

JOINT NATURE CONSERVATION COMMITTEE

A PURPLE PERSPECTIVE
Newsletter of the Lowland Heathland
Lead Co-ordination Network
Issue 4: February 2009

What is the Lowland Heathland Lead Co-ordination network?

The Lowland Heathland Lead Co-ordination Network (LCN) is responsible for undertaking the 'special functions' of the Joint Nature Conservation Committee (JNCC) in relation to lowland heathlands. It also provides secretariat support for the UK Lowland Heathland Habitat Action Plan steering group. It involves specialist staff from all three country agencies (Countryside Council for Wales, Natural England and Scottish Natural Heritage), the Northern Ireland Environment Agency and the JNCC support unit.

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1. Editorial

Welcome to the latest edition of the Lowland Heathland Lead Co-ordination Network (LCN) newsletter, and thank you to all those who have contributed.

Our aim is to produce two editions of an informative and interesting newsletter each year, giving a brief update of the main issues relevant to heathlands. In this edition there are brief reports on the Cornish based, Europe wide HEATH (Heathland, Environment, Agriculture, Tourism, Heritage) Project which has come to the end of its 3 year term; an update on progress by the Forestry Commission in developing their Open Habitats Restoration policy; and a brief update of Phytophthora, a non-native invasive fungus like pathogen which is known to kill trees and shrubby plants including bilberry and rhododendron, and which could threaten our heathlands. Contact details are given for the RSPB HEaP (Heathland Extent and Potential) maps which are now on their website.

Elsewhere in this newsletter Isabel Alonso, Lowland Heathland LCN Chair reports on the 10th National Heathland conference held in York in September 2008, and a study tour of some Danish heaths during the summer of 2008.

We would be interested in your views about this newsletter and its content, particularly if you would like to be included on a circulation list to receive it directly, please contact Suzanne or Isabel.

Suzanne Perry
Lowland Heathland LCN support

2. BAP News update for England, Scotland and Wales

As has been reported in previous newsletters, BAP delivery is undergoing significant changes in Great Britain, mainly as a result of the devolution of power to individual countries. The new framework is taking shape and a summary of the current situation in England, Scotland and Wales is provided. Northern Ireland does not appear because similar changes to delivering biodiversity improvements in Ireland have been made.

Summary of BAP delivery in England

The proposed framework for delivery of England's BAP commitments and responsibilities has four main components:

1. England Biodiversity Strategy Workstreams;
2. Biodiversity Integration Groups;
3. Targeted Species Recovery;
4. Regional and Local delivery.

The biggest change that the new framework will bring is a much greater emphasis on identifying those actions that matter most for biodiversity conservation and ensuring that they are carried out. It will establish clear delivery and policy priorities at different geographical scales, and with assigned accountabilities

1. **England Biodiversity Strategy Workstreams** - There are already 6 sector (Agriculture, Water & wetlands, Coastal, Marine, Towns, cities & development, Woodlands & forestry) and 5 crosscutting (climate change adaptation, Education and Public Understanding, Business & biodiversity, Economics & funding, Local & regional biodiversity) workstreams supporting the implementation of the England Biodiversity Strategy. These workstreams will develop policy for biodiversity delivery.
2. **Biodiversity Integration Groups (BIGs)** will set the standards for habitat-based working, agree targets, and identify and carry out priority projects for delivery, in particular landscape-scale projects. They will help to steer the work of relevant EBS workstreams by identifying policy priorities, and will work closely with regional and local biodiversity partnerships to agree the most important areas for landscape-scale delivery. The 9 BIGs are as follows:
 1. Lowland farmland, including lowland heathland;
 2. Uplands;
 3. Lakes and ponds;
 4. Rivers;
 5. Wetlands;
 6. Coastal;
 7. Marine;
 8. Urban & brownfield;
 9. Woodland.
3. **Targeted Species Recovery** - Those species actions that cannot be carried out through habitat-based work or other delivery mechanisms will require targeted species recovery work. Natural England and partners will agree a prioritised programme to deliver the most urgent species recovery actions and those that will have the greatest impact. The needs of individual species will be delivered through, and integrated with, the regional and local delivery component of the framework wherever possible.

