Uncertain times – nature conservation in the UK after 'Brexit'

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A field in Norfolk with an arable headland as part of an agri-environmental scheme under the Common Agricultural Policy. Erica Olsen/FLPA

The referendum on the EU in June caused a major shockwave in the political world, but it will also have a big impact on the countryside and its wildlife. Here the author looks at what the future might hold.

This article gives a personal view on what the result of the European Union referendum may mean for nature in the UK. With such a huge topic to consider, the article focuses on some key areas, including the 'nature directives' and the Common Agricultural Policy, and what a future farm-support scheme may look like. It will not explore in detail the implications of 'Brexit' on such things as the implementation of the Nitrates Directive, the Water Framework Directive or the Common Fisheries Policy.

It would be an understatement to say that the political and policy landscape has changed beyond recognition over the past few months. Things are continuing to change quickly, and it is therefore inevitable that an article on the effects of the referendum will be dated as soon as it is written. What is currently known (at the time of writing, in early September) is that Brexit is going ahead, although what that actually means is still entirely unclear. 'Brexit means Brexit' is an easy tautology which bears little scrutiny.

Negotiations with our EU partners may result in the UK staying in the single market and European Economic Area (EEA), with the environmental constraints and agreements that this implies. But, equally, Brexit may mean leaving the EEA in order to gain control of the UK's borders, in which case all environmental constraints would be removed. There is also the possibility of an entirely new agreement between the UK and the EU whereby some of the EEA rules are retained, while some limit on immigration is introduced.

The European Union's environmental directives

During the last 40 years, the European Union and its predecessors have created a large number of legal measures – Directives and Regulations – designed to help Member States to protect their environment and nature. Early Directives included those on Bathing Water (1976) and on Birds (1979), on Environmental Impacts – the 'EIA Directive' (1985) and the Nitrates Directive (1991) – and the Habitats Directive (1992). More recently, the EU has created the Water Framework Directive (2000),

on Strategic Environmental Assessment (2001), the Environmental Liability Directive (2004), the Marine Strategy Framework Directive (2008) and Renewable Energy Directive (2009). A large number of other European Directives have also been written to strengthen controls over such things as pollution, groundwater abstraction and access to environmental information. The Chartered Institute of Ecology and Environmental Management (CIEEM) has prepared a comprehensive list of all these environmental legal measures (www.cieem.net/data/files/Resource_Library/Policy/Policy_work/CIEEM_EU_Directive_Summaries.pdf).

EU Regulations are also used to implement the Common Agricultural Policy (CAP) and Common Fisheries Policy (CFP). Each time the CAP or CFP has been reformed, a new Regulation has been adopted to provide the legal framework for Member States to implement the agreed changes to a policy. Occasionally, Regulations have been adopted to tackle specific environmental problems, including most recently the Invasive Species Regulation (2014).

It worth mentioning also the 'missing' Directives. A Soils Directive has been discussed for many years (http://t-stor.teagasc.ie/bitstream/11019/398/1/SUM-2009-165R1-RC%20_2_.pdf), but is still not forthcoming, and action on Climate Change is weakened through the absence of a legal framework created by a Directive. While the UK created the 2008 Climate Change Act, the EU agreed, instead of a Directive, a climate-and-energy package which included the Renewable Energy Directive and the Emissions Trading Scheme.

Influence on nature

It is easy to assume that, with such a long history of EU Directives being transposed into UK law, the influence of those Directives has been profound and there has been a significant positive impact on the state of nature in the UK. The Institute of European Environmental Policy (IEEP) produced a very comprehensive review of the impact of EU environmental law on the UK in the run-up to the referendum (www.ieep.eu/assets/2000/IEEP_Brexit_2016.pdf).

Some key international agreements which protect British wildlife and habitats: main features and opportunities in the post-EU era (compiled by Ian Hepburn)

Ramsar Convention

'Convention on Wetlands of International Importance especially as Waterfowl Habitat', also known as the Wetlands Convention.

Adopted in Ramsar, Iran, in 1971; entered into force in 1975. The UK ratified the Convention in 1976.

Currently 169 party states; 2,241 Ramsar sites (170 in UK, of which 16 in Overseas Territories) extending across 215,247,579 ha (2,278,923 ha in UK; substantial overlap with wetland and coastal Natura 2000 sites, especially SPAs classified under the Birds Directive).

