

LANDSCAPE-SCALE LONG-TERM ECOLOGICAL EXPERIMENTS



ECT's national register of 36 currently-active long-term ecological field experiments (LTEs) includes relatively few studies that were designed as landscape-scale experiments from their outset. Of these, two stand out from the crowd and both are located in the Cambrian Mountains of mid-Wales – Plynlimon Research Catchments (running for 56 years) and Llyn Brienne Stream Observatory (running for 42 years). But now the world is changing as landscape-scale ecological transformation takes centre stage, whether through rewilding, nature-friendly farming or Biodiversity Net Gain (BNG) in urban landscapes. The challenge, however, remains the same as it has always been in applied ecology – how to pin down best practice by establishing true cause-and-effect that has reproducible application in a wide range of habitats and soils. Enter from 'stage-left' a new ECT initiative in partnership with the BES.

On 21 June, ECT convened an interactive workshop for around 40 of the UK's largest public and corporate landowners with interests in landscape-scale transformation, irrespective of whatever end goals may apply (for example, ecosystem restoration, carbon credits, healthier soils). Held in close partnership with the BES at its Wharf Road headquarters in London, the workshop sought to explore the need for best practice, community building and access to expertise in landscape-scale transformation. In other words, how do landowners harness ecological expertise that enables them to learn what works where, apply it reproducibly and achieve the end goals that are *appropriate to them* and not necessarily an ecologist's ideal? Practical, robust ecological science that works in context and delivers for both nature and society.

A majority of land-owning stakeholders present at the workshop expressed support and goodwill towards further activity to build a connected community in landscape-scale experiments and monitoring design; and furthermore that this ought to include some type of centralised hub for existing practices, new best practice and quality assurance processes. ECT will continue to work with BES during the remainder of 2023 to capitalise upon this exciting and important opportunity. It looks likely that a further meeting will be convened before the end of the year with an expanded group of landowner organisations aimed at bringing additional voices to the discussion table.

By way of conclusion, writ large across the day's proceedings back in June was the uneasy relationship we all have with language – more specifically, the way in which ecologists use language and what they mean by it. With representatives of the agricultural sector attending the workshop – one of the most important UK landowner stakeholders – understanding what ecologists mean by terms such as LTEs, landscape experiments, living labs, wholescapes, rewilding, restoration and BNG is key to maintaining an open and constructive dialogue around landscape-scale transformation.

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