

HABITAT ACTION PLAN FOR LOWLAND DRY ACID GRASSLAND

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CURRENT STATUS

Nottinghamshire's dry acid grassland is characterised by the occurrence of plants such as wavy hair-grass, common bent, sheep's fescue, heath bedstraw and pill sedge. It occurs on nutrient-poor dry acid soils. Nottinghamshire falls between the acid upland grasslands of the Pennines and the lowland grasslands of the Brecklands and Lincolnshire. As a consequence the Nottinghamshire acid grasslands include upland elements, such as mat grass, but lack some of the typical lichen components found further east. In the East Nottinghamshire Sandlands, small fragments of a dune-like habitat support a number of plants typical of inland dune systems. Lowland acid grasslands are of value for a range of specialist, scarce or declining fauna, including bees and wasps, spiders, reptiles and birds. Some species are dependent upon habitat mosaics, for instance a mixture of acid grassland, heathland and woodland.

Between 1930 and 1984 unimproved lowland grassland of all types decreased by an estimated 97% in England and Wales. Losses have continued during the 1980s and 90s, and have been recorded at 2-10% per annum in some counties. The East Midlands has a particularly high rate of loss, and although the current extent is not accurately known, it is estimated that Nottinghamshire's unimproved grassland has declined by 97-99% since 1930.

In Nottinghamshire, acid grassland may be divided into two types:

a) Grassland characteristic of the Sherwood and East Nottinghamshire Sandlands Character Areas, which tends to be associated with lowland heathland.

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b) Grassland found on sand and gravel deposits in the Trent Valley, and on acidic post-industrial surfaces such as coal tips and disused railway tracks, particularly in the Coal Measures.

This action plan covers both types of acid grassland. However, much of the acid grassland of type a) is closely associated with heathland, and only differs from it in the extent of heather cover - more than 25% being defined as heathland, and less than 25% as grassland. For this reason acid grassland of type a) is included within the targets for lowland heathland, and separate targets are given for type b) acid grassland. The aim of this is to ensure that acid grassland is given a high profile as an important habitat in its own right, while recognising the strong links between it and heathland habitats. This action plan should be read in conjunction with that for lowland heathland.

THREATS

The main factors currently affecting the County's acid grassland are:

- Lack of traditional management such as light grazing and cutting, resulting in the increasing dominance of coarse grasses, bracken, scrub and trees at the expense of acid grassland flora and fauna.
- Agricultural intensification by the use of fertilisers, herbicides, liming, ploughing and re-seeding or conversion to arable. Over-grazing and supplementary feeding are also potential problems.
- Loss, fragmentation and disturbance caused by residential and industrial development, road building, mineral extraction, landfill activities and other development.
- Introduction and spread of non-native and other inappropriate plant species.
- The spread of bracken, a frequent component of lowland dry acid grassland, which can reduce habitat diversity. Control measures may be desirable, but elimination should be avoided because moderate amounts of bracken do bring significant wildlife benefits.
- Recreational pressure and proximity to urban areas, which may lead to damage and disturbance of the habitat and make grazing impractical.
- Atmospheric pollution, especially deposition of nitrogen compounds. This affects species composition and abundance in a similar way to the application of artificial fertiliser, but to a lesser extent.
- Conversion to heathland and woodland without careful consideration of the existing wildlife value. Acid grassland should not be thought of purely as potential heathland, it has interest of its own, and can be part of a diverse habitat mosaic.

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CURRENT INITIATIVES – EXAMPLES

- A national Habitat Action Plan for Lowland Acid Grassland has been prepared.
- Many private landowners manage areas of acid grassland, and have a vital part to play in its conservation.
- The Greenwood Community Forest aims to improve a major part of the Nottinghamshire countryside, which includes restoration of heathland and acid grassland.
- The majority of the best acid grassland areas are within Sites of Special Scientific Interest (SSSIs). Other acid grasslands are Sites of Importance for Nature Conservation (SINCs).
- Many organisations are involved in the sympathetic management of areas of heathland and acid grassland in Nottinghamshire, including the National Trust, The Forestry Commission, Nottinghamshire Wildlife Trust, the Sherwood Forest Trust, the Defence Estate Organisation, the British Trust for Conservation Volunteers and RJB Mining.
- Selected areas of acid grassland are managed through the Countryside Stewardship and Reserves Enhancement Schemes, or through English Nature management agreements.
- Sherwood Forest is one of four trial areas in the English Nature Habitat Restoration Project. English Nature and the Sherwood Forest Trust are working together to trial methods of reversing fragmentation through habitat restoration and creation of buffers, stepping stones and corridors.
- The restoration of heathland and associated habitats on land managed by the Forestry Commission in Sherwood Forest is expected to produce 130ha by 2001, of which 30ha will be acid grassland.

TARGETS

Discussion arose regarding the impracticalities of splitting the Lowland dry acid grassland and Lowland heathland habitat types up for the purpose of setting the targets. It was agreed, because of the mosaic nature of the habitats within Nottinghamshire, that the total resource for both habitat types should be pooled and then split 50/50 for each type and likewise for the restoration and expansion targets. Therefore the following targets were agreed by the HAP target review group.

