

OPTIONS FOR POST-BREXIT AGRICULTURAL POLICY IN THE PEATLANDS OF UPLAND BRITAIN

There is strong evidence that paying for restoration and active management for conservation could provide benefits for wildlife, water quality, reduced flooding and climate. Meanwhile, we know little about the effects of large-scale withdrawal of management from peatlands.

There is uncertain and often-contested evidence over the potential effects of policies that lead to a large-scale, significant reduction in active management. Taking a Precautionary Approach would retain farm incomes but provide a renewed focus on the delivery of wider public benefits.

Peatlands represent an important opportunity for this new approach, given the considerable benefits provided by these habitats to UK society.

KEY MESSAGES

Changing the way we manage peatlands will have uncertain consequences. Given the crucial importance of these environments for climate, water, wildlife, recreation, cultural heritage and rural communities, the Precautionary Principle would suggest that changes should be made slowly so we can research their effects.

Farm subsidies have enabled farmers to undertake peatland restoration and sustainable management. Without that support, our historically degraded peatlands would continue to deteriorate, losing biodiversity, as well as vast quantities of carbon to the atmosphere, increasing flooding, degrading water quality and imposing higher water treatment costs on water companies, and subsequently on consumers.

On the other hand, refocusing funding on restoration and environmental management could provide multiple benefits:

- Damaged peatlands would be restored, providing benefits for climate, water quality and wildlife that depend on healthy peat bogs;
- Recovery of native woodlands through targeted expansion on non-peat soils (e.g. in valley bottoms between deep peat areas), would provide biodiversity and wider benefits including shelter for livestock, reduced soil erosion and flood management benefits; and
- Many of the jobs, rural communities and cultural heritage associated with peatland management would be retained.

In this way, we can support rural communities whilst restoring and improving our largest seminatural environment, delivering more benefits for everyone in society than we currently get from the money we spend on peatlands through the Common Agricultural Policy.



BACKGROUND

The opportunity: The UK has long sought to move the Common Agricultural Policy away from direct payments to pay for non-market public benefits provided by land management in agricultural areas. The UK now has an opportunity to move towards a system that pays land managers directly for the work they do to protect nature, more cost-effectively for the taxpayer.

The challenge: Phasing out direct payments will disproportionately affect the economic viability of farming in "less favoured areas". Many of these areas are on peat soils that are prevalent across the UK uplands, and provide a particularly wide range of important benefits to UK society. We need to understand how changes to agricultural policy might affect the provision of these benefits.

The focus: We focus on blanket peats, because of the many benefits these sites provide to UK society and their sensitivity to policy change. In particular: i) the majority of the UK's carbon store is in peat soils, most of which are found in the uplands; ii) changes in peatland management can have significant impacts on greenhouse gas emissions, water quality and flood risk; and iii) the majority of designated sites in the uplands are on deep peats due to their importance for conservation of important species and habitats.



EVIDENCE

Paying for restoration and active management for conservation will provide proven benefits for wildlife, water quality and climate, whereas little is known about the effects of a large-scale withdrawal of management from peatlands

- Few people realise how managed our peatlands are these places may feel wild, but they have been shaped by generations of management
- In the past, high sheep stocking densities caused damage to peatlands, but the much lower densities that are seen across many of our peatlands nowadays are more compatible with management for multiple objectives, including conservation
- Rotational burning (mainly for grouse) has been associated with a loss of blanket bog
 vegetation and impacts on water quality on some deep peat sites. However, due to the
 modification of these sites, simply withdrawing management may not enable all sites to
 return to fully functioning blanket bog. Instead, abandonment may lead to an increased
 wildfire risk over the short-term (if highly combustible heather builds up), which could
 threaten carbon stores if the peat were to combust. It could also have negative impacts on a
 range of bird species, particularly waders, associated with the mosaic of short and taller
 vegetation that such sites provide
- By refocusing our spending on providing public benefits, we could gradually work towards
 restoring peat bogs that are currently damaged by blocking drainage ditches to raise water
 tables and revegetating bare and eroding peats. The IUCN UK Peatland Programme's 2011
 Commission of Inquiry estimated that around 80% of UK peatlands were degraded in some
 way. Restoration would reduce the amount of brown dissolved carbon that water companies
 have to remove from our water supplies, and reduce greenhouse gas emissions from peat
 soils. Restoration and conservation management of peatlands for multiple benefits
 (including low density sheep production) could protect rural jobs and make a home for both
 people and wildlife

Leaving aside the wider political arguments, the withdrawal of the UK from the EU's Common Agricultural Policy after Brexit offers us a unique opportunity to rethink how we sustain the services that are most important for us more cost-effectively

