



# MOOR matters

THE QUARTERLY NEWS-ZINE OF THE MOORS FOR THE FUTURE PARTNERSHIP

## What we are about:

- To restore and conserve moorland sites most damaged by access and recreational pressures.
- To enhance visitors' and local peoples' experience of moorland heritage and encourage greater care.
- To establish a learning centre to develop expertise about how to protect moorlands for the future and to meet the education and research needs of specific groups and the wider public.

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## Saving our world important moors

Welcome to the third edition of *Moor matters* in which we aim to keep you informed and updated on various aspects of our work.

The Moors for the Future is a 4.7 million pound partnership project, funded by the Heritage Lottery Fund, to restore the internationally important Peak District moors that have been damaged by fires, pollution and erosion - currently the biggest upland conservation project in Britain. We also aim to help educate people about sustainable use of moorlands and promote access to the moorlands. Our research work is vital in underpinning our restoration work. Vast areas of degraded and damaged moorland are being restored to stabilise and restore this threatened habitat for the future.



Airlifting heather bales on to site, Bleaklow

This edition focuses on our restoration projects. We hope you will find it of interest. If you know of anyone who may be interested in receiving their own copy or if you do not wish to receive further copies let us know.

**Next issues...** The next issue will focus on our information and interpretation works. If you have any comments about what you would like us to include please e-mail us at

[moors@peakdistrict.gov.uk](mailto:moors@peakdistrict.gov.uk)

Copy dates are 25th January and 30th April 2005.

## Restoring moors for the future

Matt Buckler is our Conservation Works Manager. He has the challenging task of supervising the large scale moorland restoration aspects of the project. This involves organising the project tenders and contracts and supervising the works, as well as ensuring that the work is on time and on budget. Matt welcomes the challenge: "I hope that we can really increase the understanding of moorland restoration, which techniques work and which need refining," he said.

Although moorland restoration is not new it has never before been done on such a massive scale, involving so many land-

owners and partners.

Most of our work so far has been on restoring 3km<sup>2</sup> of badly damaged moors on the Bleaklow massif. Accidental fires, combined with heavy grazing regimes and atmospheric pollution have led to the complete loss of vegetation. This has resulted in extensive gullying and active erosion of the peat by wind, frost and rain.

In order to reverse this trend we are employing a number of techniques which are outlined in this newsletter.

## FIRE-SITE RESTORATION

The fire site restoration works on Bleaklow appear to be having a beneficial effect, particularly due to the wet summer this year.



Bare moorlands

Active re-vegetation of bare peat is encouraged by a series of mitigating techniques:

1. Application of lime and fertiliser
2. Re-seeding of areas with grass nurse crop
3. Spreading of heather brash, heather bales or geo-textiles creating a protective cover for the new vegetation

The aim is to provide suitable habitat conditions for the natural re-colonisation by native blanket bog species, such as cottongrass and sphagnum mosses.

These re-vegetation techniques are applied in conjunction with stock removal to help the moorland to recover.

Heather brash, cut from local heather moorland, is used to keep the peat moist, provide diverse microclimates close to the peat surface and act as a seed source for heather. It aids the germination and growth of heather. Almost 1,000 tonnes of heather brash and heather bales will be spread on the restoration sites in the next 12 months, covering an area equivalent to 120 football pitches.

Due to the remote location of the moorland restoration sites, seed, lime and fertiliser are

applied aerially using a helicopter. A hopper attached to the bottom of the helicopter is used to regulate the application rate of treatments, ensuring the seed is spread evenly across the sites.

The nurse crop contains a mixture of *Lolium*, *Agrostis*, *Festuca*, *Deschampsia* and heather species. The grass species will not persist in the harsh conditions of Bleaklow for more than a few years, but will help stabilise the peat, creating conditions suitable for native moorland species to colonise.



The seed mixture

Geojute is used to stabilise the peat on steep slope sides. It is made from natural fibres woven into a loose mesh pattern and is secured to the mobile peat surface using pegs. Geojute is manufactured from natural fibres and will break down naturally after 1–3 years.



Geojute up close

### Seeds of change

In order to introduce a more diverse range of dwarf shrub species we are investigating the micro-propagation of plants from the Dark Peak SSSI in particular bilberry, crowberry, cloudberry and two cottongrass species. These will all increase biodiversity and provide good peat stability. We are learning from similar work that has been carried out in the Brecon Beacons National Park. We will do this by initiating a trial to see which species do best in the conditions found on the fire restoration sites, which will also identify mechanisms for breaking the dormancy of cottongrass seeds.

*“Moors For The Future has so far reseeded an area of bare, eroding peat, equivalent to 320 football pitches.”*

## GULLY BLOCKING

We are planning further large-scale restoration works on Bleaklow's blanket bog by blocking erosion channels to halt water loss.

The objectives are to control and stop gully erosion, to reduce water discharge and to prevent sediment loss from peatlands. The ultimate goal is to raise the water table, promote re-vegetation and reduce water discoloration of streams.



A form of gully blocking shown here on Kinder Low, NT land

The National Trust has pioneered this restoration approach and has ample experience with different gully blocking techniques. In order to inform our decision-making process we have commissioned research from Manchester and Leeds Universities to identify feasible and strategic locations on where and how to block gullies.

