

Update on the State of the UK Peatlands

a short summary

Rebekka Artz (James Hutton Institute), Chris Evans (CEH), Ian Crosher (Natural England), Mark Hancock (RSPB), Matt Scott-Campbell (Moors for the Future Partnership, MFFP), Mike Pilkington (MFFP), Peter Jones (NRW), David Chandler (MFFP), Andrew McBride (SNH), Katherine Ross (Falklands Conservation), Richard Weyl (NIEA)

In memory of Dr Richard Payne



Remit

- an update on the 2011 JNCC report, focusing on new information obtained:
- 1) mapping of peat soil extent, land cover, condition and change.
- 2) current understanding of trajectories of change following restoration activities





Peatland extent



Table 1. Peat areas reported in JNCC (2011) and updated/additional area estimates based on more recent mapping, where available, from the UK BEIS Inventory project (Evans et al., 2017⁵). Note that only true peats (not 'peaty soils') as per national definitions are included in the estimates, and that data are not available for separating deep from 'wasted' peats in any country other than England. Peat areas in other UK Overseas Territories and Crown Dependencies have not been quantified.

Country/administration	2011 (ha)	Updated (ha)	Change
Scotland	1,726,900	1,947,750	+220,850
England (deep)	495,828	495,828	-
England (wasted)	186,372	186,372	-
Wales	70,600	90,050	+19,450
Northern Ireland	206,400	242,622	+36,222
UK Total	2,686,100	2,962,622	+276,522
Isle of Man	No data	475	+475
Falkland Islands	No data	282,100	+282,100
Combined total	Not available	3,245,197	+559,097

• Still lots of uncertainties !!



Peatland condition



- Woodland
- Cropland
- Eroded Modified
- Modified, Heather-dominated
- Modified, Grass-dominated
- Intensive Grassland
- Extensive grassland
- Extracted (industrial)
- Extracted (domestic)
- Rewetted
- Near natural





Peatland condition – designated sites



- 2013 Habitats Directive Report:
- overall, all nine peatland habitat types under nature designation are currently in bad condition.
- Six of the peatland habitats were considered to show an overall improving trend in condition status. The majority of these, however, are fen type habitats, which occupy a relatively small proportion of the total UK peatland area.
- The condition of most bog habitats, including that of blanket bog, was declining. This is a worse picture than suggested in the previous report published in 2007, and primarily due to changes (improvements) in methodology, but in one instance, for active raised bogs, a genuine decline in trend was identified.



Peatland restoration effort





	England	England (wasted peat)	Scotland	Wales	NI	Isle of Man
Rewetted Bog 1991- 2013	24,705	265	20,155	4,013	712	No data
Rewetted Fen 1990-2013	17,835	-	1,171	1,544	150	8
Restoration areas 2013-2019	Unknown (see text)	Unknown (see text)	Up to 72,800* (see text)	Unknown (see text)	>2000 (see text)	No data
Rewetted area	>42,540	>265	Up to ~90,000	>5,557	>2862	8

*Peatland Action running total to date, based on area figures in submitted and accepted grant applications to date (incomplete data, not yet quality controlled, hence please treat with caution; see text for further information);

Peatland restoration effectiveness





Lots of reported ways of assessing restoration success !! But no standardised monitoring or assessment protocol...



Restoration trajectories





Plus plenty of material in non-peer reviewed literature, e.g (nonexhaustive):

Natural England review of upland evidence -Restoration of Degraded Blanket Bog

Moors for the Future Partnership; Making Space for Water project

Exmoor Mires Restoration Project

Penny Anderson Associates (2014) Improving the Evidence Based Guidance Relating to Favourable Condition for Priority Habitats, SSSIs and SACs: Blanket Bog. Natural England Commissioned Report



Recommendations



- A major obstacle in measuring restoration success is the lack of a common definition of a target state, and the lack of a common framework for monitoring and reporting.
- No monitoring framework in place in relation to international obligations regarding restoration (Aichi 15) targets or the UK's obligations to report GHG emissions under the UNFCCC and Kyoto Protocol.
- Harmonised biodiversity and wider condition monitoring frameworks still limited to just designated areas
- Collation of these data may require a decision on an appropriate centralised body at UK or Devolved Administration level for data handling



Recommendations - continued



- Cost of peatland restoration needs to be reporting with standardised methods.
- Consider mapping benefits to multiple ecosystem services even if these cannot yet be fully quantified or monetarised.
- Raise the profile of the (substantive) peatlands in the UK's Crown Dependencies and Overseas Territories
- Restoration grant aid should fund a level of on-site monitoring appropriate to the uncertainty of the outcome. Monitoring required in the restoration area and a comparable reference site in the same region, that represents a suitable target state for the restoration site.



Recommendations - continued



 Future policy development in Climate Change, Biodiversity, Planning and Agricultural arenas, especially post the (currently still ongoing) Brexit process, should explicitly regard the specific need of peatland restoration and conservation goals, given their importance for greenhouse gas emissions mitigation and in delivering UN Sustainable Development Goal 15.



Please feel free to dip into the draft document and send feedback – we are only human and may have missed critical information!

Thank you!