- We could get a better deal for taxpayers by actively paying land managers to provide us
 with the services society wants rather than putting money only into farmer's pockets, with
 very few strings attached
- Active management of the uplands doesn't have to be done by farmers with sheep. If we
 moved to a system where we paid people to provide us with environmental benefits, many
 of the people lining up to do the work would be farmers, but they would be joined by
 environmental NGOs and others who already work extensively in these areas
- By focusing on the benefits we want from the uplands, we can empower those who manage our land to find the most cost-effective ways of delivering the benefits we want, whether with sheep, other livestock or targeted reforestation

Peatlands are a special case: they provide some of the richest benefits nature has to offer, but without public funding, very few people would be able to continue managing these landscapes and we would see massive changes to the British landscape and our rural communities

- Might that be a good thing? It would certainly save money in the short-term, and British
 farming in the lowlands could probably adapt. However, without any form of public funding,
 we would almost certainly see an exodus of sheep and farmers from the hills
- For the rest of UK society, the effects may not be noticeable, or they may be severe. The problem is that we don't know the evidence is place-specific, and sometimes contradictory. We would be conducting an experiment on a national scale with an unknown outcome
- Other than the loss of cultural heritage, there are few things we know for certain are likely to happen. The Precautionary Principle suggests that we should proceed with care. Any refocusing of payments or withdrawal of management needs to take place gradually and on a limited basis while we research and monitor its effects
- The stakes are high: 70% of our drinking water comes from upland catchments; peatlands are the UK's largest carbon store; they are a globally rare habitat, hosting internationally important wildlife; and they are part of our national identity, cultural heritage and the basis for a way of life for many communities



POLICY OPTIONS

Might it be possible to get the benefits that society needs from peatlands for less than we currently pay?

In theory, by focusing payments directly on the provision of the benefits that society wants from peatlands, it should be possible to obtain these benefits for less money. The problem is that many hill farms are only just economically viable with current subsidies, so any reduction in the total amount of public money going into the hills may cause many farm businesses go bankrupt. For this reason, the Precautionary Principle suggests that any change to the total amount of funding going to this sector should happen gradually, so that adverse impacts can be identified.

Each of the following options therefore assumes a similar (or gradually changing) total amount of funding, but proposes new ways of allocating this funding to get better value for taxpayers, protect nature and support rural communities.



OPTION 1

One option is to get land managers to bid competitively for environmental funding, so the money goes to the people who can deliver the benefits most competitively, with payment conditional on delivering the contracted benefits. However, there are costs associated with monitoring benefits and bidding and rural businesses are put at risk when bids are unsuccessful or benefits cannot be delivered, for example due to pests or adverse weather, or changes in the natural environment beyond the scope of the individual land manager. Such an approach may also favour well-organised NGOs and large landowners ahead of small individual farmers, and so raise social justice concerns.

OPTION 2

An alternative second option, published in 2014 based on research funded by the Valuing Nature Network and work in the Welsh Rural Development Programme, proposed three key changes to agricultural payments:

- (i) Paying for the ecosystem services that are valued most by society;
- (ii) Spatially targeting payments to locations where ecosystem services can most efficiently be provided; and
- (iii) Providing incentives for cross-boundary collaboration over the provision of ecosystem services that need to be managed at catchment or wider spatial scales

Following this approach, land managers would be given a menu of environmental benefits they can choose from, with the menu differing between areas, depending on the benefits that can most cost-effectively be provided in any given location. In this way, spending is prioritized to the places that can most easily provide the benefits that society wants, and land managers in those locations are paid for the work they do on a stable, ongoing basis. It is important to note that there would be both winners and losers if those managing certain areas are paid more or less, based on the different levels of benefits they are able to provide society.

The UK already has computer models that can identify the places that should be able to provide key benefits most cost-effectively, and has been moving towards this sort of approach over recent years.

OPTION 3

An additional third option, which could be combined with either of the previous options, is to supplement public funding for the provision of environmental benefits from peatlands with private funding via Payments for Ecosystem Services schemes, such as the Peatland Code.

Place-based schemes have the potential to integrate payments for multiple services and habitats to provide payments at higher levels over longer periods than are currently available for similar work under the EU funding.

FURTHER INFORMATION

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Prof Reed published "Improving the link between payments and the provision of ecosystem services in agri-environment schemes in UK peatlands" as part of a special issue (9) of *Ecosystem Services* in 2014 with colleagues from the Valuing Peatlands Valuing Nature Project. His next paper, "A Place-Based Approach to Payments for Ecosystem Services" will be published in *Global Environmental Change*. He now leads the Peatland Tipping Points project, funded by the Valuing Nature Programme, which starts in November 2016 and lasts for three years, and leads a Work Package in the EU funded SoilCare project.

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