

Commission of Inquiry into Peatland Restoration Review Topic 3 Peatland Biodiversity

This review will be lead by Dr Nick Littlewood, of the Macaulay Land Research Institute.

Review team:

Penny Anderson, Penny Anderson Associates; Dr Rebekka Artz, Macaulay Land Research Institute; Dr Olivia Bragg, University of Dundee; Dr Paul Lunt, University of Plymouth; Prof Rob Marrs, University of Liverpool.

Review outline

This review will cover the following:

Biodiversity values:

Define the unique values of peatland biodiversity. This is typically species poor but with a high level of specialism and adaptation of species involved. There is usually rather higher Beta diversity though broadly a range from diverse vegetation in fens to species-poor vegetation in bogs.

Drivers of change:

Consider historical drivers, grazing, forestry, cutting/extraction, drainage and reversion to farmland, atmospheric pollution and diffuse pollution. All these factors may lead to fragmentation or degradation with associated biodiversity impacts.

Status and trends:

Describe the extent of peatland habitats with a breakdown by peatland habitat types by country within UK and designation. The condition of peatlands will be covered briefly. Trends in key wildlife species will be addressed.

Best management practice:

Discuss where management maintains important biodiversity features. It will assess situations such features are jeopardised, for example, the impacts of over-grazing and under-grazing.

Possible future climate change impacts:

The potential resilience of peatlands to absorb climate change can be reduced by bad management. This section will also look at past and present changes and consider how these might impact if they are projected into future.