

NATIONAL PARKS

Britain's breathing spaces

PARCIAU CENEDLAETHOL PRYDAIN
Lle i enaid gael llonydd

PÀIRCEAN NÀISEANTA NA H-ALBA
Àiteachan analachadh bhreatainn

Britain's National Parks as test beds for ecological mitigation and adaptation to the impacts of climate change – an agenda for action

A statement by the Ecologists of the National Parks of England, Scotland and Wales

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Introduction

National Parks actively influence the management of 10% of Britain's land area. Their expanses of mountains and moorland, forests and grasslands, caves, coasts, rivers and wetlands and the diverse wildlife that depend upon them are special and precious but, owing to their geographic locations and climatic extremes, they are especially vulnerable to the impacts of climate change.

Given their geographic location, range of habitats, species and ecosystems and the climatic extremes that they experience, Britain's National Parks are well positioned to make a significant national and regional contribution to mitigating and adapting to climate change **through flood control, water conservation, carbon conservation, woodland expansion, biodiversity conservation and sustainable farming**. They provide montane, upland, lowland and coastal barometers of the ecological changes taking place and the space for rural responses to the changes ahead. Now is the time to take advantage of these qualities and to develop this role for the Nation.

Collectively, Britain's organic soils and peatlands hold more carbon than the forests of Britain and France together and Britain's National Parks hold most of them. However, chronic and ongoing erosion and soil compaction, historic overgrazing, increasing soil temperatures and reduced summer rainfall mean that these natural carbon stores have become significant carbon sources, contributing to greenhouse gas emissions, potentially on a scale that dwarfs technical and industrial efforts to curb greenhouse gas emissions in other sectors.

As well as these large tracts of peatlands and other wetlands, Britain's National Parks include river sources and coastal ecosystems where improved ecological condition and management will help conserve water resources, restore carbon sinks, provide recreation opportunities and alleviate lowland and coastal flooding.



Within National Parks the wider countryside is on the whole less fragmented than elsewhere, as demonstrated by their larger share of national and international protected sites. Only at this landscape scale is it possible to provide the space to achieve these benefits and to enable biodiversity to flourish. National Parks offer the space to develop national and regional responses but need help to achieve this owing to their small populations and low economic base. Managing National Parks relies upon the co-operation and viability of farming, forestry, water resource management, development control and realistic investment in the costs of landscape conservation.

Therefore, drawing on a more detailed background paper¹ as well as advice issued by the National Parks' representative bodies, the conservation agencies and DEFRA, the Ecologists in Britain's National Parks posit the following agenda for mitigating and adapting to climate change and conserving biodiversity within National Parks. The agenda includes a range of suggested short term and mid-term actions and support measures.

1. The issues

There is a need to:

- Recognise that climate change has raised the bar considerably for biodiversity conservation and the high proportion of protected sites and species in Britain's National Parks are equally vulnerable. If they decline or disappear, so does the quality of Britain's landscape and its capacity to respond to climate change. The scale and complexity of biodiversity conservation is very significant and climate change has shortened the timetable within which conservation needs to succeed, effectively increasing the scale of this task still further.
- Recognise that where high biodiversity exists in designated sites and the wider countryside, this has developed in response to historic farming, pastoralism, forestry and water resource management, in short, as by-products of past human intervention. So biodiversity conservation will continue to rely on suitable agricultural practices. It is only on the highest hills and remotest coastlines that near-natural wildness might have returned to the land.
- Recognise that from now on protected sites in a changing climate will only function well if there is widespread biodiversity conservation in the wider countryside and National Parks provide the right space and scale for this.
- Recognise that despite the good track record within National Parks for conserving extensive areas of eroded peat, coastal zones, native forests, rivers and wetlands and the biodiversity they support, the scale and complexity of this task far exceeds the investment made to date and the speed of decline caused by climate change increases the scale and complexity still further. National support is required to meet this nationally important challenge.
- Recognise that soils and the nitrogen cycle are the basis of all food chains and that the vast tracts of semi-improved and unimproved land within National Parks serve as soil reserves.
- Recognise that changing weather patterns may attract more people into National Parks, where there needs to be more investment in rights of way maintenance to prevent the further erosion and decline of fragile and sensitive habitats caused by people pressure.

