



TREND IN THE PEAK DISTRICT:

Currently stable, though small losses to quarrying. Decline in quality locally.

ESTIMATED EXTENT IN THE PEAK DISTRICT:

Approximately 4000 ha.

NATIONAL BAP HABITATS:

Lowland Calcareous Grassland, Lowland Dry Acid Grassland, Upland Heathland and Lowland Meadows (priority habitats); Fens and Inland Rock (broad habitat types).

ASSOCIATED NATIONAL BAP PRIORITY SPECIES:

Lesser horseshoe bat (extinct), brown hare, skylark, grey partridge, linnet, bullfinch, song thrush, pearl bordered fritillary (extinct), marsh fritillary (extinct), chalk carpet moth, great yellow bumble bee (extinct), red hemp nettle, Appleyard's feather-moss, pipistrelle bat and possibly brown banded carder bee, large garden bumble bee and short haired bumble bee.

ASSOCIATED PEAK DISTRICT AUDITS: Calcareous Grassland, White Peak Acid Grasslands, Limestone Heath, Neutral Grassland, Wetlands, Lead Rakes, Limestone Cliffs, Limestone Scree, Limestone Dales Scrub and Tall Dales Grasslands.

INTRODUCTION

The limestone dales are confined entirely to the Carboniferous limestone of the White Peak Natural Area. They support the most biologically rich habitats of the White Peak with a complex mosaic of communities including grassland, scrub, scree, cliffs, woodland and heathland. With the exception of the ash woodlands (covered by the Upland Ashwoods Action Plan) and rivers (covered by the River Corridor Habitats Action Plan) all of these habitats are covered in this action plan. The dales have provided important sheltered grazing for the White Peak farmers for many centuries and a continuation of this practice is essential to maintain the delicate balance of habitats at each site. Given their inaccessibility to machinery, unlike other grasslands, they have largely escaped agricultural improvement.

The grasslands of the dales are very variable ranging from the predominantly calcareous grasslands to neutral and acid swards, tall herb grassland and lead rake communities. The geographical location, varying topography and underlying influence of the limestone results in a range of transitional communities. Furthermore, the Peak District Dales grasslands are renowned for the presence of plant species which occur at the edge of both their northern (e.g. globeflower, limestone bedstraw) and southern ranges (e.g. dwarf thistle, horseshoe vetch).

The calcareous grasslands of the lime rich soils in the dales are internationally important and can be incredibly species rich, with distinct plant communities on different slopes. Typically, the cooler and wetter north-facing slopes support damp-loving species such as grass-of-parnassus in a sedge rich sward. On the thin drought prone soils of south facing slopes some of the richest grasslands in the U.K. are found with many small and slow growing species co-existing, such as rockrose, salad burnet, small scabious, thyme and fairy flax. This diversity is reflected in the rich and important invertebrate fauna found within the dales.

Where deeper soils have developed masking the underlying effect of the lime-rich bedrock relatively acid or neutral conditions persist. The neutral grasslands include very species rich examples with an abundance of common knapweed, betony and lady's bedstraw. In areas inaccessible to stock, tall-herb neutral grassland may be found. These striking swards with a variety of tall herbs such as common valerian, water avens and burnet saxifrage are of very high conservation value. Jacob's ladder, a rare speciality of the Peak District, is associated with such communities. Around the less intensely grazed edges of scrub, and in particular the open areas within hazel scrub, important species such as bloody cranesbill and globeflower can be found. Such areas are particularly important for invertebrates, including the dark green fritillary.

On the brows of dales, wind blown deposits can obscure the influence of the limestone, resulting in distinct patches and strips of acid grassland with swathes of fescue and bent grass, with heath bedstraw, heath speedwell, tormentil and even bilberry. Notably mountain pansy can be conspicuous in such swards. These areas of acid soils can extend down the dalesides giving rise to distinct zones of acid grassland. The acid grasslands occasionally grade into dry heathland, dominated by heather, such as occurs at Coombs Dale and Back Dale. Elsewhere, interesting mosaics and transitions can be found where both acid vegetation and lime-loving plants grow in an intimate mix, responding to the varying depth and character of the soils.

