

Nature Conservation in Europe: Approaches and Lessons

Annex UK.8. The Development and Use of Agri-Environment Schemes for Biodiversity Conservation and Restoration in the UK

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The development of agri-environment type schemes started in the UK with upland trials (Countryside Commission, 1976, 1979; Parker 1984) and a lowland grazing marsh scheme in the Norfolk Broads. In the negotiations on the 1985 CAP reform, the UK used this experience to argue successfully for Member States to have the option to designate Environmentally Sensitive Area (ESAs) within which farmers could receive contractual payments to maintain or improve the area's ecological and landscape value. This option was incorporated into the EU Common Agricultural Policy (CAP) through Regulation 797/85, initially with national funding, until EU co-funding was introduced in 1987.¹

The first ESA schemes were introduced in the UK in 1987, with 32 eventually being established, with an average uptake rate by eligible farmers of 50%, totalling about 10% of all farmland in Britain (Newton, 2017). Farmers who joined the scheme, under 10-year agreements, received annual payments for following prescribed management practices, and capital payments for a wide range of optional one-off works (e.g. hedge-planting, or ditch blocking in the uplands). These payments were often tiered, with the lowest typically only aiming to halt losses by maintaining existing practices (e.g. low-intensity grazing). Higher tiers were more ambitious in terms of habitat improvements and recreation. An advantage of the ESA model was that efforts were relatively well targeted and concentrated, thereby facilitating landscape-scale impacts. Although they had some problems and their overall impacts were not monitored, they are considered to have significantly helped maintain areas of semi-natural habitats and species that would otherwise have declined (Reid and Grice 2001, Tucker *et al.*, 2003).

Despite their advantages, ESAs were eventually replaced with schemes that are not restricted to specific areas – partly to meet the political need for the increasing CAP agri-environment funding to be available to all farmers. The first such scheme was Countryside Stewardship, introduced in England in 1991 (initially complementing ESAs) and initially targeted at habitats and landscapes of particular biodiversity, landscape and historic value. Participation has been on a competitive basis, with participants being offered a range of options that they could take up to manage and/or restore targeted habitats and species, or contribute to other environmental objectives (e.g. woodland creation, preservation of landscape features, water quality improvements). Similar schemes have been established in each of the UK countries, under various names that have changed over time as the schemes have evolved in response to monitoring and evaluation evidence, as well adapting to CAP reforms.

Initially the schemes focused on grasslands and semi-natural habitats, but they have since been extended to arable habitats (after initial trials in England from 1998 to 2000). This was done partly to mitigate the loss of compulsory set-aside, which had provided significant benefits for a range of declining farmland birds and other species (e.g. Henderson and Evans, 1999; Firbank *et al.*, 2003). The schemes therefore introduced options such as fallow plots for ground-nesting birds and the creation of flower-rich margins. An important means of increasing the effectiveness and the efficiency of schemes has been through targeting. This has been carried out for birds, using breeding atlas data to identify areas where target species are present, and where the use of measures for them is appropriate.

¹ For further discussion of CAP agri-environment policy development, see NCE Section 4.3.8 (Tucker *et al.*, 2023) and online Annex 3 (Hart and Tucker, 2023).

One limitation of such post-ESA schemes has been that they are relatively demanding and complex in terms of their land management requirements, and therefore expensive in terms of their unit-area, support and administration costs. Consequently, it has not been feasible to extend them over very large areas, and many farmers have been reluctant to take them up. To address this, in 2005 a new type of 'entry-level' scheme was introduced in England (with later analogous schemes in Scotland, Wales and Northern Ireland). These were open to all farmers who were willing to adopt a minimum combination of relatively simple low-cost options that go beyond the good farming standards that must be met to receive direct payments. Typical options included maintaining stubbles over winter, hedgerow management, creation of buffer strips, providing bird seed and cover crops, or flower-rich strips for pollinators, and maintaining upland semi-natural grassland. Thus the schemes provided a broad and shallow layer, that complemented the narrow, deeper, more tailored approaches of 'higher-level' schemes, which have also been increasingly targeted towards protected areas.

