Wildlife and Countryside LINK

Wider Habitats – the Case for an Outcome Target

Summary

DEFRA has proposed that the biodiversity target suite under the Environment Bill contains a target for habitats in the wider countryside. Whilst we welcome the inclusion of this target as a means of driving progress in restoring biodiversity across the landscape, we are concerned at DEFRA's intention to use an action-based metric—the uptake of agri-environment schemes (AES) to restore, create and maintain habitats—rather than an outcome target.

We recommend the use of the 25 Year Environment Plan indicator D1 (extent, condition, and connectivity of habitats) as a much more effective means of capturing the delivery of government's biodiversity goals.

We recognise that Defra has yet to fully develop indicator D1, but information is available of sufficient depth and reliability to use while urgent efforts to finalise the metric are prioritised. There is also sufficient information to set a robust and achievable target for 2037 even in the absence of complete information about the baseline; it would be better to establish a clear intention and direction of travel in law and then adjust the detail than to focus policy and private sector efforts on a "second class" target.

In addition, it is essential that investment in the roll out of geospatial mapping to enable a robust assessment of the extent, condition and connectivity of habitats in the wider landscape is boosted. This would align with the Secretary of State's commitment in July 2020 to amassing an accurate and centralised body of data to inform decisions affecting biodiversity.[1]

Critique of DEFRA's wider habitats target

The proposal to use AES coverage to underpin the wider habitats target runs into two serious problems:

- first that coverage of AES does not necessarily equate to increases in the extent, condition and connectivity of habitats.[2] There are risks that an apparent increase in habitat shown by a habitat creation figure could mask a real world loss of habitat. This is exacerbated by the fact that AES cover only farmed land, missing out large swathes of England's natural environment. For example, this metric will not capture habitat improvements from net gain or from conservation management of non-farmed habitats such as road verges.
- and second the temporary nature of the schemes means that there is no guarantee that conservation improvements are secured for the long term. At the end of a scheme's term, there may no longer be any incentive for land managers to maintain the land under the same beneficial management and habitat and species gains could be lost. There are examples where flower rich habitats have been ploughed in, and sheep grazing has been reintroduced in an area where woodland or other valuable habitats had begun to regenerate.

[1] https://www.gov.uk/government/speeches/george-eustice-speech-on-environmental-recovery-20-july-2020

[2] Not all AES agreements contain actions to increase the extent, condition of connectivity of habitats, they also cover aspects such as air and water quality, heritage and landscape.

Similar to DEFRA's proposal for the Environment Bill target, the last biodiversity strategy, *Biodiversity 2020,* adopted area under management as a means of assessing outcomes for wildlife, but this has not proved to be an accurate indicator of actual delivery. The approach is overly simplistic as area data do not necessarily equate to the desired end state. Whilst scheme monitoring and evaluation has demonstrated that Countryside Stewardship is an effective scheme, helping to secure the right actions in the right places, scheme coverage alone is not a sufficient proxy for the delivery of specific environmental outcomes. Specific outcome focused monitoring and evaluation is required to determine improvements in the condition, extent and connectivity of habitats.

The future Environment Land Management (ELM) schemes are in the design stage, and Defra is still working to determine scheme priorities. Whilst government should report on uptake and coverage of schemes, it is vital that they also monitor the success of agreements in creating and improving lasting wildlife habitats and other environmental outcomes. There remains considerable uncertainty about the structure of ELM schemes and the extent of ecological monitoring to assess condition, thus making them an unsuitable vehicle to underpin a wider habitat target, at present.

We note too that an action-based target would not record losses of habitat and could suggest that progress is being made towards the 25 Year Environment Plan goal to create or restore 500,000 hectares of priority habitat, while in reality losses elsewhere are undermining those efforts.

<u>Our preferred option: extent, condition, and connectivity of species-rich habitats</u>

We propose the use of an outcome indicator of the extent, condition and connectivity of species-rich habitats. This would provide a useful means of evidencing the delivery of an effective Nature Recovery Network, which must include wildlife-rich habitat outside designated areas, as well as protected sites.

Both the National Audit Office and the Natural Capital Committee have recently highlighted the serious gaps in DEFRA's monitoring and reporting of progress against its environmental goals and have called for the Department to report against a comprehensive set of milestones for the 25 Year Environment Plan. In 2018 the NCC recommended that building a baseline understanding of natural assets should be a key milestone for the first five years of the plan and it further cautioned that failure to amass this evidence would lead to both gaps and duplications in the data collected and impede the effective decision making needed for its delivery. Getting a handle on the extent, condition and connectivity of species rich habitats in the wider countryside is fundamental to understanding the state of our biodiversity.