4. **Regional and Local delivery** – Halting biodiversity loss and meeting the challenge of climate change requires landscape-scale approaches to improve habitat connectivity and deliver appropriate networks. This requires co-ordinated delivery at all levels, with strong regional and local work programmes.

Summary of BAP delivery in Wales

The Wales Biodiversity Partnership (WBP) chaired by the Welsh Assembly Government (WAG) has developed the following new mechanism for delivering BAP in Wales; this will bring a much greater emphasis on identifying and carrying out those actions that will have the greatest benefit for biodiversity.

The proposed delivery mechanism has six main components:

1. The Wales Policy Group;
 2. Wales Ecosystem Groups;
 3. Wales Species Expert Group;
 4. Species Lead Partner;
 5. Local Delivery;
 6. Wales Biodiversity Partnership.
-
1. **The Wales Policy Group** brings together all the policy actions from the species signposting exercise and from habitat actions. The group will be composed of representatives from the policy sector in Wales, with one or two habitat and species representatives. Policy actions from species and habitats can be brigaded into common themes for more efficient implementation and solutions than if dealt with by each habitat or species group individually.
 2. **Wales Ecosystem Groups** will bring together habitat and relevant associated species actions at the Wales level. The nine groups are:
 - Grassland and Heathland;
 - Upland;
 - Farmland;
 - Wetland;
 - Woodland;
 - Urban;
 - Freshwater;
 - Coastal;
 - Marine Ecosystem and Species group combined.

They will largely be made up of experts from relevant organisations, NGO's and LBAPs, and will be charged with driving the delivery of priority habitat targets including those associated with relevant species

by identifying and, where appropriate, carrying out the most important actions required by the group as a whole.

3. **A Wales Species Expert Group** has been proposed in order to prevent the limited number of species experts in Wales and the UK from receiving multiple queries from each habitat group regarding signposted species action. The group will consist of 1 or 2 experts from each broad taxonomic group. They will provide advice in response to queries from habitats groups in relation to habitat management requirements for particular groups or individual species.
4. **Species Lead Partners** will continue to be required in order for species Lead Partners to report status and trend information against targets. In addition, there are some important species actions that cannot be carried out through habitat-based work or policy mechanisms. These will require targeted species recovery work.
5. **Local delivery** – the Wales ecosystem groups and species Lead Partners will work closely with local partnerships represented on BAP groups. Halting biodiversity loss and meeting the challenge of climate change requires landscape-scale approaches that improve habitat connectivity, ecosystem functions and deliver appropriate networks to meet the present and future needs of species. This requires coordinated delivery at local levels.
6. **The Wales Biodiversity Partnership (WBP)** will oversee, enable and monitor the implementation of BAP in Wales. The WBP will explore and develop new opportunities for biodiversity action, identify barriers and work to remove obstacles to secure biodiversity gain, including coordinating and facilitating the ecosystem approach in Wales. Ultimately the responsibility of delivering BAP lies with the WBP.

Summary of BAP delivery in Scotland

The new framework in Scotland will enable the adoption of an ecosystem approach to biodiversity planning and delivery. This approach will allow 'ecosystem health' issues, like extent, the adequacy of habitat mosaics and ecological networks, to be addressed in a holistic way.

At the top of the structure is the **Scottish Biodiversity Committee (SBC)** which sets the strategic policy direction and endorses the implementation programme.

Below this is the **Scottish Biodiversity Action Coordination Group (SBACG)**, which will oversee the implementation of strategic policy directions set by the SBC. The main purpose of this group includes co-ordinating the planning of

biodiversity work in Scotland using an ecosystem approach and integrating the new Scottish Biodiversity Strategy (SBS) Implementation Plans with UKBAP and to oversee the delivery of agreed actions, working directly with the 5 Ecosystem groups, the Science Group and the People and Communications group.