The entry-level schemes have been popular with farmers, particularly in England such that at their peak coverage in 2013, 72% of the utilised agricultural area was under the entry-level scheme compared to 16% under higher level scheme options (JNCC agri-environment area indicator²).

Monitoring of the schemes described above has revealed mixed outcomes, but some have substantially helped to maintain semi-natural habitats and the populations of declining species in the UK (Dicks *et al.*, 2013), as has occurred elsewhere in Europe (e.g. Batary *et al.*, 2015). Most notably, the higher levels schemes have probably prevented the extinction of Stone Curlew (*Burhinus oedicnemus*), Corncrake (*Crex crex*) and Cirl Bunting (*Emberiza cirlus*) (Wilson *et al.*, 2009). In all three cases, Evans and Green (2007) consider that their recovery was dependent on three key factors: 1) a thorough diagnosis of the reasons for their population decline; 2) design and testing of the intended management measure; and 3) targeted deployment of the tested measures in the right locations and at the right scale. These and other successes were also achieved through partnerships between government agencies, NGOs and landowners, and the design of agri-environment schemes that 'fit' in well with existing farm practices (Evans *et al.*, 2002). Good quality technical advice is also needed to ensure that farmers achieve the desired objectives (Boatman, *et al.* 2014).

Unfortunately, the effects of the schemes on other more widely dispersed species have been less beneficial, and whilst local increases have been observed in some farmland bird species, population level increases have not occurred (Baker *et al.*, 2012; Bright *et al.*, 2015; Colhoun *et al.*, 2017; Walker *et al.*, 2018). These overall results may be partly due to the entry-level scheme options being less effective than targeted and evidence-based tailored measures for particular species (Pywell, 2012). Entry-level schemes options have also been judged to have little potential to benefit most threatened, rare and scarce plant species (Still and Byfield, 2010). Similarly, in ESAs, only higher tier measures were able to increase breeding wader densities in wet grasslands (Ausden and Hirons, 2002). Targeted and tailored measures for the Corn Bunting (*Emberiza calandra*) in Scotland were able to reverse declines, but more general measure were not (Perkins *et al.*, 2011). A further problem with the entry-level schemes has been that participants have tended to select the easiest options, which also happen to have the least biodiversity benefits, especially for declining farmland specialist birds that require in-field habitat improvements (Davey *et al.*, 2010).

The other main reason for the limited overall impacts of the schemes on most species has been the limited scale of coverage of the most beneficial measures (Newton, 2017). For example, based on a study of the effects of a package of agri-environment measure on farmland birds in England, which covered about 7% of farmland in 2013, it was estimated that coverage of about 26–33% would be required to offset their ongoing declines of 2.3–4.1% per annum (Walker *et al.*, 2018). A more recent by Sharps *et al.* (2023) found that to increase the abundance of farmland indicator species of birds by 10% over 10 years, higher-level schemes with packages of wildlife interventions need to cover 34% to 47% of the landscape in arable dominated areas. In pastoral landscapes, where population trends are more favourable, 17% to 26% coverage would be required to achieve the same rate of increase. The

² <https://jncc.gov.uk/our-work/ukbi-b1a-agri-environment-schemes/#downloads>

lower requirement for coverage within each range resulted from targeting of the schemes to key areas for the species concerned.

Taking such results into account, the 2013 CAP reform and evolving priorities, the schemes were further revised in 2015. In particular, the Countryside Stewardship scheme in England no longer had an entry-level component (with its very basic general options), but instead had a mid-tier and a higher-tier. To encourage widespread uptake, it also introduced non-competitive 'wildlife offers' which enable farmers to provide important and effective measures (e.g. for insect pollinators and seed eating birds) through a simpler application process. Another positive innovation was the introduction of a facilitation fund to encourage landscape scale agreements and actions.

As a result of Brexit, all UK countries are currently going through an agricultural policy transition. This is most advanced in England, with the development of the Environmental Land Management (ELM) schemes that will make payments to farmers for public goods (including biodiversity), as direct payments that were provided under the CAP are gradually phased out by 2028.