The first modern global convention aimed at safeguarding wildlife and habitats; includes an obligation to designate at least one internationally important wetland site as a condition of becoming a party state. Extended over the last 45 years from an initial focus on waterfowl sites to cover a wide range of non-bird species, wetland habitats and ecosystems, including marine habitats (to a depth of 30m). The 'three pillars' of the Ramsar Convention commit contracting parties to work towards the wise use of all their wetlands; to designate suitable wetlands for the list of Wetlands of International Importance and ensure their effective management; and to cooperate internationally on transboundary wetlands, shared wetland systems and shared species.

Departure from the EU will not affect the UK's status as a party to the Ramsar Convention; hence Ramsar sites will remain in place regardless of the fate of the UK's Natura 2000 sites. As Ramsar sites and Natura 2000 sites have generally been bundled for the purposes of planning policy and impact assessment, some policy disentanglement may be necessary.

CITES

'Convention on International Trade in Endangered Species of Wild Fauna and Flora' sometimes called the Washington Convention.

Adopted in Washington DC in 1973; entered into force 1975. The UK ratified CITES in 1976.

A global trade agreement designed to protect the most threatened species of wildlife from the potentially damaging impacts of exploitation for international trade. Operates through a licensing system which aims to ensure that any legally sanctioned international trade in endangered species – and species at risk of becoming endangered – is sustainable.

Legal measures to implement CITES are quite complex. The UK implementing legislation is the Endangered Species (Import & Export) Act 1976; updated subsequently to give force to relevant EU Regulations (338/97 and 865/06), now amended by 1320/2014 to reflect the EU becoming the first

'regional organisation' to ratify CITES. Importantly, the EU regulations impose stricter obligations on EU Member States than required by the Convention. The UK will remain a contracting party to CITES on departure from the EU. But if the UK is no longer bound by the stricter EU regulatory framework, UK implementation of CITES could be weakened unless national legislation (the 1976 Endangered Species Act and the 1997 regulations to enforce trade controls) are amended to match the same standards as the EU regulations.

Bern Convention

'The Convention on the Conservation of European Wildlife and Natural Habitats'.

Adopted in Bern, Switzerland, in 1979; entered into force in 1982. The UK ratified the Convention in 1982.

This 'regional' European Convention is administered by the Council of Europe; participation is not restricted to European states.

The perceived contrast between the effective protection afforded to wild birds and their habitats in important sites through provisions of the Birds Directive and relative ineffectiveness of the Bern Convention to protect non-bird wildlife was a major factor prompting the conservation NGO community to press for EU legislation to match that in place for birds. Ratification by the EU of the Bern Convention in 1982 provided the legal basis for the European Commission to prepare the 'draft Fauna, Flora and Habitats Directive' in 1988. The Birds Directive and Habitats Directive together are the mechanism through which EU Member States collectively implement the Bern Convention.

The UK will remain a contracting party to the Bern Convention when no longer an EU Member State.

Under the Bern Convention an ecological network of protected areas – the 'Emerald Network' of Areas of Special Conservation Interest – has been established. This parallels the EU's 'Natura 2000' network of SPAs and SACs and could provide a simple route to maintain recognition of the European significance of the Natura 2000 network of sites in the UK at the point of UK departure from the EU. As the two governing institutions (the European Union for the Natura 2000 network and the Council of Europe for the Emerald Network) have ensured that methodologies used to identify Natura 2000 sites and Emerald Network sites are well aligned, it should be relatively straightforward, subject to Bern Convention procedures, for the UK to propose conversion of the entire UK suite of SPAs and SACs to be designated as Areas of Special Conservation Interest and thus included in the 'Emerald Network'. This would continue recognition of the European importance of the UK's Natura 2000 sites.

The main change would be that the final arbiter in any disputes over the protection of Emerald Network sites would be the UK courts, and not the European Union Court of Justice (EUCJ).

Bonn Convention

'Convention on the Conservation of Migratory Species of Wild Animals', also known as the Convention on Migratory Species, or CMS.

Adopted in Bonn, Germany, in 1979; entered into force in 1985. The UK ratified the Convention in 1985.

A major global wildlife treaty which provides a framework for 'range states' to collaborate in developing and implementing measures throughout the defined range of groups of migratory animal species with common characteristics. Fundamental principles include a commitment that party states will take action to conserve migratory species and '... paying special attention to migratory species the conservation status of which is unfavourable ...'. A key feature of the Convention is the development by contracting parties of regional Agreements. Measures developed under these Agreements aim to address factors affecting the conservation status of the migratory species concerned.