Scrub can be an important component. Retrogressive hazel scrub is thought to derive from ancient ash woodland, consisting mainly of hazel with perhaps field rose, guelder rose and wild privet. Such scrub is a treasure trove of plants with remnants of woodland flora, such as lily of the valley and wood sage, growing with a variety of grassland plants. Important birds such as whitethroat and song thrush favour these areas. Elsewhere, hawthorn scrub, the commonest scrub type in the dales, may be well established, providing nesting sites for songbirds and nectar and shelter for insects. However, encroaching hawthorn scrub is undesirable ecologically as it leads to the loss of important species-rich grassland. A third type of scrub, dominated by gorse, is often found where acid conditions prevail. These areas are important for birds such as linnets and a rich nectar source for insects.

The spectacular limestone cliffs which are found within many limestone dales also support very variable vegetation types on the ledges and within rock crevices. These include communities of small annual plants, ferns, mosses and lichens, calcareous grassland plants, tall herbs, woodland ground flora and occasional trees and shrubs. Almost inaccessible, cliffs support perhaps the most natural type of vegetation in the Peak District. Rich in a variety of rare vascular plants, lichens, mosses and liverworts, cliffs are also important as nest sites for breeding birds such as ravens, and hibernation roosts for bats.

Limestone screes are commonly found on the dalesides, often at the foot of the cliffs. These support a restricted flora commonly composed of specialist plants including the nationally scarce limestone fern and dark-red helleborine. Some areas of scree have been or are being colonised by a vigorous growth of ash in the first stages of succession to ash woodland.

A number of important lead rakes - surface spoil heaps of waste material from the mining of lead - are also found. These rakes support a complex mosaic of different grassland types, which reflect the variations in topography and the nature of the waste material. Notably, the toxic nature of some of the lead rake material results in distinct areas of open metallophyte vegetation with nationally important species such as spring sandwort.

The unusual drainage qualities of limestone has resulted in a number of important basic flushes within the dales. Such areas are characterised by a number of species which are uncommon in the White Peak, such as butterwort and flat sedge and a rich invertebrate fauna. These rare habitats are found where springs occur, a result of impervious, volcanic rock layers forcing water to the surface on the dalesides, usually close to rivers. Monks Dale and the Wye Valley both have small but good examples of these communities.

Increased stocking levels and changes in types of stock will have affected the quality of some sites. Losses to scrub encroachment through lack of grazing are known to have been significant since World War 2. In the past a small number of sites have probably been lost to plantations.

The limestone dales are of exceptional landscape value, with their steep impressive slopes, interspersed with dramatic cliffs and screes. They are often visually striking with the light catching them in all their moods from carpets of wildflowers in the summer to frost clad grasses in the winter. With such a variety of vegetation types they are a feast for the eyes with their ever-changing tones and textures. Often hidden from the White Peak plateau they are a retreat into a truly semi-natural habitat. Given this unique landscape value the dales attract a significant number of visitors and the cliffs are popular with rock climbers.

ADVERSE IMPACTS	Historic	Current
Land Management		
Inappropriate grazing regimes, including: type of stock; undergrazing resulting in invasion by coarse grassland and scrub; overgrazing, and supplementary feeding (causing localised enrichment and poaching).	✓	✓✓
Applications of organic and inorganic fertilisers or herbicide, pesticides and lime on accessible parts of the dale or on adjacent land.		✓
Applications on accessible areas.		✓
Pollution		
Use of Ivermectin and its associated effects on invertebrates.		✓
Atmospheric pollution (particularly of Nitrous oxide).	✓	✓✓
Climate change.		✓
Others		
Tree planting schemes.	✓	
Limestone quarrying and mineral extraction.	✓	✓
Recreation – this tends to be a local threat in relation to rock climbing, footpaths erosion and disturbance to screes.	✓	✓

An impact ✓ *Significant impact* ✓✓

CURRENT ACTION

Designated Sites

- The majority of the limestone dales (approximately 3300 ha) are designated as SSSIs.
- 1344 ha of the SSSI dales are protected within the Peak District Dales cSAC (of which approximately 930 ha are open habitat). The complexity of these sites is recognised in the list of features now covered by this designation, with calcareous grasslands, metallophyte vegetation, heath, base-rich wetlands, tall herb grassland, screes and inland rock (chasmophytic) vegetation all considered of international importance.
- A number of limestone dales are identified as 'Wildlife Sites'.

New Initiatives

- EN has embarked on a comprehensive monitoring programme with the aim of agreeing favourable management with owners and occupiers to bring all SSSI sites into favourable condition.

