Scottish Wildlife Trust

RACCE Committee

Draft Budget 2013-14 call for views

The Scottish Wildlife Trust welcomes the opportunity to submit evidence to the RACCE committee. We will concentrate our submission with regard to Chapter 7, *Rural Affairs and the Economy*, presenting evidence on lowland raised bogs.

We note, under Budget priorities, there is the intention to: *invest in peatland restoration, as part of our further investment in construction, skills and the green economy. Peatlands offer a number of multiple benefits to the Scottish economy, environment and society, e.g. water quality, biodiversity and potential carbon benefits.*

Lowland raised bogs

Lowland raised bogs are a form of peatland that are amongst the rarest and most threatened habitats in Scotland, and indeed the whole of Europe. They are naturally relatively species-poor, but are still considered very important for biodiversity as they contain unique assemblages of species, several of which are rare and/ or threatened.

Annex 1 of the EU Habitats Directive includes two lowland raised bog habitats: active raised bog and degraded raised bog. This unprecedented inclusion of degraded habitats within Annex 1 underlines the rarity and importance of recoverable lowland raised bog.

The state of Scotland's lowland raised bogs in 2012

In 2012 the Scottish Wildlife Trust published a report on Scotland's lowland raised bogs.[1] The aim of the project was to assess the current state of 58 sites (covering just over 4000 ha) and to analyse changes in condition by comparison with surveys carried out in 1994/5. The project also identified sites suitable for restoration and identified landowners supportive of restoration.

The main findings were:

- **48%** of sites showed **deterioration** in condition, 36% of sites showed an improvement in condition and 16% of sites showed no change in condition
- The total **carbon stored** across the survey area is estimated to be **10.1 Mt of carbon**.
- An extrapolation from the carbon stored in the surveyed sites gives an indicative carbon storage figure for all Scottish lowland raised bogs of **59.4 Mt of carbon**[2]
- In their existing condition the surveyed sites have **little potential for active peat accumulation** and carbon sequestration
- 39 out of 41 private landowners questioned (95%) were either very supportive or broadly supportive of grant-aided restoration measures being carried out on their sites
- **Active management will be required** to counteract past damage and bring the sites into favourable condition

[1] Matthews, P, Hughes, J and Dowse, G. (2012) *The state of Scotland's lowland raised bogs in 2012: interim findings from a survey of 58 Scottish lowland raised bogs and analysis of change since 1994/95.* Scottish Wildlife Trust, Edinburgh.
[2] The survey site represents 17% of all of Scotland's lowland raised bogs and they are assumed to be representative of the whole of the Scottish resource. Total area of lowland raised bogs is c 27,892 ha,

The main causes of damage to lowland raised bogs were from:

- Site drainage - 97% of sites were affected by artificial drainage ditches across the mire expanse.
- Woodland and scrub invasion - 45% of the restorable peatland area was covered by open and closed-canopy woodland or scrub
- Peat cutting - 9% of sites were subject to active peat cutting on a semi-commercial or commercial scale

Estimated costs of restoration

The restoration of a lowland raised bog site involves reversing past damage and returning the habitat to a favourable condition. The main forms of damage affecting raised bogs are past and present peat cutting, the presence of scrub and woodland, and artificial drainage. Whilst removed peat cannot be put back in the short-term, restoration efforts can focus on the removal of scrub and woodland, and raising the water table by damming drainage ditches. There may also be on going management practices that cause damage, such as poaching damage from livestock and management of the bog vegetation by burning, and it may be possible to address these issues by entering into landowner management agreements.

The actual costs involved in restoring a site are likely to be fairly complex and based on a management prescription specific to each site. Nevertheless a reasonable estimate of costs can, arguably, be made based on past restoration project costs and on grants available for the restoration of raised bogs or similar habitats. This is the approach used to calculate the costs of restoration for the sites surveyed during 2010/11 and the survey results are used as the basis for these calculations. The estimated costs for the restoration of the surveyed sites are also extrapolated to provide indicative restoration costs for the whole Scottish raised bog resource.

Restoration costs in the report are estimated based on the restorable peatland area and include capital costs (e.g. removal of tree cover and installation of dams) and annual management costs (e.g. grazing and maintenance of dams).

Per unit (ha) of lowland raised bog capital costs are estimated to be £1,280 and annual management costs are estimated to be £40 year^{-1}.

It was estimated that the cost of restoring a total 50 sites would be **c. £1,481,000** (capital cost) and the annual management cost would be £46,000.

Extrapolation across the whole of the Scottish resource equates to c.21 million (capital cost) and an annual management cost of c. 650,000.

Conclusions:

The Scottish Wildlife Trust's report highlights the clear need to restore this particular peatland resource - lowland raised bogs. Furthermore, peatland restoration is not just a Highland rural issue; many lowland raised bogs are found in the Central Belt and Borders.

Restoration would provide an opportunity to deliver significant biodiversity objectives whilst at the same time it helps meet climate change and water quality objectives.

Restoring peatlands helps sustainable economic growth by drawing money into rural areas, sometimes very remote ones, through management payments from CAP and natural heritage grants. Private finance to peatland managers from corporate sector is increasingly possible as the ecosystem service benefits of peatlands is realised as shown in the IUCN Peatlands Inquiry.[3]

Restoring and conserving peatlands avoid costs to society from carbon emissions and reduces downstream costs to drinking water treatment and salmon fisheries that would arise from damaged peatlands.

[3] See:
http://www.iucn-uk-peatlandprogramme.org/sites/all/files/IUCN%20UK%20Commission%20of%20Inquiry%20on%20Peatlands%20Full%20Report%20spv%20web.pdf

Therefore the proposed budget for peatland restoration and conservation is welcomed as this will help support restoration projects and allow extra money to be drawn down from matched funding. As our report illustrates initial outlay is high, but annual maintenance costs thereafter are not.

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