



TREND IN THE PEAK DISTRICT:

Insufficient information but bird species dependent on this habitat are known to be in sharp decline.

ESTIMATED EXTENT IN THE PEAK DISTRICT:

Rush pasture is widespread in the headwaters of Dark and South West Peak river valleys and along the moorland fringe. It is not known how much of this is high quality habitat.

NATIONAL BAP HABITATS:

There are no relevant national BAP habitats. Rush pasture is considered to be of Peak District importance because of its contribution to the landscape and its importance for nationally and regionally important species.

ASSOCIATED NATIONAL BAP PRIORITY SPECIES:

Water vole, black grouse (extinct), reed bunting, skylark, brown hare.

ASSOCIATED PEAK DISTRICT AUDITS:

Rush Pasture.

INTRODUCTION

Rush pasture includes all mires and wet grasslands in the upper reaches of rivers and at the moorland edge within the South West Peak and Dark Peak Natural Areas. These areas are commonly dominated by either soft or sharp-flowered rush in some instances with a rich assemblage of marsh species but in others in association with relatively species-poor grassland. All are potentially of importance for their invertebrate and bird populations. Waders such as lapwing, curlew and snipe depend on this habitat for feeding and/or breeding, as do several of our farmland birds such as skylark.

Rush pasture does not include mires and wet grasslands throughout the White Peak or in the lower and middle reaches of river valleys within the Dark and South West Peak. It also does not include flushes on open moorland but together with these habitats and with wet woodland it contributes to a rich picture of wetlands across the Peak District.

Rush pasture occurs as a complex mosaic of community types along the fringe of the moorland areas. In this context it often exists in close association with spring-heads, flush-lines, field ditches and small streams. It also exists extensively over permanently damp soils in areas of impeded drainage.

Traditionally these areas have been used for light grazing by cattle. During the 20th century they have come under pressure for drainage and improvement and have suffered from increased stocking rates, which have dramatically altered the quality of the habitat type.

There has been no comprehensive assessment of the area of rush pasture. However it is likely to be in excess of the 32 km² quoted in 1993 for severely disadvantaged areas within the Peak District. It is unclear how much of this is valuable habitat for either flora or fauna although much of it is likely to be potentially important.

Rush pasture exists as part of the intimate mosaic of farmland habitats. The tussocky structure and damp soils contribute to the richness of its invertebrate fauna whilst the structure and rich feeding grounds make it of crucial importance to the survival of many of our best loved farmland birds which have shown dramatic declines in numbers over the last 15 years. For example, curlew, lapwing and snipe numbers declined by 57 – 73 % in the North Staffordshire area between 1985 and 1996. It is also the habitat for increasingly uncommon plants including marsh orchid, ragged robin and marsh cinquefoil.

Rush pasture makes a valuable contribution to the landscape, often existing as a transition and buffer between the more intensively used in-by-land and the moorlands above. Several of the species it supports are equally dependent on the moorland habitat e.g. twite, ring ouzel, golden plover and merlin. It is only by conserving both of these elements within the landscape that we can positively contribute to the enhancement of the populations of these key species.

ADVERSE IMPACTS	Historic	Current
Land Management		
Ploughing and other types of land cultivation including chain harrowing and rolling.	✓	✓✓
In-field drainage.	✓	✓
The modification of stream and ditch profiles.	✓	✓
Inorganic and organic fertilizer, lime and herbicide applications	✓	✓✓
Extensive and regular mechanical rush cutting.	✓	✓
Application of paper pulp.		✓✓
Inappropriate stock type owing in part to the expansion in sheep numbers relative to cattle on many moorland edge land holdings, and the growth in the use of in-by-land fields as pony paddocks.		✓✓
Inappropriate grazing levels including over-grazing in some instances leading to compaction, and neglect in others.	✓	✓✓
Pollution		
Sheep dip disposal.		✓
The adverse effects of Ivermectin on invertebrates.		✓

Others

Tree planting schemes.

Fragmentation – leading to a risk of species extinction and a negative effect on the feasibility of rush pasture restoration.