Sites Owned and Managed by Conservation Organisations

- 374 ha of daleside SSSI are owned or managed by EN and form the Derbyshire Dales NNR, of which approximately 60 % is open habitat.
- The PDNPA owns several limestone dale sites, including northern Tideswell Dale, part of Taddington Dale and Millers Dale Quarry (which the DWT manage as a Nature Reserve).
- 65 ha of open dales habitats are managed by DWT as Nature Reserves.
- The NT owns significant areas of limestone dales, including substantial proportions of Dove Dale and the Hamps and Manifold Valleys.
- In 1999 Plantlife purchased an important limestone dale SSSI covering 36 ha and the site is now managed as a Nature Reserve.

Sites Within Conservation Agreements

- 35 owners or occupiers of 400 ha of daleside open habitats hold management agreements with EN through the White Peak Wildlife Enhancement Scheme (WES).
- A significant area of daleside is managed within the Countryside Stewardship Scheme (CSS).
- 420 ha of steep grassland are managed under the PDNPA Farm Conservation Scheme (FCS). A proportion of this will be within the limestone dales.
- Of the SSSI grasslands so far monitored, approximately 280 ha of grassland outside WES or other conservation management agreements and not owned by nature conservation bodies, is in favourable conservation status.

ACTION PLAN OBJECTIVES AND TARGETS

National Targets

Lowland Calcareous Grassland, Lowland Dry Acid Grassland and Lowland Meadows:

- Arrest the depletion throughout U.K.
- Agree favourable management on all resource within SSSIs in unfavourable condition by 2005 and achieve favourable condition wherever feasible by 2010.
- Secure favourable condition over 30 % of resource outside SSSIs by 2005 and as near 100 % as practicable by 2015.
- Re-establish 1000 ha of calcareous grassland, 500 ha of acid grassland and 500 ha of lowland meadow at carefully targeted sites by 2010.

Upland Heath:

- Maintain current resource in favourable condition.
- Achieve favourable condition on all resource within SSSIs by 2010 and improve the condition of at least 50 % of resource outside SSSIs by 2010.
- Restoration of 50000 - 100000 ha by 2010.
- Re-creation of 5000 ha by 2005.

Inland Rock:

- Broad habitat type only, no national targets set.

A Vision for the Peak District

The following objectives and targets are ambitious, in excess of the national targets. In part this reflects the fact that the majority of the dales are within existing statutory sites, which adds to the resources available for the implementation of conservation measures. It also reflects how important the Peak District is for this habitat. Undoubtedly the dales are scientifically important, particularly for their impressive calcareous grasslands. But they are also special places of beauty and to some they effuse spiritual qualities. With their steep sided valley slopes, impressive rock outcrops and ancient screes they can be visually striking. The dales are often a surprise, hidden from the White Peak Plateau and rarely traversed by roads. On a small scale they harbour a myriad of nooks and crannies full of contrasts, beautiful flowers, lush ferns and mosses, or strange rock formations. It is hoped that organisations and land managers can work together to manage the dales positively, not only to enhance and conserve the immense wealth of wildlife found in the dales, but to ensure that these unique areas, found nowhere else in Britain, can be enjoyed and appreciated in the future.

OBJECTIVES AND TARGETS

Objective 1

Maintain the current extent and distribution of priority daleside habitats and seek to secure favourable condition on 100 % of the resource.

Target

Secure favourable management, by 2005, on 100 % of all SSSI dalesides and 80 % of all sites outside of SSSIs, by negotiating appropriate voluntary, CSS, WES or other conservation agreements. Review and set new targets for 2005 - 2010.

Objective 2

Restore priority daleside habitat, determined on a site by site basis, on heavily overgrazed or scrub invaded dalesides with the aim being to achieve favourable condition within relevant nationally or locally important habitat types.

Target

Assess the need for restoration of daleside habitats and target priority areas as appropriate. Initiate the restoration of 30 ha of daleside habitat by 2010.

Objective 3

Create new daleside habitats, giving priority to areas adjacent to important sites or which link existing fragmented sites (particularly aiming to link sites for BAP species).

Target

Identify the opportunities for creation of a minimum of 10 ha of daleside habitats on appropriate sites by 2010.

Main Factors Likely to Affect Achievement of Targets

Land Management

- Implementation of the Rural Development Regulation and reform of the Common Agricultural Policy.
- Effectiveness of agri-environment and conservation scheme prescriptions.
- The availability of appropriate grazing stock in the current agricultural climate.
- Difficulties of managing limestone dales sites with a complex range of habitats and communities, each with differing and sometimes conflicting management requirements.