Five **Ecosystem Groups** sit below the SBACG. These groupings reflect the principal broad ecosystems found in Scotland. Each group is responsible for co-ordinating the planning, delivery and reporting of action for priority habitats and species within their element of the ecosystem. The groups will each produce a plan designed to provide an overview of the key issues relating to the ecosystems, their constituent habitats and species and the services they provide for each ecosystem group and set out a vision, objectives and action plan for them. The 5 groups are:

- Upland;
- Woodland;
- Freshwater & Wetland;
- Marine & Coastal;
- Farmland & Lowland, includes lowland heathland.

In addition, two all encompassing groups will also be established; a 'People and Communications Group' and a 'Biodiversity Science Group':

The focus of the **People and Communications Group** is to provide leadership to the delivery of the second objective of the SBS which is to increase awareness, understanding and enjoyment of biodiversity and engage many more people in conservation and enhancement. Central to this work is the need to raise awareness, encourage better co-ordination, advocate more action and support greater involvement.

The **Biodiversity Science Group** will undertake specific tasks requested by the SBACG. Among other things, the remit of this group is to:

- promote the input of high quality scientific advice into the delivery of the SBS;
- promote cooperation in research and advice, cross-fertilisation of ideas and dissemination of research results;
- provide a focus for identification of research needs
- maintain appropriate links with UK BRAG.

This structure will enable the adoption of an ecosystem approach to biodiversity planning and delivery, and will allow 'ecosystem health' issues, such as extent, the adequacy of habitat mosaics and ecological networks, to be addressed in a holistic way.

Suzanne Perry, Graham Sullivan, Jan Sherry

3. Update on Phytophthora – the killer disease

Phytophthora species are a group of fungus like pathogens that kill trees and shrubby species. They have been a significant problem in ornamental horticulture, but recently *Phytophthora* has been found in the wider countryside on trees and shrubby heathland species. In the UK two species, *P. ramorum* and *P. kernoviae*, are the subject of containment and eradication action.

Since the mid 1990s, *Phytophthora ramorum* has caused widespread death of millions of trees in forest environments in coastal California and Oregon in the USA. In the US the disease kills tanoak (*Lithocarpus densiflorus*) and American oak species (*Quercus*), and has become known as 'Sudden Oak Death'. It is particularly taking tanoak out of the ecosystem. The sporulating host which is driving epidemics in the States is California bay laurel (*Umbellularia californica*), which is a foliar host only, the plants are not killed.

P. ramorum was first found in the UK on viburnum in a nursery in Sussex in February 2002, and on American southern red oak (*Q. falcata*) in November 2003. Other trees which have since been affected include horse chestnut, sweet chestnut, several oak species, sycamore and southern beech. Once the plant is infected with the disease, death happens quickly. No chemicals appear to kill the disease, most simply suppress it.

More recently, *P. kernoviae* has been found in the UK on bilberry (*Vaccinium myrtillus*). This appears to behave in a very similar way to *P. ramorum*. The spores of both species can survive in plant debris and soil for many years, and contaminated soil, water, equipment and footwear may harbour the pathogen. Both pathogens are the subject of containment and eradication action by the UK government.

The disease causes bleeding bark cankers which may girdle and kill trees. Other symptoms, which occur on a range of shrub hosts and also some trees, include leaf blight, wilting, discolouration of foliage and dieback. In the UK the majority of nursery hosts are species of rhododendron, viburnum and camellia. Laboratory experiments have shown that native wild plant species are also vulnerable, including bilberry (*V. myrtillus*), cowberry (*V. vitis-idaea*), bearberry (*Arctostaphylos uva-ursi*) and crowberry (*Empetrum nigrum*).

If you suspect that the disease is present on a site near you, confirmation can be made by sending a sample of the infected plant to the Central Science Laboratories in York, address below.

Before taking a sample, look at the whole plant and check that there are no other possible causes of aerial dieback such as physical or vertebrate damage, root disruption, damage etc. If in doubt submit a sample but mention these

factors. For dying shoots, locate the border between the healthy and dead tissue, remove a piece of stem about 15 cm long, 7.5 cm on either side of the border; remove about 5-6 stems showing symptoms; do not send totally dead stems, place in a labelled 'zip-lock' type plastic bag, add a small piece of damp tissue, inflate the bag slightly and seal. Leaf spotting - remove about 5-10 leaves, place in a labelled plastic bag, add a small piece of damp tissue, inflate the bag slightly and seal.