The following three ELM schemes are being established in England (DEFRA, 2023):

- The Sustainable Farming Initiative.
- Countryside Stewardship (which builds on the existing scheme, rather than a new 'Local Nature Recovery' scheme as initially announced).
- Landscape Recovery.

The Sustainable Farming Initiative is most advanced and underway, being rolled out in phases since June 2022 (following trials). It is open to all farmers and provides payments to those who chose to comply with defined standards. Initially the SFI focussed on soil health and only included three standards covering arable and horticulture soils, improved grassland soils and moorland, and some nature conservationists described the scheme as showing a 'shocking lack of ambition'.³ The House of Commons Environment, Food and Rural Affairs Committee (2021) also had concerns that simplicity and high uptake had been prioritised, despite the risk of providing limited benefits, as was the case with entry-level agri-environment schemes. In 2023 six additional standards are being added, including in relation to hedgerows, integrated pest management, nutrient management and grasslands.

The Countryside Stewardship and Landscape Recovery schemes could have much greater nature conservation benefits as they have the potential to significantly improve and restore habitats (including through large-scale and long-term projects) and tackle declining species.

With sufficient take-up, the Department for Environment, Food and Rural Affairs estimate that by 2042 the schemes have the potential to create or restore up to 300 000 ha of habitat, and bring over half of Sites of Special Scientific Interest into favourable condition. However, it remains to be seen whether the detailed schemes' requirements for landowners, and actual budget, payment rates and uptake will be sufficient to achieve their objectives.

In Scotland and Wales, support schemes were still under development at the time of writing. In Scotland, a four-tier framework is proposed to come into force from 2025⁴. Unlike in England, direct income support payments are being retained. Tier 1 would consist of a base level direct payment, underpinned by essential standards to ensure climate, biodiversity and business efficiency outcomes. Tier 2 would build on the standards under Tier 1 and as an enhanced payment for measures that will reduce greenhouse gas emissions and restore and enhance nature. Tier 3 is termed 'elective' payments and would provide targeted actions to support nature restoration, innovation and supply chains, while the proposed Tier 4 is called 'Complementary Support' and covers support for new skills, training, advisory services and business support as well as support for tree planting and peatland management, and an Agricultural Transformation Fund.

In Wales a Sustainable Farming Scheme is proposed, also to be introduced from 2025 (Welsh Government, 2022). The scheme will have three layers: Universal Actions, which are actions that have

³ The Wildlife Trusts, the National Trust and the RSPB www.wildlifetrusts.org/news/brexit-farming-promises-broken

⁴ www.ruralpayments.org/topics/agricultural-reform-programme/arp-route-map/

to be carried out by all farmers who join the scheme and are intended to support farms to become more sustainable (replacing direct payments); Optional Actions, which are actions that may be targeted to specific land or landscape features; and Collaborative Action, which are those to be carried out in a coordinated way by multiple farmers or land managers, at a landscape, catchment or national scale.

In Northern Ireland, the Department of Agriculture, Environment and Rural Affairs announced in March 2022 its decisions on a future agricultural policy framework in light of a public consultation. This is to be based on achieving four outcomes: increased productivity, environmental sustainability, improved resilience and an effective functioning supply chain. The key elements include: a Farm Sustainability Payment (income support); a Beef Sustainability Package comprising a suckler cow measure and a beef carbon reduction measure; a Farming with Nature Package, reversing biodiversity decline through the creation and restoration of habitats; and Farming for Carbon measures to encourage low carbon emission farming practices. These will be accompanied by investment measures, a programme for generational renewal, knowledge and innovation, and supply chain measures (DAERA, 2022).

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Recommended citation

- Tucker, G. & Hart, K. (2023) The Development and Use of Agri-Environment Schemes for Biodiversity Conservation and Restoration in the UK. In *Nature Conservation in Europe: Approaches and Lessons*, ed. G. Tucker, online Annex UK.8. Cambridge, UK / New York: Cambridge University Press, online annex, www.cambridge.org/natureconservation