The UK will remain a party state to the Bonn Convention (and all Agreements which it has ratified) after departing from the EU.

Agreements of direct relevance to UK (in chronological order of the Agreement being concluded) are:

- 'Agreement on the Conservation of Populations of European Bats' (EUROBATS), concluded in London, September 1991; entered into force January 1994; the UK ratified the Agreement in 1992. EUROBATS covers all 53 species of European bats, across 63 range states (of which at January 2015, 36 were contracting parties to the Agreement) in Europe, North Africa and the Middle East. The key measures are international cooperation among range states to develop legislation, education and conservation measures implemented at national level to safeguard all bats.
- 'Agreement on the Conservation of Small Cetaceans of the Baltic, North East Atlantic, Irish and North Seas' (ASCOBANS), concluded in New York, March 1992; entered into force in 1994. UK ratified ASCOBANS in 1993. The Agreement covers 20 species of small cetaceans commonly occurring in the area, dealing with issues such as by-catch, underwater noise and marine pollution. Species covered include two which are listed in Annex II of the EU Habitats Directive and with populations in UK waters, the Harbour Porpoise *Phocoena phocoena* and Bottlenose Dolphin *Tursiops truncatus*.
- 'Agreement on the Conservation of African-Eurasian Migratory Waterbirds' (AEWA), concluded in The Hague, Netherlands in 1995; entered into force in November 1999. AEWA covers 254 species of birds 'ecologically dependent on wetlands for at least part of their annual cycle' across 119 range states extending from the Canadian archipelago

and Russian Federation in the north, through Europe and the Middle East and Africa; as at April 2015, 75 countries – mostly in Europe and Africa – plus the EU are contracting parties to the Agreement). To support general protection measures set out in the Agreement, 'International Single Species Action Plans' have been prepared for the species and populations most at risk, to restore them to a 'favourable conservation status'. These include species which are listed in Annex I of the EU Birds Directive, such as the Greenland White-fronted Goose *Anser albifrons flavirostris*.

- 'Agreement on the Conservation of Albatrosses and Petrels' (ACAP), concluded in Cape Town, South Africa in 2001; entered into force in 2004; the UK ratified the Agreement in 2004. There are currently 13 party states. The original focus at the time the Agreement was adopted was on southern hemisphere albatrosses and large petrels, so the particular UK relevance at that time was to British Overseas Territories. Subsequently it has been extended to cover all species of albatrosses, and, in July 2016, the Balearic Shearwater *Puffinus mauretanicus* was added to Annex 1 of the Agreement, the first of the smaller petrels, a regular visitor to British waters and listed on Annex I of the EU Birds Directive.

Convention on Biological Diversity

Also known as the Biodiversity Convention or 'CBD'. Adopted at the 'Earth Summit' in Rio de Janeiro, Brazil, in 1992; entered into force in 1993. The UK was one of the original signatories in 1992 and formally ratified CBD in 1994. 196 countries have ratified the Convention.

The most wide-ranging modern international treaty aiming to safeguard the natural world, covering the conservation, sustainable and equitable use of biodiversity. Key principles include a recognition that biological resources and ecosystem functionality not only sustain life on Earth, but are vital to social and economic performance and progress; CBD embraces the precautionary principle and the ecosystem approach as guiding principles to decision-making and the use of natural resources. The main mechanism for implementation is through 'National Biodiversity Strategies and Action Plans'. The UK Biodiversity Action Plan (UK BAP) launched in 1994, *inter alia*, spear-headed a plethora of habitat, species, local and thematic action plans as a basis for UK implementation of CBD. In 2002, contracting parties agreed that they would '… commit themselves to a more effective and coherent implementation of the three objectives of the Convention, to achieve by 2010 a significant reduction of the current rate of biodiversity loss at the global, regional and national level …'.

In 2010, parties to the Convention agreed a new strategy, supported by a more sophisticated suite of objectives and targets to be achieved by 2020 (the 'Aichi Targets'); in response to this and the 2011 EU Biodiversity Strategy, the UK BAP approach was replaced with 'The UK Post-2010 Biodiversity Framework' in 2012.

The UK will remain a contracting party to the Biodiversity Convention when it is no longer a Member State of the European Union.

OSPAR Convention

'Convention for the Protection of the Marine Environment of the North-East Atlantic' (OSPAR).