## UPLAND PATH WORKS

Moors for the Future are undertaking large scale restoration of popular recreation routes. The aim is to reduce the visual impact of eroded paths, create a better environment for path users, help prevent future damage, and to reduce disturbance on ecologically sensitive sites.

Trampling from walkers can lead to bare ground and boggy terrain as people then walk around the eroded area encroaching onto neighbouring vegetation and disturbing wildlife.

Moors for the Future's path work is split into two types: Firstly, trampling sites, where paths have degraded due to recreational use; Secondly, wildlife disturbance sites, where disturbance to wildlife can occur on paths crossing eroding peat which may be detrimental to the local fauna, flora and landscape.



Path restoration work underway on Higger Tor

Our research team will be undertaking a complete upland footpath condition assessment to identify those footpaths that are currently seen to be in a moderate state of repair but may require work in the near future. It will also identify sensitive areas across the moorlands where people will be encouraged to follow rights of way rather than create desire lines. All of the waylines have also been digitised and classified.

Before work commences, full consideration is taken of a site's wider issues such as remoteness, sensitivity of wildlife, archaeology, aesthetics and wider recreation management issues.

Work is currently underway on the popular Higger Tor route and work is planned to start on Cut Gate early in 2005.

## THE TECHNICAL APPROACH

Technical approaches to upland path management are:

**Stone pitching** — used on eroding sections of steep path

**Causey Paths** — laying of stone flagged on flat, peaty surfaces

**Landscaping** — using machinery to re-profile and level the ground, improve drainage and block multiple walk lines.

Other landscaping techniques are done by hand on more remote sites using subsoil path building. Spoil from a new ditch is used to create a new, sustainable path surface. Steps are cut out across slopes to control water flow and prevent run off.

**Re-seeding** — of eroded path sides



Using small machines and hand tools on Back Tor

*“Moors for the Future aims to restore 3 km<sup>2</sup> of the 5- 6 km<sup>2</sup> bare and eroding blanket bog in the Peak District”*

## RESTORATION SITE MONITORING

Due to the cost of carrying out the restoration works, it is vital to evaluate the effectiveness of the different techniques. They are monitored by the project, to assess which nurse grass species germinate and survive best and which of the other restoration techniques (heather brush, geo-textiles) give the best vegetation cover.



Vegetation monitoring on Bleaklow

Volunteers and botanists have been carrying out extensive vegetation surveys for the past two years, and the results are used to inform the next phase of the restoration. Monitoring of gully-blocking and plant propagation will

advise on the best techniques to be used in further moorland restoration works, both here and elsewhere to protect these habitats into the future.

*In order to support research on Peak District moorlands we are again able to facilitate research projects with small grants. In particular we hope to encourage research relating to our restoration*

*projects (fire site re-vegetation, stock enclosure and gully blocking). A list of potential projects is on our website: [www.moorsforthefuture.org.uk](http://www.moorsforthefuture.org.uk). The application deadline is 10 January 2005.*

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**WE'RE ON THE WEB:**  
[www.moorsforthefuture.org.uk](http://www.moorsforthefuture.org.uk)

(This site is still under development)

*Restoring Moorlands in the  
Peak National Park*



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## FREQUENTLY ASKED QUESTIONS

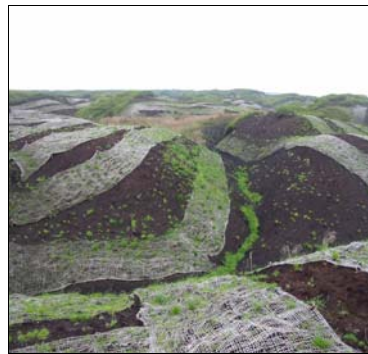
### What is heather brash?

Heather brash is both baled heather (cut and baled in long stalks) and double chopped brash cut and bagged by a forage harvester. Heather is harvested from local moors in the autumn when it is rich in fresh heather seed.

The heather brash is applied onto the worst eroded areas of blanket bog. In most cases the heather brash is delivered to site by helicopter and then spread by hand, a laborious and labour expensive task. This technique provides a soil level microclimate optimum for germination and growth of the both the nurse grass seeds and heather seeds.

### What is geojute?

Geojute is a landscape fabric which we use over selected sites, especially the steep sides of eroding peat hags where heather brash will slide off. This will provide surface stabilisation and an improved soil microclimate.



Geojute is used to stabilise slopes

### Why doesn't the vegetation regenerate by itself?

Decades of atmospheric pollution from the conurbations of Manchester and Sheffield have fallen in acidic rain on the Peak District moorlands which have also suffered from high levels of sheep grazing. Under such extreme conditions any damage caused, by accidental and deliberate, deep-seated summer fires, has never had a chance of recovery.

### What is a nurse crop?

Fast growing grass species are applied to provide initial surface stabilisation whilst the heather establishes. The nurse crop species will die off after about 3 - 5 years by which time the heather should have established.

### Any more questions?

**E-mail us: [moors@peakdistrict.gov.uk](mailto:moors@peakdistrict.gov.uk)**