Tag all plants sampled to permit re-sampling if required. EACH sample must be accompanied with information about where the sample was taken from including the location name and grid reference. Your name and address and telephone number, the date the sample was taken, details about the plant the sample was taken from ie plant genus species and variety, the type of sample ie leaf spot, aerial dieback, wilt.

All samples should be put in a strong cardboard box or a padded envelope. Samples should be dispatched in order to arrive at CSL the next day. Send your sample to:

CSL Diagnostics,
Room 04GA04,
Central Science Laboratory,
Sand Hutton,
York YO41 1LZ

or telephone 01904 462000 for more information.

An interdepartmental Programme Board, with representatives from Defra, the Forestry Commission and the Devolved Administrations oversee a programme aimed at containing and eradicating this disease.

More information about the disease, including images which will help identify it, is available on the Defra and Forestry Commission web sites.

P. ramorum in trees: <http://www.forestry.gov.uk/forestry/WCAS-4Z5JLL>

P. kernoviae in trees: <http://www.forestry.gov.uk/forestry/inf-d-66jlgb>

P. ramorum images of symptoms: <http://www.defra.gov.uk/planth/pramor4.htm>

P. kernoviae images of symptoms: <http://www.defra.gov.uk/planth/pkernovii3.htm>

Suzanne Perry
Natural England

4. Forestry Commission Open Habitats Policy Development

Forestry Commission England has produced a plan for the development of a

policy to restore open habitat from conifer plantation. The details of the policy and the stages of its development can be seen on their website:

<http://www.forestry.gov.uk/england-openhabitats>

The policy consultation document is due to be released during February 2009, and will be made available on the above website for those interested in contributing to the discussion.

Discussions with key stakeholders including conservation bodies and the timber industry are ongoing.

In drawing up the policy, FC have taken the following matters into consideration:

Conservation of biodiversity: Government commitments to restoration of open habitats in England arise from the England Biodiversity Strategy which aims to halt, and if possible reverse declines in priority habitats and species, with living things and their habitats as part of healthy, functioning ecosystems.

Desired outcomes will relate to biodiversity, landscape and historic environment: Biodiversity will provide many of the desired outcomes of the policy but Government agendas for landscape (including people's enjoyment of landscape and involvement in their local landscape) and historic environment are also significant.

Impacts on other woodland and forestry objectives will be considered: the policy must take account of the impact of open habitat restoration on the ability of woods and forests to contribute to other relevant Government aims as set out in ETWF:

- to secure trees and woodlands for future generations;
- to ensure resilience to climate change;
- to protect and enhance natural resources;
- to increase the contribution that trees, woods and forests make to our quality of life;
- to improve the competitiveness of woodland businesses and products.

Long-term viability of woodland and open habitats is important: The management regime to maintain the open habitat must be feasible in the long-term. This should include the net-cost of managing the open habitat and any associated woodland and the woodland that remains elsewhere.

Several types of open habitat are important but lowland heath is the testing issue: The open habitats of relevance are lowland meadows, upland hay meadows, lowland calcareous grassland, lowland dry acid grassland, upland heathland (moor), lowland raised bog, blanket bog, and lowland heathland. Of

these it is restoration of lowland heath that is the most significant issue because of its extent, biodiversity value, value of timber grown on some former heath, proximity to populations and discrepancy between hectares of extant and potential habitat, much of which is on publicly owned land.

Lowland heathland is the testing ground for this policy but the policy must work for all relevant habitats in England.

For more information about the policy and to contribute to the consultation when it becomes available see: <http://www.forestry.gov.uk/england-openhabitats>

5. The Cornish HEATH project in Cornwall and Europe

The Heathland, Environment, Agriculture, Tourism, Heritage (HEATH) Project was developed in response to growing evidence that the Penwith heaths, as well as other sites in West Cornwall, Wales, Holland and France, were deteriorating. The project builds on the experience of heathland conservation management across the UK and Europe.