Adopted in Paris, France, in 1992, but technically much older as it replaces the 1972 Oslo Convention and 1974 Paris Convention to prevent marine pollution by ships and aircraft and from land-based sources respectively, tracing its genesis to the massive oil spill resulting from the grounding of the oil tanker SS *Torrey Canyon* off Cornwall in March 1967. OSPAR entered into force 1998; in 2000 the Convention extended its remit by bringing into force a new Annex V 'On the protection and conservation of the ecosystem and biological diversity of the maritime area'. The UK ratified OSPAR in 1998 and Annex V in June 2000.

Annex V provides a strategic framework for the protection and restoration of marine ecosystems, habitats and species. OSPAR promotes a cohesive network of Marine Protected Areas (MPAs) and actions to safeguard habitats and species on its 'List of Threatened and/or Declining Species & Habitats'. Some OSPAR-listed habitats and species are also protected under the EU nature directives. For example, Annex V includes the Roseate Tern *Sterna dougallii* and *Zostera* beds, which are also listed in Annex I of the EU Birds Directive and Annex I of the EU Habitats Directive, respectively.

The UK will remain a contracting party to OSPAR when it is no longer a Member State of the European Union.

Aarhus Convention

'Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters'.

Adopted in Aarhus, Denmark, in 1998; entered into force in 2001. Currently, 47 parties (46 individual countries plus the EU) have ratified the Convention; the UK signed the Convention in 1998 and ratified in 2005. Administered by the United Nations Economic Commission for Europe (UNECE); the UK will remain a contracting party when its membership of the European Union has been terminated.

The Aarhus Convention covers important procedural measures to ensure transparent, accessible and timely access to information and the right of citizens

and organisations to participate in public decision-making affecting the environment. EU has adopted the 'three pillars' of Aarhus (access to information, public participation and access to justice) in the development of the Water Framework Directive. The EU has spearheaded implementation of the Convention through directives on public access to information and participation in decision-making. UK has transposed the obligations into UK law. However, a coalition of NGOs is challenging both the legal cost structures in the UK, and clarity of the application of rules on 'cost caps' which limit the opportunities for small community groups and individuals to have the access to justice as intended by the Convention, which is characterised as to 'empower people with the rights to access easily information, participate effectively in decision-making in environmental matters and to seek justice if their rights were violated'.

Aarhus Convention enshrines important principles which are of direct relevance to protecting British wildlife. The extent to which proper implementation of the Convention in the UK could be compromised if the UK is no longer subject to EU legislation remains unclear.

The IEEP is acknowledged as one of the principal sources of expertise on environmental policy across the EU. It concluded that the EU had made a significant contribution to improving the environment, at least for humans. It lists many key environmental achievements, including a significantly improved system of protection for species and habitats, which it believed would not have happened to the same extent if individual Member States had developed their own environmental legislation.

Many British politicians have sought to create political capital from a narrative that claims that these European Directives are 'gold-plated' when transposed into UK law (e.g. George Osborne's infamous 2011 Autumn Statement in which he stated 'We will make sure that gold-plating of EU rules on things like habitats aren't placing ridiculous costs on British businesses.' (https://www.gov.uk/government/speeches/autumn-forecast-statement-by-the-chancellor-of-the-exchequer-rt-hon-george-osborne-mp).

In fact, often the opposite is true. It took 16 years and threats of action in the European Court of Justice, and large daily fines, before the Labour Government in 2001 finally transposed the 1985 Environmental Impact Assessment Directive clauses that sought to require assessment of the impact of 'intensive agriculture' on the loss of 'semi-natural areas'. That these losses continue today, in the face of ineffectual Regulations, provides an illustration of the reluctance on the part of the UK fully to implement EU law.

In 1988 the chief architect of the draft Habitats Directive was Stanley Johnson, father of our current Foreign Secretary. When the Directive was adopted in 1992, the UK's response was to take a minimalist approach to its implementation. As a result, the UK has one of the lowest proportions of its land and sea surface in the 'Natura 2000' network of protected areas (comprising Special Protection Areas, SPAs, and Special Areas of Conservation, SACs) across the whole EU. Only one other EU member state, Denmark, has a lower proportion of its land surface within the Natura 2000 network: UK has 8.54%, Denmark 8.34%. In comparison, 34.46% of Bulgaria is covered by Natura 2000 protected areas. Admittedly, this is partly because the UK had already lost most of its wildlife-rich semi-natural landscapes to intensive agriculture or forestry. Even so, the Netherlands, where the same process had occurred, has placed more than 13% of its land into the Natura 2000 network.