Resources and Financial Incentives

- Availability of funding for negotiations and agreements.
- Limited rewards from agri-environment and conservation schemes and lack of incentives for favourable management.

Planning and Regulations

- Planning policy.

Conflicts with Other Priorities

- Conflicting conservation priorities, particularly during restoration (e.g. value of scrub).
- The practicality/desirability of re-creating dale grasslands where succession to scrub has been proceeding since the 1950s.

Others

- The impact of access, including the Countryside and Rights of Way Act 2000, which gives right of access on foot across open country. This could include limestone dales.
- The effectiveness of methods to minimise recreational impact.

ACTIONS

Key to the achievement of the proposed targets is a whole landscape approach taking into account the ash woodland as well as the grassland, wetland, scrub, limestone heath and lead rake communities. Key actions within the plan include:

- Defining objectives (favourable condition) on a site-by-site basis (Action LD8);
- A review of management within SSSIs (LD23);
- Continuing to provide appropriate financial incentives for enhancement to landowners (LD22), and
- Ensuring positive management of sites in the ownership of conservation organisations (LD28).

ACTIONS		TIMESCALE	LEAD AGENCY & Partners
DATA COLLATION AND SURVEY			
Data Collation			
LD1	Collate existing information and identify gaps in the knowledge for dales outside of SSSIs. (Objectives 1 and 2)	2001	EN/PDNPA WTs/LAs/LRCs Voluntary Sector
LD2	Compile a register of potential areas for restoration and identify priority sites for action. (Objectives 1 and 2)	2001	EN/PDNPA/WTs
LD3	Compile a limestone dales register of sites including classification into types, level of importance (including 'Wildlife Site' status), condition, constituent habitats, important species and conservation status and initiate a programme for regular updating. (Objectives 1 and 2)	2001	EN/PDNPA/WTs
Survey			
LD4	Identify priority sites for detailed habitat survey. (Objectives 1 and 2)	Spring 2002	EN/PDNPA/WTs

LD5	Following collation of data and identification of priorities, carry out detailed habitat survey of any un-surveyed dales. (Objectives 1 and 2)	2002	EN/PDNPA/WTs
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EVALUATING THE IMPORTANCE AND CONDITION OF SITES

Evaluating Importance and Identifying Key Sites

LD6	Agree methodology for the evaluation of limestone dales, to include the identification of 'Wildlife Sites'. (Objectives 1 and 2)	2002	EN/PDNPA/NT WTs
LD7	Identify target areas appropriate for scrub clearance and grassland restoration. (Objective 2)	2003 - 2005	EN/PDNPA

Defining Favourable Condition

LD8	Define favourable condition for dalesides on a site-by-site basis within a Peak District wide framework, including assessment of the appropriate balance of different habitats. (Objectives 1 and 2)	2001 onwards	EN/PDNPA/NT WTs
LD9	Agree guidelines for the conservation and restoration of limestone dale habitats. To include: *The range of appropriate management needed to achieve favourable condition *The identification of target areas for restoration *The techniques needed for restoration (Objectives 1 & 2)	2001	EN/PDNPA/NT WTs
LD10	Agree guidelines for the creation of limestone dale habitats. (Objective 3)	2001	EN/PDNPA/NT WTs

RESEARCH

LD11	Continue to support research into nitrous oxide deposition on calcareous grassland and ensure that results are made widely available. (Objectives 1 and 2)	2001 onwards	EN
LD12	Continue to investigate and ultimately identify the most appropriate stock type and breed to deal with problem sites. (Objectives 1 and 2)	2001 - 2003	EN
LD13	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

PUBLIC ACCESS

LD14	Agree and implement both general and site specific approaches to the management of access in limestone dales that enables public enjoyment of the environment but prevents significant damage. (Objective 1)	2001 onwards	PDLAF/NT/EN WTs/PDNPA/LAs
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MONITORING

LD15	Agree methodology for and implement effective monitoring of limestone dales. Ensure that the results of the process are collated and used to update the limestone dales register. (Objectives 1 and 2)	2001 onwards	EN/PDNPA MAFF/WTs/NT
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AWARENESS RAISING

LD16	Share information on the wildlife importance and management needs of key conservation and restoration sites with the landowners/managers, including feedback from surveys. (Objectives 1 and 2)	2001 onwards	PDNPA/NT/EN WTs/MAFF FWAG/LAs
LD17	Make guidance available to land managers and conservation organisations on restoration techniques for limestone dales habitats. (Objectives 1 and 2)	2003	EN/PDNPA/NT WTs
LD18	Make guidance available on creation techniques for limestone dales habitats for use in, for example, quarry restoration schemes. (Objectives 1 and 2)	2003	EN/PDNPA/NT WTs