The aim of the HEATH project was to re-establish the direct social and economic links that were once associated with heathland environments. With a total of 5m Euros of funding from the Heritage Lottery Fund and EU Interreg IIIB North-West Europe, the project incorporates 6 partner organisations across North-West Europe from the UK, France and Holland.

The Project incorporates sites across 5 sub-regional areas within North-West Europe;

- In France:
 - 5 groups of sites in Western Brittany at Cap de la Chevre, Menz-Meur, Le Cragou, Vergam and Vernec;
 - 3 groups of sites in Normandy at Le Camp, Fermanville, and Le Hague;
- In the Netherlands:
 - The National Park De Hogue Veluwe to the north of Arnhem in Holland;
- In the United Kingdom:
 - 58 individual sites across West Penwith, the Lizard and the North Coast of Cornwall;
 - one site in Pembrokeshire in Wales.

UK partners include Natural England, the National Trust, Cornwall Wildlife Trust, the Eden Project, Cornwall County Council, Penwith District Council and the Countryside Council for Wales.

The heaths of Cornwall are a cultural landscape, and were once the centre of the economy and social activities of the area. HEATH investigated opportunities to re-establish the economic value of the heath, especially relating to farming and tourism. By reintroducing and improving habitat management practices and by communicating and promoting heathland as a potential valuable resource with a valuable historic context.

Approximately 450, 000 Euros of contracts and on site works in Cornwall were spent before the end of the project. The project installed over 40 km of fencing, 2 km of Cornish hedging and over 90 gates in order to make sites stock proof. In addition to this, over 25 ha of scrub and 15 ha of bracken have been cleared and over 10 km of firebreaks cut. Work has been carried on 33 sites, representing over 3000ha of lowland heath sites in West Cornwall, with the aim of introducing better management practices through the re-introduction of grazing and scrub/bracken management.

Two publications were available at the time of publishing this newsletter. The first is a guide on conserving the archaeology and historic landscapes on West Cornwall's heathlands is available as a booklet which promotes ways of positively managing the rough ground in West Cornwall without damaging archaeological and historic landscapes.

The second is a leaflet entitled 'The Past in the Present; A walk through 6000 years of history' which introduces walkers to one of West Penwith's most spectacular historic landscapes. This is a self-guided trail leaflet focussing on sites around St Just. In addition to a suggested walk route, and details of the various archaeological and historic features to be seen, the leaflet gives a short history of west Cornwall's downs and moors and advice on finding out more about historical landscapes.

More information about the HEATH project, and to view electronic versions of their publications see: www.heathproject.org.uk

6. The RSPB HEaP project

The RSPB has created a map which indicates the extent of all lowland heathland in England, as well as the expansion potential of the surrounding land. The Heathland Extent and Potential (HEaP) maps are available to download from the RSPB website at: <http://www.rspb.org.uk/ourwork/conservation/advice/heap.asp> This type of exercise has never been done before.

The MapInfo files are available for downloading from the RSPB website. They are compiled in a GIS (MapInfo 7.8), using information interpreted by eye from recent aerial photographs.

RSPB intend the maps to be used to help target financial and grant support for habitat re-creation initiatives.

7.10th National Heathland Conference – York 9th -11th September 2008

In September 2008 more than 80 delegates attended the biannual National Heathland Conference which was held in the National Science Learning Centre of the University of York. The conference theme was “Managing heathlands in the face of climate change”. The programme of talks and workshops and the link to presentations and details about the site visits can be accessed at <http://www.keystone-group.co.uk/heathlands/index.php>. Proceedings will be published in 2009.

On the first day, **Humphrey Crick** and **John Hopkins**, Natural England, outlined the main changes expected over the next hundred years, highlighting the need to plan ahead. Even the most conservative forecasts indicate that there will be a very significant impact on all systems. The main principles and actions we need to take into account include continuing good practice for conserving biodiversity; reducing other causes of harm not related to climate change; and developing ecologically resilient and varied landscapes. Ecological networks, nature reserves and other protected areas will continue to support the highest biodiversity, although the species themselves may change.