The UK also made use of its existing wildlife-protection law, principally the Wildlife and Countryside Act (and subsequent Acts), to implement the Nature Directives. Thus, Special Protection Areas (SPAs) and Special Areas of Conservation (SACs) were already largely designated as Sites of Special Scientific Interest (SSSIs). On land at least, practically all of the Natura 2000 network is underpinned by SSSIs, designated by means of domestic law. Since 1994, when the Habitats Directive was first transposed into UK law, only a very small number of new SSSIs has been designated.

Lappel Bank

Ironically, the UK Government, albeit inadvertently, helped other Member States to improve the way in which they identified and designated SPAs and SACs, namely by destroying an area that should have been protected as a SPA. Lappel Bank, a mudflat in Kent's Medway Estuary, was excluded from the SPA because Medway Ports already had planning permission to reclaim it for use as a lorry park. Although the Birds Directive had been created in 1979, the UK Government had not come around

to deciding whether to designate the Medway Estuary and Marshes as an SPA until 1993. After it had decided, for economic reasons, not to designate Lappel Bank, it was challenged by RSPB and this challenge eventually found its way to the European Court of Justice.

The European Court ruled that economic considerations cannot be taken into account when Member States decide whether to designate SPAs or SACs, as these should be purely scientific decisions. Lappel Bank was still destroyed, but the 'case law' created as a result of the challenge had a profound impact on the way in which the Birds and Habitats Directives were implemented across the EU. (www.rspb.org.uk/forprofessionals/policy/sites/international/25years/failed/lappelbank.aspx).

Although few additional areas (on land) were actually designated because of the introduction of the Natura 2000 approach, the strength of protection afforded, and the opportunity to acquire additional funding to manage those areas, changed markedly as the Natura 2000 network evolved. In 2004, a long-running legal dispute in the Netherlands culminated in what became known as the Waddenzee ruling. This ruling fundamentally changed the way in which SACs and SPAs were protected, because the European Court concluded that any plan or project affecting a Natura 2000 site should be subject to an assessment; and, if that assessment could not show that the plan or project would have 'no adverse effect on the integrity of the site', then it could not proceed. The burden of proof, which had previously fallen on the objectors to show that a development would be damaging, had been reversed. Now the developer (or other organisation) had to show that its actions would have no adverse effect. This level of protection is not available to domestically designated SSSIs.

This also provides an example of how the legislation affecting SPAs and SACs evolves as a result of the interplay between actions within Member States, challenges to those actions from Civil Society, investigations by the European Commission into those challenges, and decisions taken by the European Court of Justice.

The Birds and the Habitats Directives also provide protection for a range of species found in the UK and UK waters. The Birds Directive provides strict protection for individuals of a wide range of species, but also requires the UK to identify and designate SPAs for such species as the Nightjar *Caprimulgus europaeus*, Woodlark *Lullula arborea* and Stone-curlew *Burhinus oedicnemus*.

The Birds Directive was enacted in 1979, but even now BirdLife International estimates that only 64% of all important bird areas are covered by SPA designation, and the UK is in a poor 16th place in the EU when it comes to protecting marine areas for seabirds.

Other than birds, a tiny number of UK species are protected under the Habitats Directive. These include cetaceans, Common Dormouse *Muscardinus avellanarius*, Otter *Lutra lutra*, a number of fish, most of our herpetofauna and all species of bat. Very few plants or insects are protected, and no fungi or lichens. As the UK has a particular importance, at a European and even global level, for bryophytes and lichens, this has always been a bone of contention. Some of

The fragile British Stone-curlew populations have benefited from funding and designation of sites under the EU Natura 2000 initiative.
Paul Sterry/Nature Photographers

the species listed are given protection only from collecting, while others require the designation of Special Areas of Conservation. Alongside species of bat, the most controversial species protected under European legislation is the Great Crested Newt *Triturus cristatus*. These species, with their tendency to turn up on development sites, have caused the most friction between conservation protagonists and the planning process. Disputes over the conserving of Great Crested Newts have been the subject of a number of European Court judgements and, even after more than 20 years of policy and practice, it seems that we are no nearer a resolution of the issues.

Common Agricultural Policy

While it is clear that the EU environmental directives have had a positive impact on nature in the UK, the same cannot be said for the Common Agricultural Policy (CAP). The CAP has existed since 1962, long before the UK joined the 'Common Market' in 1973.