CONSERVATION ACTION AND INCENTIVES

Designations

LD19	Implement obligations under European (Natura 2000) legislation with respect to review of the Peak District Dales cSAC. (Objective 1)	2001 onwards	EN
LD20	Review coverage of daleside SSSIs and notify further sites as appropriate. (Objectives 1 and 2)	2002 - 2005	EN
LD21	Review desirability of 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

LD22	Consider recommending a review of all agri-environment and conservation schemes to ensure that: *Targeting at national, regional and local level continues to give adequate priority to limestone dales *Management prescriptions are reviewed to include flexible site-specific measures *Adequate financial incentives for safeguard, enhancement and restoration are available (Objectives 1 and 2)	2001 - 2005	MAFF/EN PDNPA/WEG GBAPG
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Negotiation and Review of Agreements

LD23	Review management of all sites within SSSIs. Where necessary agree revised management regimes with owners/managers, through appropriate mechanisms such as WES, to ensure maintenance or restoration of favourable condition. (Objectives 1 and 2)	2001 - 2005	EN
LD24	Negotiate appropriate conservation agreements with landowners/managers of all key sites outside of SSSIs and existing agreements, in order to achieve maintenance or restoration of favourable condition. (Objective 1 and 2)	2001 - 2010	MAFF/NT PDNPA/WTs FWAG
LD25	Review management of limestone dales 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 restored. (Objectives 1 and 2)	2002 - 2005	MAFF/NT/WTs PDNPA/FWAG
LD26	Review whole holding agreements which include unprotected limestone dales. Consider the opportunities for upgrading the agreement to incorporate their safeguard and enhancement. (Objective 1 and 2)	2002 - 2010	MAFF/NT/WTs PDNPA/FWAG

Land Acquisition

LD27	Consider negotiating purchase/lease of priority sites where this would be the most effective way of achieving conservation objectives and when a negotiated conservation solution has not succeeded. (Objectives 1 and 2)	2001 onwards	PDNPA/EN WTs/RSPB/NT
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Direct Action

LD28	On land owned by public or conservation bodies, ensure that: *Management maintains and where possible enhances the value of limestone dales *Options for the restoration of limestone dales are considered *Opportunities for involvement of local communities in site management are taken where possible (Objectives 1 and 2)	2001 onwards	PDNPA/WTs NT/LAs/EN
LD29	Consider providing appropriate specialist stock for grazing problem areas within the limestone dales. (Objectives 1 and 2)	2004	EN/LAs/PDNPA NT/WTs

REGULATION

Planning

LD30	Ensure all planning applications and General Development Orders are adequately assessed in relation to their impact on limestone dales and that loss or damage is avoided. (Objectives 1 and 2)	2001 onwards	PDNPA/EN WTs/LAs
LD31	Consider the opportunities for the creation of limestone dales in relevant planning decisions, including quarry restoration schemes. (Objective 3)	2001 onwards	PDNPA/EN/LAs WTs
LD32	Ensure that the impact of disposal of waste from new buildings is addressed in the planning process. (Objectives 1 and 2)	2001 onwards	PDNPA/EN WTs/LAs

Pollution Control and Waste Management

LD33	Review procedures and consultation processes in relation to the spreading of paper pulp. (Objectives 1 and 2)	2001	EA/EN/PDNPA LAs
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Other Regulatory Mechanisms

LD34	Ensure that all woodland planting proposals consider the adverse effects of planting on limestone dales. (Objectives 1 and 2)	2001 onwards	FC/LAs/EN PDNPA
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RESOURCES

It is envisaged that the majority of work as a result of the actions proposed will be carried out by the relevant organisations using current resources. These include:

- the continuing investment by landowners and managers in managing their land sympathetically for wildlife;
- EN's programme of reviewing SSSI management and designation and its grant and management agreement schemes ;
- MAFF's Countryside Stewardship Scheme;
- continuing management of limestone dales owned by conservation organisations and public bodies (LAs, EN, NT, WTs, PDNPA, Plantlife);
- the PDNPA's advisory and grants service for landowners/managers.

Additional resources are likely to be required:

- for enhanced management of sites in the ownership of conservation organisations.