¹ Climate Change within Britain's National Parks – a Natural Resources Management Response (paper arising from the National Park Ecologists' workshop held at Plas Tan Y Bwlch, Snowdonia National Park in May 2007).



2. Short term opportunities and action

- 2i. Through National Parks' purposes and duty, promote their roles as test-beds for ecosystem-led responses to climate change at a national and regional level.
- 2ii. Develop action plans to maximise the efforts over the next 20 years to conserve and restore key elements of ecosystem function in order that National Parks become the 'healthy beating heart' of Britain's ecosystems in the face of climate change.
- 2iii. In collaboration with the research institutes and conservation agencies, develop minimum estimates of the volumes of organic soils and peat within National Parks, identifying those habitats and management practices that are most critical to carbon conservation and ecosystem function.
- 2iv. In collaboration with the research institutes and conservation agencies, understand the distribution of vulnerable soils within National Parks.
- 2v. In collaboration with the research institutes and conservation agencies, identify strategically important wetland ecosystems for water conservation, carbon sinks and alleviation of lowland flooding.
- 2vi. Continue to work with the farming sector to secure biodiversity and ecosystem benefits.
- 2vii. Increase the resources devoted to reversing footpath erosion.
- 2viii. Educate and advise others on their roles in conserving biodiversity, reducing carbon footprints, and mitigating and adapting to climate change.

3. Mid-term actions

- 3i. Develop the role of National Parks as test-beds for ecosystem-led responses to climate change at a national and regional level.
- 3ii. Implement conservation plans in core zones where carbon sinks, vulnerable soils, wetland/coastal ecosystems and protected sites coincide.
- 3iii. Link these core zones with permeable buffer zones where primary land uses can change in response to prevailing climate and economic conditions and where habitat diversity is high.
- 3iv. Link these buffer zones with mixed use zones close to settlements and other areas of intensive land use.
- 3v. In National Parks, consider accelerating the reversion of unproductive or uneconomic conifer plantations to deciduous broadleaved woodland, heathland and moorland in order to provide "near-natural areas" within and adjacent to the former plantations.
- 3vi. Where suitable and appropriate, maximise broadleaf woodland expansion within Britain's National Parks in order to provide wood fuel, reduce flooding by increasing infiltration, sequester carbon and improve landscape richness and connectivity.
- 3vii. Develop the contribution of National Parks in supporting the Environmental Change Network of long-term ecosystem and climate monitoring stations.
- 3viii. Develop joint projects by teams from across the National Park network on different themes, such as montane or coastal biodiversity, peatland restoration, flood alleviation through wetland conservation and expansion of unimproved grasslands and woodland.

4. Support measures needed

- 4i. National Park Authorities are expected to play a lead and innovative role in achieving sustainable



development through their purposes and duty. To serve as test beds for landscape scale conservation, this means that we look to others to:

- Recognise and provide the resources required to meet this commitment.
 - Look for stepwise improvements in the ecological fabric of National Parks in each successive State of the Park Report.
- 4ii. National Parks in Scotland, Wales and England need to move forward together through jointly led initiatives supported by the three Governments; climate change and biodiversity don't recognise national boundaries.
- 4iii. We seek closer collaboration and support from the Environment Agency, Environment Agency Wales and the Scottish Environmental Protection Agency, to make a special case for eliminating causes of chronic and diffuse pollution and for restoring riverine, wetland and coastal ecosystems within National Parks.
- 4iv. We seek closer collaboration and technical support from the country agencies, research institutes and universities to develop the evidence base for responding to climate change in an informed way.
- 4v. We seek closer collaboration and support from the Forestry Commissions to maximise the biodiversity value, habitat connectivity and near-natural potential of publicly owned plantations.
- 4vi. We look to all public bodies and statutory undertakers to give special attention within and adjacent to National Parks, to their duties under Sections 11 of the 1949 National Parks and Access to the Countryside Act and Section 62 of the 1995 Environment Act, as well as their duty under Section 40 of the 2006 Natural Environment and Rural Communities Act, in order to support and enhance rather than hinder or undermine these test bed initiatives.
- 4vii. In the next phase of Asset Management Plans (AMP5), we look to the water utilities, OFWAT and the agencies to develop catchment management plans that achieve water conservation, wetland restoration and biodiversity conservation within National Parks.

End.