The drive to produce more food has been operating in the UK since 1940. Initially, it was a response to real threats to food security during the Second World War, but thereafter the momentum to increase food production took on a life of its own. The intensification of farmland, which had for centuries supported abundant wildlife, accelerated during the next 40 years. The Ministry of Agriculture (MAFF) effectively bankrolled the farmers and landowners to achieve ever greater productivity, initially from Treasury funds, but subsequently via the CAP. It was not until 1988 that the European Commission finally published a paper recognising that all this was causing a serious environmental problem. (Environment and Agriculture: http://ec.europa.eu/agriculture/cap-history/crisis-years-1980s/com88-338_en.pdf). Thus started the long hard road of CAP reform, on which, 28 years later, the EU still travels.

It would be churlish not to recognise that the CAP has altered dramatically in its form, its intent and its impact over those three decades. Although 75% of the CAP payments made to landowners in the UK are still direct payments with no requirement to take positive action for nature, at least there is no incentive to overproduce food. Indeed, there is no obligation to produce any food, only to maintain the land in a state in which food can be produced. This leads to the bizarre situation where now tiny pockets of scrub or even individual bushes are mapped such that their area is deducted from the total area for which CAP payments can be claimed on a farm. Rules that farmers are supposed to abide by, in return for receiving their subsidies, are known collectively as 'cross-compliance'.

Roughly a quarter of CAP payments are now made for 'Agri-Environment Schemes'. These schemes, which also have been around for nearly 30 years, were intended to support farmers in producing food in a way that enabled wildlife to continue to exist on their farmland. Evidence of their success is mixed, but what is clear is that the schemes, even if they have been partly successful, were too small and the impact often too scattered even to slow the continuing decline in farmland wildlife, let alone reverse it, for all but a handful of species.

What are the implications of Brexit?

Environmental directives

Assuming that Brexit does mean that the UK will leave the EU, the possibility exists that all of the accumulated decades of legal protection for nature and the wider environment will be lost. This rather depends on whether the UK leaves the EEA, as well as the EU. Members of the EEA who are not members of the EU (Norway, Iceland and Liechtenstein) are subject to a wide range of environmental requirements. These include many of the Directives relating to pollution, air quality and water quality, but not the Birds, Habitats or Bathing Water Directives. So, even a close relationship between the UK and the EU through the retention of the EEA and Single Market means that the UK would no longer be subject to the law protecting Natura 2000 sites and species and clean beaches.

There are suggestions that the UK's various Governments will retain (at least initially) all of the existing Regulations and Orders, which transpose EU Directives into UK law and the laws of its devolved countries. This would certainly make things simple and give the various administrations across the UK the time to work slowly through the many pieces of legislation derived from EU law. How would this work on the ground, though?

Would SSSIs that are also designated as SACs or SPAs be given the status currently afforded to them

with the full backing of European law? This seems unlikely. Defra minister George Eustice has already indicated that he would drop the 'spirit-crushing' frameworks of the Birds and Habitats Directives while retaining the domestic Regulations, which transpose them. It is difficult to know what this means. At present, SACs and SPAs are afforded much more protection from, for example, the direct and indirect impacts of housing development than are their domestic cousins, the SSSIs. It is difficult to imagine, for example, that, had the Nightingale *Luscinia megarhynchos* been on Annex I of the Birds Directive, Medway Council would have given planning permission for a new town of 5,000 houses to be built on the SSSI at Lodge Hill, in Kent, which had just been designated to protect this bird's largest British population. Contrast this with the protection currently afforded lowland-heathland Natura 2000 sites supporting ground-nesting birds such as the Nightjar, where standard residential housing cannot be built within 400m of the Natura 2000 site boundaries.

Retaining the protection mechanisms which have been developed for Natura 2000 sites outside the EU Directives could raise further complications. Those additional protection mechanisms, and the underlying presumption that development cannot proceed unless it can be shown that there would be no adverse effect on the integrity of the Natura 2000 site, relies on case law made in the European Court of Justice, drawn from examples in other Member States, such as the Waddenzee judgement mentioned previously. It seems implausible that, once the UK is outside the EU and not subject to decisions in the European Court, British courts would be able to take into account these cases. At that point the whole legal edifice that protects these sites falls down.