This is a UK priority habitat falling under the UK Broad Habitat classification of Acid grasslands, which are grasslands occurring on acid rocks such as sandstones, acid igneous rocks and on superficial deposits such as sands and gravels. As a Priority habitat, Lowland Dry Acid Grassland typically occurs on nutrient-poor, generally free-

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draining soils with pH ranging from 4 to 5.5 overlying acid rocks or superficial deposits such as sands and gravels.

Definition of lowland acid grassland is problematical but here it is defined as both enclosed and unenclosed acid grassland throughout the UK lowlands (normally below c. 300m). It covers all acid grassland managed in functional enclosures. Nottinghamshire's dry acid grassland falls between the acid upland grasslands of the Pennines and the lowland grasslands of the Brecklands and Lincolnshire. Consequently Nottinghamshire acid grasslands include upland elements such as mat grass, but lack typical lichen components found further east.

The total lowland heath/acid grassland mosaic resource in Nottinghamshire is 1500ha, based on SSSI data and site survey by the NBGRC. Of this around 800ha is not in good condition. There are 453ha of the lowland heath/acid grassland mosaic covered by SSSI status in Nottinghamshire, of which 431.28ha are in favourable condition. The Sherwood Forest Trust has restored 737ha of heath and acid grassland to date. The restoration and expansion targets, combined, were based on the Nottinghamshire Heathland Strategy and the England targets for Lowland Heath.

Target Type	Target Text	Units	2005 Baseline	2010 Target	2015 Target
Maintain Extent	Maintain the extent of all existing lowland dry acid grassland.	Ha	750	750	1750
Achieve Condition	Maintain and improve by management existing lowland dry acid grassland.	Ha	338 (45%, existing habitat in favourable condition)	600 (80% of total habitat resource)	750 (100% of 2005 baseline resource)
Restoration	Improve the condition of relict habitat so that it qualifies as lowland dry acid grassland.	Ha		500	500
Expansion	Encourage the re-establishment and increase the area of lowland dry acid grassland.	Ha			

PROPOSED ACTION

Policy and legislation

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1. Ensure the incorporation of relevant (inter-)national law, policies and guidance into all plans and policies relating to the protection, enhancement and management of lowland dry acid grassland habitat.

ACTION: Government Agencies, Local Authorities, NGO's.

2. Through planning control or other land use consultation processes, allow no further loss of areas of lowland dry acid grassland habitat and seek opportunities to enhance existing areas and create new areas through approved development.

ACTION: Government Agencies, Local Authorities, NGO's.

3. Ensure agri-environment, forestry and other funding schemes include appropriate management options and design measures to suit local nature conservation needs.

ACTION: Government Agencies.

Site safeguard and management

4. Review the extent of SSSI coverage of grassland habitat and consider notifying further sites as necessary.

ACTION: Government Agencies.

5. Designate SINCs and declare Local Nature Reserves on appropriate areas of habitat or instigate other appropriate measures for their protection.

ACTION: Government Agencies, Local Authorities, NGO's.

6. Promote the uptake of positive management with owners of SSSIs, LNRs, SINCs and any other areas of lowland dry acid grassland habitat.

ACTION: Government Agencies, Local Authorities, NGO's.

7. Carry out appropriate habitat management on sites controlled by BAP partners.

ACTION: Government Agencies, Local Authorities, NGO's.

8. Ensure sites containing lowland dry acid grassland habitat have appropriate management plans that are working towards improving site management and condition

ACTION: Government Agencies, Local Authorities, NGO's.

9. Acquire land to ensure good habitat management or to create habitat.

ACTION: NGO's.

Advisory

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10. Provide formal or informal training in management techniques for lowland dry acid grassland habitat to land managers, site wardens, volunteers, etc.

ACTION: Government Agencies, Local Authorities, NGO's.

11. Establish demonstration sites or projects to demonstrate/publicise good habitat management techniques.

ACTION: Government Agencies, Local Authorities, NGO's.

Future research and monitoring

12. Establish and maintain a monitoring programme (a site register) to determine progress towards county HAP targets.

ACTION: Government Agencies, Local Authorities, NGO's.

13. Ensure that areas of lowland dry acid grassland habitat are periodically resurveyed to establish extent and condition. Update resulting habitat inventory every 5 years and revise targets and HAPs if necessary.

ACTION: Government Agencies, Local Authorities, NGO's.

Communications and publicity

14. Improve public awareness and appreciation of lowland dry acid grassland habitat by providing appropriate interpretation, education and access (where appropriate).

ACTION: Government Agencies, Local Authorities, NGO's.

15. Improve awareness of the value of, and appropriate management techniques for lowland dry acid grassland habitat among site owners and occupiers.

ACTION: Government Agencies, Local Authorities, NGO's.

What You Can Do

- If you are a landowner or manager on naturally acid land in Nottinghamshire, consider managing part of your land as unimproved acid grassland. Contact FWAG, FRCA, ADAS or the Sherwood Forest Trust for advice on sources of funding.
- Join the Nottinghamshire Wildlife Trust, BTCV or another voluntary organisation, and find out how you can become actively involved in the conservation of acid grassland.

Species List

The following are examples of species of conservation concern (Appendix A) which are likely to benefit from this action plan:

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- Brown hare
- Common shrew
- Barn owl
- Common buzzard
- Curlew
- Grey partridge
- Lapwing
- Common lizard
- Broom tip moth
- Light brocade moth
- Blue fescue
- Fragrant agrimony
- Prickly sedge
- Sand sedge