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Dear Editor,

Welsh Sustainable Farming Scheme and Liver Fluke

Profound changes in the management of agriculture land are afoot across the UK. In Wales, the current consultation for the Sustainable Farming Scheme (SFS)¹ is garnering fierce debate. A recent impact assessment indicates that 5,500 jobs could be lost as a result of the scheme, a figure that has sent shockwaves through the Welsh agricultural industry².

Yet, there is one less focused upon universal action in the SFS that has caught our attention as we begin work on a newly funded BBSRC endemic livestock disease research project focusing on liver fluke control, which has specific onus on the role of the environment in fluke transmission³. All farms will have to manage at least 0.1 or 0.2 ha worth of ponds or scrapes, with most farms likely to have to create new scrapes to achieve this. A scrape is defined as a small, shallow, irregular shaped pool of water that is expected to retain water during the summer months. Unlike ponds, scrapes cannot be fenced, meaning that livestock will have access. Having spent the past 10 years identifying and mapping fluke intermediate host mud snail (*G. truncatula*) habitats on farms, the description of a scrape seems perfect for fluke transmission⁴, and research has demonstrated that newly created scrapes can be colonised rapidly by mud snails⁵.

Careful thought will therefore be needed regarding the creation, placement, and management of these newly created scrapes. The main aim will be to enhance biodiversity and we have no doubt that these scrapes will achieve that. For example, I often come across declining farmland birds such as Snipes, Lapwings and Curlew in such habitats. However, it's imperative that animal health is also at the forefront of our thoughts when implementing such environmental measures, especially as maintaining animal health is amongst the most effective ways of lowering agricultural carbon emissions. Fluke control is a major challenge on many farms with climate change, drug resistance and limitations surrounding diagnostics and treatments all causing significant problems. The creation of potentially new fluke transmission sites on most farms in Wales will only add to the challenge and as such, it is imperative that the Welsh government liaises with relevant stakeholders to ensure suitable mitigations are in place to minimise any impact on animal health, whilst the influence of these new habitats on fluke epidemiology on farms will also need to be monitored by environmental diagnostic tools as the scheme progresses.

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