Similarly, at the moment, legal disputes which arise from UK Natura 2000 sites (such as the above-mentioned Lappel Bank case) can be referred to the European Court of Justice, either via the UK courts or more directly via the European Commission. The European Court is the final decision-maker and its judgements cannot be challenged. Once the UK leaves the EU, however, that will no longer be the case. Presumably, the final legal judgement will then be handed down by the Supreme Court. Thanks to changes to the Judicial Review process, however, it is even now difficult for individuals and organisations seeking to use the UK legal system to protect nature, and the chances of such cases making it as far as the Supreme Court therefore already seem slim.

Perhaps we shall revert to the time, before 1998, when there were two tiers of SSSI, but this time with nationally and internationally important sites. Today, however, the devolved administrations are likely to take differing approaches to their protection. This seems like a backward step.

Common Agricultural Policy

Reform of the farm-subsidy system outside the CAP may present the greatest opportunity to achieve something positive for nature in the UK. It could also provide some significant threats. What is clear is that the major farming and landowning organisations already have excellent connections to decision-makers in Whitehall and the devolved administrations, and they will be expecting to wield great influence over the design of the system to replace the CAP. The challenge will be for civil-society groups interested in achieving results for nature to break into this cosy cabal.

Agriculture is a devolved matter in the UK, and the relationship between nature and the land is quite different in each country, Wales and Northern Ireland, for example, being overwhelmingly pastoral. Without the binding rules of the CAP, farm support is likely to develop very differently in each UK country, although each system will still be funded ultimately by the Treasury.

Successive UK Governments have sought to decouple CAP farm-support payments from production. This process is most unlikely to be reversed once the UK has to achieve agreement only among its constituent countries. At present, landowners receive payments just for being in control of farmland (whether owned or rented). There is no requirement to produce public goods such as clean water, nature, landscape quality or carbon storage. The provision of food is not normally defined as a public good, at least not at the farm level. This is because food produced on a farm is treated as a commodity and can be sold to the highest bidder, which could be someone outside the UK.

Farmers rightly complain about the extent and complexity of bureaucracy that has accreted around the way in which CAP payments are made.

Brexit provides an opportunity to develop a much simpler system. But whatever the new system looks like, it will have to tackle the same issues, such as fraud, as those which the complex CAP system was supposed to address. At the moment, all farmers receive the same levels of area payment; moving away from an area-payment system to another will inevitably introduce an extra level of complexity.

If, for example, payments were based purely on the provision of public goods, this would require the development of a system which established the nature of those public goods, their value and location, and how their provision could be monitored and verified. This has the potential to become even more complex than the system under which farmers currently labour.

'Natural Capital' enthusiasts will be keen to promote the economic valuation of the public goods that nature provides on farmed land. But there are profound ethical problems with this approach, and one consequence could be the creation of an artificial market in public goods, enabling farmers to trade with each other. Thus, a farmer in the Lake District uplands could receive funding from lowland intensive cereal farmers to provide public goods such as landscape quality, wildlife or access. This idea has been promoted by Defra Farm Minister George Eustice. Aside from the practical difficulties and enormous bureaucratic burden, the idea that public goods such as wildlife are fungible, i.e. not tied to particular places, will cause alarm among many who care about their local 'patch' and the wildlife, heritage and other values which it encompasses.

Other possibilities include the introduction of a ceiling on the farm area that is eligible for public support. There are also calls that support should be given only to family farms. Unless these approaches are developed carefully, it could generate a mass restructuring of farm ownership, as larger units are broken up in order to claim the subsidies. Further, there is no legal definition of a family farm. Indeed, many farms which have been in the same family for generations are, for tax reasons, now owned by companies or partnerships of which the families are beneficiaries.

Whether a farm is small or family-run, it does not inevitably mean that it delivers more public goods than does a farm owned by a public company or large estate. Nevertheless, there is an implicit recognition that larger businesses are by their nature less in need of public subsidy.

At the opposite end of the scale, very small farms and smallholders have been excluded from the CAP subsidy system. Ironically, these may provide more food per hectare than large farms, they also employ more people per unit of food produced, and they are more likely to produce food sustainably.

EU farm subsidies have been, and continue to be, used to support agri-environment schemes. At present, around one quarter of UK farm subsidies are spent on these schemes, which are supposed to support farming systems that are more sympathetic to wildlife. Such agri-environment schemes have become the main source of funding for farmers and landowners who have areas rich in nature. Although these schemes have been around for nearly 30 years, they have not succeeded in preventing many species and habitats from continuing to decline. Some schemes, such as the now finished Entry Level Scheme, delivered very little for nature. The new Countryside Stewardship Scheme is very unpopular with farmers and Natural England staff alike, and its future is now highly uncertain, given that its five-year schemes will finish long after the date when the UK is likely to have left the EU.

