HRLN 25 - Evidence from: Centre for Agroecology, Water and Resilience at Coventry University

Senedd Cymru | Welsh Parliament

Pwyllgor Newid Hinsawdd, yr Amgylchedd a Seilwaith | Climate Change, Environment, and Infrastructure Committee

Atal a gwrthdroi colli natur erbyn 2030 | Halting and reversing the loss of nature by 2030

1. Your views on the effectiveness of current policies / funds / statutory duties in halting and reversing the loss of nature by 2030.

(We would be grateful if you could keep your answer to around 500 words).

1. Biodiversity. The EU launched its legislative framework for environmental protection with the 1979 Birds Directive, and in the 40 years since, levels of biodiversity have fallen sharply across the continent. By 2000, farmland species had lost a quarter of their 1970 populations (De Heer et al., 2005). Throughout the UK, and beyond, current policies, funds and statutory duties at best result in temporarily reducing permanent biodiversity loss. At worst distract from the transformative changes needed to reverse biodiversity depletion.
2. Pollution. Equally, pollution regulations, e.g. NVZs have often proven to have resulted in little or no improvement (Orellana-Macías et al, 2020; Kay et al 2012) this, despite massive investment in subsidies to incentivise environmentally-beneficial farming practices, suggests that merely paying farmers and land managers does not promote the behaviour needed to halt and reverse the loss of nature for 2030 or later.
3. Production. Some farmers see any requirement to improve biodiversity, or other environmental parameter, as impacting negatively on production. This is either in time spent enacting the biodiversity requirement, land lost, investments made or other input. This was institutionalised and exacerbated by previous policies which have lasted decades (e.g. the previous requirement of the CAP to remove trees and hedges from BPS calculations). Now, funded AES schemes fail to influence positive farmer behaviour due to their prescriptive approach and design, including inflexible payment conditions, poor targeting and little scientific evidence of success in either biodiversity or commercial production parameters (Batáry et al., 2015; Pe'er et al., 2017; Arnott et al., 2019; Ekroos et al., 2019; Pe'er et al., 2020; Maas et al 2021).

4. Farmer and land manager behaviour. Hence, current policy tools often create poorer environmental behaviour in farmers. In our own studies we found that farmers often create additional pollution events in order to get around restrictive policies and legal requirements designed to reduce pollution (e.g. “national slurry spreading day” the day after NVZ closed period due to the costs of slurry tanks and a planning system stacked against them) (Franklin et al 2021). There is also the belief among some farmers that as they know their land the best, they just need targets to meet and the financial support to do it, including skill sets, supporting groups for knowledge exchange and they will best know how to manage their land to halt the decline of nature. Hence, policies and regulations design to limit farmer action on their own land, not only have not proven to be effective in the past, but they also won’t be in the future.

2. Your views on the progress towards implementing the Biodiversity Deep Dive recommendations.

(We would be grateful if you could keep your answer to around 500 words).

1. Transform protected sites. Expanding and scaling up NNP is a good start, but the duration of programmes needs to be longer than just 3 years. This will not encourage organisations or land managers to make the investments needed to achieve aims. Maximising the role of LNRs and SINCs etc will take commitment, in terms of both funding and behaviours at all levels of organisations and society. This can only be achieved through very long-term funding frameworks.
2. Create a framework to recognise Nature Recovery areas. In establishing an expert working group for criteria development and monitoring, it is crucial that non-traditional experts are included – long-time residents and land managers in a given area. They will have an understanding of local areas that isn’t possible to achieve through study, only through living there. They may well be able to advise on what and how to monitor easily whilst improving likelihood of commitment and behaviour change.
3. Unlock potential of designated landscapes.
Designated areas are still separate entities from the landscape and people they are embedded in. This delineation needs to be eroded. The good practice that happens in a NP needs to leak out into local areas. This needs to be supported all departments – including planning. If a planning decision is based on an environmental impact, then that same level of control needs to be throughout Wales. So that dairy farmers aren’t farmers aren’t unable to meet the legislative requirements for a slurry tank because of a planning refusal, but their non-NP neighbours can.

3. Your views on current arrangements for monitoring biodiversity.

(We would be grateful if you could keep your answer to around 500 words).

At the moment there is still a reliance on scientists using sampling techniques, surveys, and counting methods to monitor biodiversity, including satellite images, DNA sequencing, and acoustic monitoring. These are effective but limited because the organisations generally involved in this work are too small. A significant improvement would be to develop a much larger workforce including a wider range of citizen scientists (ie members of the public), schools (a much greater inclusion of biodiversity, landscape and environmental concerns included in the curriculum), those less able to access the countryside (e.g. in poor transport areas, sheltered housing, residential care settings) and many other groups. These groups could monitor via camera traps. Thousands of hours of video could be assessed for free (see Mobilising Citizen Science for Marine Recording).

4. Your views on new approaches needed to halt and reverse the loss of nature by 2030.

(We would be grateful if you could keep your answer to around 500 words).

This entire drive needs to be about behaviour change and therefore understanding what creates it.
1. Foreseeability. Farmers and land managers need long term schemes so that they can fully understand inputs and risks.
2. Control. Farmers and land managers appear to respond better to schemes (such as payment by results) when they are given the goal but they decide how to achieve it. Not by regulations.
3. Inclusion. Everyone needs to be involved. The youngest through schools and the eldest through care settings. Monitoring through trips out, forest schools, video traps, eDNA collection etc are all valid techniques that create inclusion and understanding.
4. Courage. We've done this before. Wales' Well-being of Future Generations (Wales) Act is a world-leading piece of legislation. We need to do this again for biodiversity. A whole country approach. Engaging the few (farmers, land mangers and scientists) only will not achieve the result we need for biodiversity. There needs to be a country wide, holistic approach to supporting, changing and monitoring.

5. Do you have any other points you wish to raise within the scope of this inquiry?

(We would be grateful if you could keep your answer to around 500 words).

No comment.