An impact ✓

Significant impact ✓✓

✓

✓

✓

✓✓

CURRENT ACTION

Designated Sites

- Rush pasture within enclosed fields forms part of the reason for notification of the Goyt Valley and Leek Moors SSSIs. The floodplain mire at Moss Carr in the headwaters of the River Manifold, which includes elements of the rush pasture habitat, is also a SSSI.
- Both the Goyt Valley and Leek Moors SSSIs form part of the South Pennine Moors SPA, designated for its upland bird populations. Rush pasture also contributes to the feeding grounds available for upland birds in the Dark Peak SSSI where the moorland alone forms the SPA.
- A number of important rush pastures are identified as 'Wildlife Sites'.

New Initiatives

- The National Park's Pastures Project targeted wetlands for conservation action in 2000 and five key rush pasture sites each including a number of fields were surveyed during the summer.
- Both Environmentally Sensitive Area (ESA) schemes have introduced re-wetting options and re-wetting projects are underway both in the Dark Peak and South West Peak with the aim of increasing the area of marsh and marshy grassland and soil moisture generally.

Sites Owned and Managed by Conservation Organisations

- The PDNPA owns a number of rush pastures on the North Lees, Warslow Moors and Eastern Moors Estates.
- The NT holdings in the Dark Peak Natural Area probably include in the order of 1000 - 1500 ha of rush pasture, approximately one-fifth of the in-bye farmland.

Sites Within Conservation Agreements

- There are 152 ha of flat pasture managed within the PDNPA Farm Conservation Scheme (FCS), which includes small areas of rush pasture.
- In 1994 54 % of the rough grazing land within the North Peak ESA was in an agreement.
- In 1996 62 % of the rough grazing land within the South West Peak ESA was in an agreement.
- Areas of rush pasture are being positively managed by farmers within Countryside Stewardship (CS) agreements.

Research

- Research projects are underway to explore the possibility of re-wetting rush pasture by breaking up the surface of the soil using a slotting machine.

ACTION PLAN OBJECTIVES AND TARGETS

National Targets

There are no relevant national BAP habitats and so no relevant national objectives and targets (some small areas of mire and tall-herb fen vegetation correspond to the National Fens Key Habitat but the national objectives and targets for the Fens Action Plan relate poorly to the Peak District examples.)

A Vision for the Peak District

The objectives and targets outlined below have been chosen to reflect:

- i) The importance of the rush pasture habitat for internationally, nationally and regionally important bird, invertebrate and plant species,
- ii) The contribution that rush pasture makes to the moorland/farmland interface and to the landscapes of the South West Peak and Dark Peak Natural Areas,
- iii) The presence of two ESAs within the BAP area which should be able to make a significant impact on the conservation and enhancement of the rush pasture habitat.

Rush pastures form a distinctive habitat with tussocky and unruly appearance and reflect decades of hard toil by farmers, struggling to farm marginal and difficult land. They now provide an essential habitat for many important birds, plants and invertebrates. The targets are very ambitious but with resources and targeted effort they can be achieved. The realisation of the actions will ensure that these rough marginal fields remain an important part of the character of the Peak District. It is hoped that the conservation and enhancement of this habitat will be accompanied by a reversal in the depressing decline in marshland plants and important birds such as the curlew.

OBJECTIVES AND TARGETS

Objective 1

Safeguard all existing rush pasture of botanical, bird or invertebrate importance by ensuring favourable management aimed at achieving favourable condition.

Target

Initiate management by 2005 to bring 50% of all rush pasture into favourable condition. Review and set a new target for 2005 - 2010.

Objective 2

Enhance the rush pasture habitat to achieve an extension in the habitat of key species.

Target

Initiate the restoration of 100 ha of poor quality rush pasture by 2005 and 500 ha by 2010 to provide quality habitat for key species, targeting important sites.

Objective 3

Create new areas of rush pasture with the priority being to link or extend existing areas, for example alongside stream-sides or in relation to key species.