Simon Smart, CEH Lancaster, considered ecosystem responses to multiple drivers of and current approaches to change for various heathland species. The interactions between factors, such as atmospheric pollution and climate change produce different responses when considering each impact in isolation.

Dominic Driver and **Jonathan Spencer**, Forestry Commission, introduced the policy being developed for the restoration of open habitats from woods and forests in England. Forest must deliver greater economic, social and environmental benefits. However, the cost implications of changing land use are significant and there are concerns about future funding for management. There are about 30,000 ha of plantations established on land that was previously heathland, and which could potentially be restored. The net income from productive conifer woodland is £100-£200/ha/yr; from birch woodland it is £0 -£20/ha/yr. It is estimated that the cost of managing open heathland is £200/ha/yr. There will be a public consultation on this policy early in 2009.

Simon Nobes, Natural England, talked about the four-day fire at Thursley National Nature Reserve which occurred in July 2006. 1400 fire fighters were required to bring it under control. The local community was involved in restoration efforts through fund raising, volunteer work parties and art events. After the event, the fire management plan was revised. Included in the revised

plan was the need to provide training for fire officers in dealing with heathland fires (e.g. by using beaters); setting up voluntary fire wardens and the need to continue fire fighting at night. The site is regenerating.

Adrian Yallop, Cranfield University, told us that c. 114 km² of moorland is burnt annually England, but there is very little data on which to assess impacts. Defra commissioned Cranfield University to 'map burns from space'. A case study in North York Moors was presented, where burns on deep peat, steep slopes, near woodland, etc were looked at. It has been found that >20% of burnt areas contravened the Burning Code.

Colin Legg, Centre for the Study of Environmental Change and Sustainability, discussed the detail of what determines fire occurrence, behaviour and effects. He listed the fire requirements: fuel, right weather and ignition. Heather is good fuel and can be lit when moisture content is <70%. In Scotland, it burns in spring when plant moisture content is low but it won't light in summer because the plant is too wet. Dead gorse is good fuel, but not green gorse. Purple moor grass is good fuel when dormant and dries out quickly. The Met Office Fire Severity Index and the Fine Fuel Moisture Code are useful tools for predicting when fire may occur. The rate of recovery of heather depends on height of heather before the burn.

Joe Holden, University of Leeds, presented "The hydrology and fluvial carbon fluxes of upland organic soils". Peats are the best understood soils but not much is known about hydrology or carbon cycling of mineral soils. In peat, there are underground natural 'pipes' which are important for water through flow, and they can collapse to form gullies. There are more pipes where the land is drained, and *Calluna* tends to be associated with pipes.

Carly Stevens, Open University, presented the results of a project trying to detect and attribute nitrogen deposition in heathland ecosystems. The impacts of N deposition are global and well known: grass replaces heather; heather becomes more susceptible to heather beetle; the low pH gives high concentration of toxic metals; it results in loss of bryophytes.

The study looked at how impacts of N deposition can be picked up in Common Standards Monitoring and recommended additional indicators for upland heathland, acid grassland, upland bogs, but there is no information available yet for lowland heathland.

Isabel Alonso, Natural England, outlined the best practice guidance introduced in the Natural England Research Report no. 10 'Impact of heathland restoration and recreation techniques on soil characteristics and the historic environment.' In summary, site managers attempting restoration and re-creation projects should bear in mind the potential value of the current soil and the likelihood of

the presence of archaeological remains, and should adjust the operations accordingly.

On day 2, **Durwyn Liley**, Footprint Ecology, helped us to understand the links between housing developments, access and disturbance to wildlife. He presented various studies of visitor use on Dorset and Thames Valley heaths which enabled the prediction of the impacts of new housing on nesting birds. The biggest impacts will be to sites with large car parks close to housing. This information can be used to assess planning applications for housing developments and mitigation measures.