DEFRA's August 2020 targets policy paper was clear that where possible targets should be based on environmental outcomes. Although we acknowledge that the necessary indicator is still being developed, work to define the elements of the indicator has been progressing and a "stop gap" outcome indicator could be crafted pending completion of the D1 indicator, based on a more limited metric for habitats.

Habitats outside the protected areas network should use NERC s.41 priority habitats (or level 4 in the UK Habitats Classification system) as a starting point for defining "species-rich", but these could be refined down to a shorter list for the purposes of target setting, e.g. flower-rich open habitats, broad-leaved native woodland, aquatic, coastal (comprising saltmarsh, mudflats, dune, lagoon and shingle).

Habitat area should use a "net" figure to quantify extent: losses as well as gains in mature habitat should be measured so that mature, rich habitats are not traded off against new, featureless habitats. CEH's land cover satellite data is now freely available and can support compilation of this data.

Any areas of habitat restoration need to be secured for the long term. We recognise that the indicators to support a clear habitat extent target outside the protected area network are still evolving, with some errors expected in current mapping of habitats. However, this should not be a reason to avoid setting this target. Indeed, Defra is planning to set targets in other areas where monitoring and recording methodologies are currently being updated and where data is known to be deficient, such as SSSI condition.

CEH is working with DEFRA and Natural England on the habitat quality element of indicator D1 to develop a hierarchical indicator, i.e. a summary indicator for habitat quality composed of individual indicators, similar to the model used for native woodland condition monitoring. It is proposed that indicators fall under the functional elements: soil nutrient status, presence and conservation status of characteristic species, naturalness of hydrology, vegetation structure and management, soil sediment condition and processes and habitat heterogeneity. This structure is partly based on Common Standards Monitoring (CSM) used for statutory protected sites, where the feature of interest for a land parcel is the habitat, and the condition indicators are habitat-based. The increased conservation policy focus on restoration of natural function requires measuring habitat quality in new ways across habitats and landscapes but also further analysis to understand what quality looks like in what may be new transitional habitat types.

Connectivity is best measured in terms of progress towards achieving connectivity (or reducing fragmentation) within defined, mapped networks into which habitat restoration is being targeted. The metric must relate to what needs to be done i.e., at a local level an officer must be able to plan habitat restoration work, or develop a Local Recovery Network, and understand how this would contribute to a national connectivity target.

To keep a connectivity metric simple and understandable, we suggest that wildlife rich habitats are initially divided into three broad categories: open and flower rich, woodland and wetland. For two of these categories nationally mapped networks already exist. Firstly, B-Lines is a well-established national network of mapped corridors, produced through a locally led process, that link together remaining open flower-rich habitats (pollinator habitat), to provide a template for targeting habitat restoration and creation. B-Lines use real habitat data to both initially map B-Lines and to identify where the biggest gaps are, allowing the prioritisation of habitat creation and restoration. A target is likely to be based on a decrease in habitat fragmentation rather than an increase in connectivity.

This approach could be applied to other broad habitat types once connectivity maps for these are similarly developed and agreed. Secondly the Wetland Vision sets out a template for where wetland habitats should be restored that would maximise wetland connectivity.[3] The UK Forestry Standard acknowledges the threat that fragmentation and the loss of connectivity poses to woodland biodiversity, but currently lacks any metric for assessment.[4, 5]

[3] https://www.lunevalleyfloodforum.org.uk/uploads/1/2/3/7/123753072/wetlandvision_tcm9-132957.pdf
[4] https://www.gov.uk/government/publications/the-uk-forestry-standard
[5] In Europe a pilot study has been carried out on a Forest Fragmentation indicator as part of the process of updating the pan European indicators for sustainable forest management: https://www.researchgate.net/publication/339077477_Forest_Fragmentation_Indicator

Conclusion

Developing a target based on (1) a metric under development; with (2) current best-available information about the extent, condition and connectivity of habitats outside the protected area network would set a clear indication of policy intent and commitment.

We recognise that some adjustments in both the assessment of current data and the eventual goal may be necessary in the short-term, but this would cause less disruption than starting out with an action-based target only to shift to an outcome target later.

It would also provide assurance that the outcome target will, in fact, be set and provide a fillip for rapid work to fill existing data gaps. This is important for ensuring coherent and strong policy across Whitehall, as well as sending an appropriate signal of firm policy intent to land managers and businesses about long-term expectations.

Overall, the state of important wildlife habitats outside the protected area network is a critical component of ecological recovery. Without a target for its recovery and improvement, confidence in the aim to reverse environmental decline is seriously diminished; an action-based target is no substitute and simply cannot guarantee overall improvement in habitat. The Government should set an outcome target for the state of habitats outside the protected area network and expedite work to improve measurement and the evidence base accordingly.