Target

Initiate the creation of new rush pasture by 2010, where this is essential in linking and extending the habitat.

Main Factors Likely to Affect Achievement of Targets

Land Management

Implementation of the Rural Development Regulation and reform of the Common Agricultural Policy.

Predicted decreases in the numbers of stock in the uplands as a result of the move to area as opposed to headage payments within the subsidy system – this may well prove positive for the rush pasture habitat.

Decreasing numbers of cattle in the Peak District compared to sheep.

The effectiveness and lack of flexibility within grant schemes particularly ESA schemes. This is of particular concern for the rush pasture habitat where appropriate management often requires additional management prescriptions not available within the scheme, for example stipulations of stock type or all year round stocking rates.

Resources and Financial Incentives

Availability of funding for survey, negotiations and agreements.

Limited rewards from agri-environment and conservation schemes – this is particularly significant for the rush pasture habitat which may cover a large proportion of a holding and can include productive grassland. Annual payments need to reflect the impact that a conservation agreement could have on the economics of the holding if a large proportion of relatively productive land is included in a scheme.

High land prices – forcing intensive management following purchase of land.

Practical Difficulties and Gaps in Knowledge

Inadequate understanding of the habitat and the management necessary for its conservation and enhancement.

Others

The critically small size of populations of key species.

The fragmentation and small size of some rush pastures, particularly botanically rich wetlands.

Lack of safeguard or effective conservation mechanisms outside of SSSIs - it is often at the time of change of ownership that pastures, as with other grassland habitats, are most at risk. At present there is no systematic procedure or mechanism for conservation bodies and local authorities to have an opportunity to safeguard such land.

ACTIONS

Key to the achievement of the proposed targets are actions relating to:

- Habitat and species surveys, coupled with negotiations to secure appropriate land management (Actions RP4, 7 and 22 - 25);
- Ensuring agri-environment and conservation schemes provide adequate financial incentives and appropriate management prescriptions to safeguard, enhance and restore rush pasture, including inventive options for re-wetting and stock control (RP21);
- Awareness-raising and training measures, particularly important in this diverse habitat (RP16 - 18), and
- The development of restoration techniques (RP12 and 13).

ACTIONS	TIMESCALE	LEAD AGENCY & Partners
DATA COLLATION AND SURVEY		
Data Collation		
RP1 Collate all existing information on the rush pasture habitat to include: *PDNPA key sites register *the results of the bird surveys *existing basic information *NT survey information *SSSI survey information *invertebrate information (Objective 1)	Winter 2001	PDNPA/WTs/ EN/LRCs/LAs/ Voluntary Sector
RP2 Compile a register of the rush pasture habitat, including: type, level of interest, condition, presence of important species and conservation status (including 'Wildlife Site' status). Initiate a programme of regular updating. (Objective 1)	Winter 2001 onwards	PDNPA/GBAPG
RP3 Compile a register of the potential areas for restoration and identify priority restoration sites. (Objective 2)	Winter 2002 onwards	PDNPA/GBAPG
Surveys		
RP4 Carry out a co-ordinated survey for all key bird species – lapwing, curlew, snipe, redshank and skylark. Ensure		

	that this survey includes opportunities for habitat assessments and collection of predator information. (Objective 1)	2001	RSPB/Bird Study Groups
RP5	Consider the need for further botanical survey work. (Objective 1)	Winter 2001	PDNPA/GBAPG
RP6	Consider the need and practicalities of collecting invertebrate information during the survey of rush pastures. (Objective 1)	Winter 2001	PDNPA/GBAPG
RP7	Carry out a detailed habitat survey of rush pastures where current information is inadequate. (Objectives 1 and 2)	2002 - 2005	PDNPA/GBAPG

EVALUATING THE IMPORTANCE AND CONDITION OF SITES

Evaluating Importance and Identifying Key Sites

RP8	Agree methodology for the evaluation of rush pastures, including definition of key sites (botanical, invertebrate and bird importance), priorities for conservation action and 'Wildlife Sites' status. To include consideration of nationally and locally important species particularly breeding birds. (Objective 1)	Winter 2001	EN/GBAPG
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Defining Favourable Condition