Kristoffer Hewitt, Natural England, focused on the Thames Basin Heaths Special Protection Area (SPA), where an extra 48,000 houses are proposed, considering the concept of environmental capacity to assess combined impact of multiple developments. The local authority strategy to avoid impact on the SPA is 'no new housing within 400m of the SPA' and a tariff on houses >400m away to provide Suitable Alternative Natural Greenspace (SANGS). Each LA sets their own tariff, and has to prove that the SANG will provide effective alternative sites for the public (walkers and dog walkers). SANGS must be managed in perpetuity (ruled as 80 years) and must provide opportunities for a walk at least 2.4 km in length. Eight hectares of new natural green space per 1000 new residents is the standard. There have been public inquiries and two cases in the high court which have tested and developed this approach.

Moira Owen, Defence Estates (DE), talked about DE as heathland managers. They own 1% of land area of Britain, including 10,000 ha of upland heath and 11,000ha of lowland heath and mire. They are undertaking a programme of SSSI improvement including livestock removal and tree removal. Tenants are encouraged to enter agri-environment schemes, such as Higher Level Stewardship agreements in England. Burning is often not possible because of unexploded munitions.

Tom Tew, Natural England, summed up the conference.

There were a series of workshop discussing issues as varied as management, the vision for the next decades, marketing or biofuel.

Above all it was a great opportunity for heathland experts and enthusiast to come together, network, discuss themes of common interest and advance our knowledge of this fascinating habitat.



Picture 1. Participants of the 10th NHC at St Williams College, York.



Picture 2. Site visit to Strensall Common led by Moira Owen.

I Alonso
Natural England

8. Study tour of Danish Heaths - June 2008

Heathlands across Europe share similar origin, centuries of management along with current problems such as lack of appropriate management and threats from development. It is therefore valuable for heathland managers and conservation staff to maintain links across Europe. During the last week in June 2008, Isabel Alonso, two other colleagues from Natural England and other British and Belgium colleagues visited heathlands in Jutland, Denmark (map 1). We discussed all these issues with members of the Danish Nature and Forest Agency, Copenhagen and Århus Universities and Local Authorities (Jammerburg and Ålborg municipalities).



Map 1. Location of the sites visited.

Mols Bjerger is a site being considered for designation as National Park for its heathlands. It is also the Danish site of experiments on climate change impacts (drought and warming) on heathlands (Picture 1) and research into grazing with goats.



Picture 1. Infrastructure for the study of climate change impacts on heathland.

On Himmerlandske heath we learnt about how Old Jutland cattle (Picture 2) graze the heath and how older animals “teach” the younger ones where and how to graze, which has implications for those graziers introducing animals to a new site.



Picture 2. Old Jutland cattle dealing with birch.

Thy, in the North West, is the first Danish National Park, it was designated in 2008, and consists of 24,370 ha of fantastic dune systems (Pictures 3 & 4) and associated vegetation communities. A significant part has been restored from conifer plantations.



Pictures 3 & 4. Dunes in Thy NP.

At **Præsterbjerg Heath** we saw heathland being managed by cutting and the arisings being converted into pellets or briquettes (Picture 5) for power stations, or as mulch for playing grounds (apparently it is much softer for falling children than wood chippings).



Picture 5. Briquettes and pellets made from heather cuttings.

On the last day we visited **Nørholm heath** where the succession from arable land into heathland and now woodland has been followed by researchers since 1921.



Picture 6. Heathland re-created from arable land at Røndbol

In **Røndbol heath**, we saw the results of different management methods in ex-arable land and rare plants in the heath such as *Lycopodium tristachyum* (Picture 7).



Picture 7. The rare club moss *Lycopodium tristachyum* at Nørholm

The discussions and exchange of ideas was very constructive. Our Danish colleagues have been working on heathland grazing for decades, but unfortunately most of their work is published only in Danish. We brought some papers back, but we know that for future reference, when we want to know something in particular about this subject they are likely to have looked into it and will be happy to help.

Isabel Alonso
Natural England

9. Forthcoming meetings

10/11 March 2009 Heathland HAP group meeting, Dorset

6/7 October 2009 Lowland Heathland LCN meeting, Wales

10. LCN contacts

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