved in the UK Curlew Recovery Project.

The strongest evidence for fledging success following predation control comes from large-scale, long-term, manipulative experiments whose findings have been published in peer-reviewed journals where predators are legally removed from an area and the responses of their prey monitored in comparison to areas of similar landscapes where predators remain. In the pantheon of experimental approaches, these randomised, replicated removal experiments are considered the best way to identify the importance of predation. Academic ornithologists and other UK-based wildlife charities agree and have gone into print confirming this. They also agree that the experimental approach is more robust than the correlations of various datasets. Statistically significant correlations do not indicate cause, and effect can be caused by unmeasured factors. The absence of a significant correlation may indicate weak investigative methodologies. But scientifically robust experiments conducted by GWCT on Salisbury Plain and Otterburn, and the large-scale demonstrations at Royston, Loddington and elsewhere, provide this evidence.

Through a number of scientific studies and well documented case studies, there is good evidence that the combination of habitat improvement alongside targeted, effective predation control can lead to the recovery of species of conservation concern where habitat improvement alone has failed.

For further information regarding the experiments used to investigate the role of predation control as a tool to conserve threatened species such as the curlew, please see the following:

- Fletcher, K., Aebischer, N.J., Baines, D., Foster, R. & Hoodless, A.N. (2010). Changes in breeding success and abundance of ground-nesting moorland birds in relation to the experimental deployment of legal predator control. *Journal of Applied Ecology*, 47: pp.263-272).

1.3. Delivering better outcomes from the SFS

The precautionary principle can have a negative influence on being able to achieve better outcomes. Often there are evidence gaps and as a science-based organisation, we are keen to support further research to provide scientific evidence in answer to the unanswered questions. Often practitioner evidence can be used to test hypothesis which can speed up the potential gains for nature. This is particularly important in saving species such as the curlew where undoubtedly there are knowledge gaps, but when there are only 400 pairs left in Wales there are practical solutions which can be applied immediately which may not be permissible adopting the precautionary principle.

We would welcome the ability for famers to be able to receive payments for management of existing habitat as well as for creation and loss of production. This will be of particular benefit to biodiversity.

1.4. Further information

1.4.1 Diversity of habitat

We would like to see the definition of habitat within the SFS considered in a way to encompass and encourage diversity which is necessary for the benefit of biodiversity. GWCT Cymru fully support cropping particularly the provision of funding for cover crops and we would like to see it expanded to include supplementary feeding.

1.4.2 Please see the following for further information:

Bolton, M., Tyler, G., Smith, K. and Bamford, R. (2007). The impact of predator control on lapwing Vanellus vanellus breeding success on wet grassland nature reserves. *Journal of Applied Ecology*, 44(3), pp.534-544.

Reynolds, J., Stoate, C., Brockless, M., Aebischer, N. and Tapper, S. (2010). The consequences of predator control for brown hares (Lepus europaeus) on UK farmland. *European Journal of Wildlife Research*, 56(4), pp.541-549.

Sage, R. and Aebischer, N. (2017). Does best-practice crow Corvus corone and magpie Pica pica control on UK farmland improve nest success in hedgerow-nesting songbirds? A field experiment. *Wildlife Biology* 1, pp.1-10.

1.5. Co-production of the SFS

GWCT welcome the opportunity to work with Welsh Government in the co-production of the SFS. Please let us know if any Welsh Government officers or Ministers would be interested in visiting one of our demonstration farms The Allerton Project | Game & Wildlife Conservation Trust (allertontrust.org.uk), Scottish Demonstration Farm - Game and Wildlife Conservation Trust (gwct.org.uk) or if you would like to hear more about our Farming Community Network and Sustainable Management Schemes which focus on collaborative landscape scale delivery of more biodiversity in an enhanced environment within working farming systems.

Sue Evans Director Wales sevans@gwct.org.uk

21st November 2022