RP9	Agree definitions of favourable condition for the complete range of sites in the Peak District, including the requirements of important species. (Objectives 1 and 2)	Winter 2001	EN/GBAPG
RP10	Agree guidelines for the range of appropriate management needed to achieve favourable condition, conservation, restoration and creation of rush pastures. This will include guidance on conservation priorities and a review of restoration and creation techniques, and it will define priority restoration and creation areas such as sites adjacent to key bird sites or areas which would link key botanical sites. (Objective 1 and 2)	Winter 2001	GBAPG

RESOURCES

RP11	Seek resources to carry out survey and negotiation of conservation agreements in collaboration with other grassland and bird action plans. (Objectives 1, 2 and 3)	2001	RSPB/PDNPA(joint leads)
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RESEARCH

RP12	Continue the re-wetting/slotting machine research projects and expand if results prove positive. (Objectives 2 and 3)	2001 onwards	RSPB/MAFF/NWW/EN
RP13	Continue to support research at University of Lancaster into the management of rush pasture and ensure that information on techniques is shared with the GBAPG. (Objectives 1 and 2)	2001 onwards	RSPB
RP14	Ensure that the results of research into the effects of Ivermectin on invertebrate communities associated with animal dung are implemented at a local level. (Objectives 1 and 2)	2001 onwards	WEG

MONITORING

RP15	Agree methodology for and implement effective monitoring of rush pasture. Ensure that the results of the process are collated and used to update the rush pasture register. (All Objectives)	2001 onwards	PDNPA/MAFF/EN WTs/NT
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AWARENESS RAISING

RP16	Share information on the wildlife importance and management needs of key conservation and restoration sites with landowners/managers, including feedback from surveys. (Objectives 1, 2 and 3)	2001	PDNPA/MAFF/RSPB EN/WTs/NT
RP17	Make guidelines available on the techniques for restoring rush pasture, to include re-wetting and adjusting stock type, numbers and grazing period. (Objective 2)	Winter 2001 onwards	RSPB /PDNPA/EN GBAPG
RP18	Make guidelines available on the techniques for re-creating rush pasture, to include: reversion to traditional management without inputs; adjusting stock type, numbers and grazing period; the abandonment of field drains and other methods of re-wetting. (Objective 3)	Winter 2001 onwards	RSPB/PDNPA/EN (joint leads)/GBAPG

CONSERVATION ACTION AND INCENTIVES

Designations

RP19	Review coverage of rush pastures in SSSIs and notify further sites as appropriate. Consider extending the Dark Peak SSSI and associated South Pennines SPA to include fringing areas of rush pasture in order to recognise the importance of the moorland fringe habitats for upland birds. (Objectives 1 and 2)	2002	EN
RP20	Review desirability and opportunities for establishment of further key sites as NNRs and LNRs and establish if appropriate. (Objectives 1 and 2)	2005	EN/LAs (joint leads) WTs/NT/PDNPA

Grant Schemes

RP21	Consider recommending a review of all agri-environment and conservation schemes to ensure that: *Targeting at a national, regional and local level gives adequate priority to rush pasture *Management prescriptions are reviewed to include flexible site-specific measures and that restoration prescriptions are effective *Payments are increased to at least income foregone and include small area payments (to encourage the conservation of small areas of species rich wetland within otherwise less interesting management units) *Payments for restoration, for example for re-wetting, are set at an attractive level to increase uptake (Objectives 1, 2 and 3)	2001 onwards	MAFF/EN/PDNPA WEG/GBAPG
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Negotiation and Review of Agreements

