Rob Gibson MSP Convenor Rural Affairs, Climate Change and Environment Committee The Scottish Parliament Edinburgh EH99 1SP

19 November 2013

Dear Rob,

Regarding evidence given to your committee by two witnesses on 13 November that indicated that weather and climate change were responsible for peat erosion- rather than there being any impact from deer or sheep- we sought the opinion of the Director of the IUCN peatland programme. We hope the committee finds the comments below useful.

Kind regards,

Duncan Orr-Ewing, RSPB Scotland Mike Daniels, John Muir Trust Dr. Maggie Keegan, Scottish Wildlife Trust

## Effects of grazing on peatbogs - Comments from IUCN Peatland Programme Director Clifton Bain

There is clear evidence that grazing animals can have a damaging impact on peatbogs. High grazing intensity and associated trampling can cause physical damage to the peatland system or changes to the typical peatland vegetation resulting in a species mix that does not provide peatland ecosystem function or peatland biodiversity. Reference - Aletta Bonn, Don Monteith, Mark Reed, Kirsty Blackstock, Nick Hanley, Des Thompson, Martin Evans and Isabel Alonso. 2011. *UK National Ecosystem Assessment.* Chapter 5: Mountains, Moorlands and Heaths. Defra. (available at: <a href="http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx">http://uknea.unep-wcmc.org/Resources/tabid/82/Default.aspx</a>)

The impact of grazing animals can exacerbate the damage from other factors such as burning or drainage. With the majority of peatlands in the UK having been affected by some form of damage the habitat is vulnerable to the additional pressure from grazing. The result is a more speedy deterioration of the peatland system leading to erosion with gullies and areas of bare peat. Across peatlands internationally there is effort to control grazing animals to prevent damage to peatlands and this is being promoted by the food and agriculture organisation of the United Nations – ref Peatland Guidance for Climate Mitigation <a href="http://www.fao.org/docrep/015/an762e/an762e.pdf">http://www.fao.org/docrep/015/an762e/an762e.pdf</a>

Restoring damaged peatlands has been widely practised and supported by government grants and international funding (SNH Peatland Management Scheme, Scottish Rural Development Programme, EU Life funding for the Flows) which has included measures for reducing deer grazing pressure by fencing. Numerous successful peatland restoration projects have been achieved on blanket bogs in the Scottish Highlands See: IUCN UK Demonstrating Success booklet <a href="http://www.iucn-uk-peatlandprogramme.org/resources/199">http://www.iucn-uk-peatlandprogramme.org/resources/199</a>

Restoration of damaged areas for example by fencing alone may not be achievable in some areas as the erosion features require additional management to repair them. This includes blocking drains and gullies or in extreme situations revegetating bare peat. There are opportunities for funding such restoration work through the Scottish Governments recently announced £15 million fund for peatland restoration and from private sources through the pilot Peatland code.

The longer a degraded peatland is exposed to high grazing pressure the greater the risk of further deterioration and severe erosion of the peatland which becomes more difficult and costly to repair. Therefore early remedial action including reducing grazing numbers and associated peatland restoration work becomes a cost effective way of preventing further loss to carbon, biodiversity and water management function.

Figures a) and b) show that the absence of deer (and sheep) can allow eroded peatland to recover.



a) Highly degraded eroded hill top blanket peat in east Sutherland with deer grazing.



**b)** Recovering eroded hill top blanket peat at same site but inside a deer fence with no grazing for >20yrs.

(Source of pictures: Dr Richard V. Birnie and Dr Mary-Ann Smyth – Standard values for estimating GHG emission reductions from restoration projects on UK blanket bogs.– Research Briefing.)