Agri-environment schemes that may be more effective are ones based on agreed outcomes. Farmers would be supported in their efforts in achieving objectives, with bonus payments for exceeding agreed outcomes. So, for example, a farm where the outcome was to have ten successfully breeding pairs of Curlew *Numenius arquata* would receive the payment when that outcome was reached, and would receive a bonus if it achieved more breeding pairs.

There has been a tendency among governments (of all colours) to see agri-environment schemes as replacing other approaches to protecting nature, such as site designation and regulation. The evidence suggests that this approach has not worked. Now would be a good time to review the balance between designation, regulation and incentive, with a wholesale designation (as SSSIs) of all surviving important fragments of semi-natural habitat and important populations of declining and threatened species.

Diffuse pollution or soil loss from farms continues to be a serious problem that cross-compliance has failed to address. Better regulations should be

preventing damage, as a result of pollution and other causes (including tidiness), to wider countryside features. Receipt of public subsidies should be conditional on abiding by these regulations.

While it is appealing to imagine a farm-support system that aids the recovery and return of nature to farmland, it is more likely, in the current atmosphere of deregulation and cost-cutting, that the opposite will take place. At present, the EU has started to restrict the use of some neonicotinoid pesticides, which are harmful to bees, other pollinators and wildlife. When the UK leaves the EU, this restriction will be lifted, unless the Government decides to change its approach. UK Government ministers have already spoken of adopting a 'risk-based approach' to such things as neonicotinoids or Glyphosate (the EU is considering restricting the latter, too, as a result of evidence that it is carcinogenic). The EU has thus far prevented genetically modified crops from being grown widely across Europe. Outside the EU, pressure within the UK will certainly mount to relax this restriction.

Free Market enthusiasts are also calling for a complete abandonment of public support for farming, following the approach adopted in New Zealand. This would save several billion pounds a year of public funds being paid to farmers (£3.5 billion a year is spent under the CAP). The consequences would be profound. Small farmers who are dependent on public subsidy to stay in business would be forced to sell up, leading to a substantial increase in the average farm size. Without any support for the provision of public goods, coupled with farmers having to compete in the open market against cheap imports and those from countries with lower environmental standards, further losses of nature from farmland would be almost unavoidable.

Finally, would a removal of farm subsidies lead to land being abandoned, and would nature benefit from this 'rewilding' of former farmland? Farm abandonment and the effect on rural communities across Europe were one of the reasons why the Common Agricultural Policy was created in the first place. Successive reforms have seen the CAP shift its focus away from this objective, but it still exists. In parts of Europe, especially outside the EU, abandonment of marginal land has happened and forests have replaced cultivated land. This has created 'rewilded' land by default. If farm subsidies were removed, or were no longer sufficient to support upland grazing systems, this would lead to a change in the character of those landscapes and the type of nature which they support. Some, however, would argue that these marginal farming systems are worthy of support in themselves. High Nature Value (HNV) farming, as it is known in Europe, is a distinct type of farming system which produces high-quality food, as well as supporting agro-pastoral ecosystems rich in a wide variety of species and habitats. These remote farming communities are highly marginal, and their plight is very sensitive to changes in farm-support systems. It would be ironic if it were these systems, where farmland wildlife is at its richest, that were lost in a post-Brexit world, while lowland intensive farms would remain relatively unchanged, in their predominantly wildlife-poor state.

Conclusion

It seems almost certain that at some point in the next decade the UK will be leaving the EU, and the process to achieve this will be the subject of long and complex negotiations. It is unclear what sort of relationship the UK will have with the EU after these negotiations have concluded, but, whatever the outcome, there will be an effect on wildlife. Whether the UK stays in the European Economic Area or not, the UK will no longer be subject to the requirements of the two nature directives. This seems almost certain to weaken, possibly seriously, the protection afforded to sites, habitats and species listed within these Directives. The UK will also leave the Common Agricultural Policy. This may lead to nature on farmland recovering, or declining further. If farm subsidies are abolished, abandonment of farmland could result in a loss of High Nature Value farmland, with a significant loss of wildlife. Whatever the outcome, it is imperative that those who care about the future of our wildlife are part of the decision-making process and not just passive onlookers, hoping for the best.

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