RP22	Review management of all sites within SSSIs. Where necessary agree revised management regimes with owners/managers, through appropriate mechanisms, to ensure maintenance or restoration of favourable condition. (Objectives 1 and 2)	2002 - 2005	EN
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RP23	Negotiate appropriate conservation agreements with landowners/managers of all key conservation, restoration and creation sites not in existing agreements, outside of SSSIs, in order to achieve maintenance or restoration of favourable condition. (Objective 1 and 2)	2002 - 2003 (conservation) 2005 - 2010 (restoration)	PDNPA/RSPB (joint leads)/MAFF/NT/WTs/FWAG
RP24	Review management of rush pasture in existing conservation agreements, outside of SSSIs. Where necessary agree revised management regimes with owners/managers to ensure that favourable condition is being maintained or restoration. (Objectives 1 and 2)	2001 onwards	PDNPA/RSPB (joint leads)/MAFF/NT/WTs FWAG
RP25	Review whole holding agreements which include unprotected rush pastures. Consider the opportunities for amending the agreement to incorporate their safeguard and enhancement. (Objective 1 and 2)	2002 - 2005	PDNPA/RSPB (joint leads) MAFF NT/WTs FWAG
Land Acquisition			
RP26	Consider negotiating purchase/lease of priority rush pastures where this would be the most effective way of achieving conservation objectives and where a negotiated conservation solution has been unsuccessful. (Objectives 1 and 2)	2001 onwards	PDNPA/EN/WTs/RSPB NT
Direct Action			
RP27	On land owned by public or conservation bodies, ensure that: *Management maintains and where possible enhances the value of rush pastures *Options for restoration of rush pastures are considered (All Objectives)	2001 onwards	PDNPA/EN/LAs/FC NT/WTs

REGULATION

Planning

RP28	Ensure all planning applications and General Development Orders are adequately assessed in relation to their impact on rush pastures; that loss or damage is avoided; and that opportunities are taken for enhancement. (Objectives 1 and 2)	2001 onwards	PDNPA/EN/LAs/WTs
RP29	Consider the opportunities for the creation of rush pastures in relevant planning decisions, including quarry restoration schemes. (Objective 3)	2001 onwards	PDNPA/EN/LAs/WTs

Pollution Control and Waste Management

RP30	Review procedures and consultation processes in relation to the spreading of paper pulp. (Objectives 1 and 2)	2001	EA/EN/PDNPA/LAs
RP31	Ensure good practice is followed in disposing of sheep-dip, avoiding rush pastures. Implement by continuing with an awareness raising strategy amongst land managers; continuing the programme of licensing; extending consultation procedures for disposal applications to the whole of the Peak District and, where necessary, by enforcement action. (Objectives 1 and 2)	2001	EA/LAs/PDNPA

Other Regulatory Mechanisms

RP32	Ensure that all woodland planting proposals consider the adverse effects of planting on rush pastures. (Objective 1)	2001 onwards	FC/LAs/PDNPA/EN
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RESOURCES

It is envisaged that a significant proportion of the actions proposed will be carried out by the relevant organisations using current resources. These include:

- continuing investment by landowners and managers in managing their land sympathetically for wildlife;
- EN's programme of reviewing SSSI management and designations and its grant and management agreement schemes;
- MAFF's Countryside Stewardship and Environmentally Sensitive Area Schemes;
- the PDNPA's advisory and grants service for landowners/managers and its rolling programme of special conservation projects;
- RSPB, FWAG and the WTs' advisory services;
- the MAFF/NWW/RSPB re-wetting trials;
- RSPB and volunteer surveys;
- continuing management of rush pastures owned by conservation organisations and public bodies (EN, NT, WTs, LAs, PDNPA) and WCs.

Additional resources are likely to be required:

- for species and habitat surveys (2001 - 2002);
- for negotiations (2001 - 2010);
- to provide adequate financial incentives for the conservation and restoration management of rush pastures (2001 onwards);
- to aid in the production of the proposed registers (2001 onwards);
- to implement effective monitoring (2001 onwards).

The PDNPA and EN are currently seeking resources to continue a Pastures Project, aimed at surveying and securing high quality sites within appropriate agreements. The RSPB, PDNPA and EN are currently seeking resources for a Ground-nesting Bird Habitat Project (to run from 2001 - 2004) which would also have implications for rush pasture conservation.