Environment & Heritage Service

# NORTHERN IRELAND SPECIES ACTION PLAN
# HEATH CUDWEED

April 2008

Environment & Heritage Service
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**Northern Ireland Species Action Plan**
**Heath Cudweed *Gnaphalium sylvaticum***
**April 2008**

# 1 Current Status

**1.1** Heath Cudweed *Gnaphalium sylvaticum* L. is a short-lived perennial member of the Daisy family. The flower heads are solitary or in small clusters in the axils of the upper stem-leaves, forming an interrupted leafy spike. Phyllaries (outer bracts) are green in the centre and brownish-scarious around the edges and lower stem leaves stalked, lanceolate, pointed, 2-8 cm long, upper leaves progressively shorter and narrower, stalkless. All leaves are green, one-veined and hairless above but white and woolly below. It grows up to a height of 60cm. It flowers July - September and is little visited by insects. (Clapham, 1987; Rose, 1981)

**1.2** *G. sylvaticum* occurs as a native species in open habitats on dry, acidic, often sandy or gravelly soils such as heaths, heathy pastures, sand-pits, dunes and tracks and especially in open woodland and forestry rides in former heathland, at an altitude of 0-850 metres (Preston, 2002). In Northern Ireland it occurs in sand pits, gravel pits, quarries, tracks and in well drained acid grassland around loughs, rivers and bogs. It prefers lightly disturbed ground with few potentially competitive species.

**1.3** This species is found throughout the British Isles and Europe, the Caucasus and North America. Indications are that it is declining throughout its range despite benefiting from afforestation policies in the 20$^{th}$ century (Preston, 2002). The reasons for this decline are not clear.

**1.4** The first record of *G. sylvaticum* in Northern Ireland was made by Rev. W. M. Hind at Newcastle, Co. Down in 1852 (Stewart *et al.*, 1938). It has declined from being recorded in 55 10x10km squares pre-1970 to only 12 10x10km squares since 1986, an historical reduction of 75% (Preston *et al*., 2002). The species is presumed to be extinct in Counties Fermanagh, Antrim and Armagh. It has not been recorded in County Down since 1988 (Day & Hackney, 2004) with all surviving populations thought to be restricted to County Tyrone (Northridge & Northridge, 2005). Most populations are associated with sparsely vegetated ground in acid grassland which has been created through damage, reclamation and drainage of peatlands. Former populations on grey dune habitat are considered extinct. There are 77 historic records scattered across Northern Ireland. Data held at the Centre for Environmental Data and Recording Data (CEDaR) indicate that there are 20 records since 1980.

**1.5** *G. sylvaticum* currently has no special protection in Northern Ireland though it is protected under the 1999 Flora Protection Order in the Republic of Ireland and has been given the category of 'Vulnerable' in the *Irish Red data Book* (Curtis *et al.*, 1988). Vulnerable species are defined as those that are currently not endangered but would be extremely vulnerable if their habitats are disturbed in the future.

## 2 Current Factors Causing Loss or Decline

**2.1** Agricultural improvement in the form of cultivation, application of fertiliser and pesticides, and ploughing and re-seeding, has been identified as one of the factors that may threaten lowland dry acid grassland in Northern Ireland, the habitat mostly associated with *G. sylvaticum*.

**2.2** Moderate grazing or mowing, with removal of cut material, is necessary to retain the low nutrient value of the lowland dry acid grassland favoured by *G. sylvaticum*. This helps keep potentially competitive species in check. Severe overgrazing results in a reduction of species diversity and allows more stress-tolerant and nitrophilous species to dominate. Supplementary stock feeding can lead to detrimental localised effects such as heavy poaching and excessive increases in nutrients. Although grazing can benefit the species, these processes, if excessive, are potentially damaging to *G. sylvaticum* populations.

**2.3** Abandonment of agricultural practice may threaten lowland dry acid grassland in Northern Ireland. Absence of management by cutting or grazing can lead to the development of rank heath or growth of bracken, scrub or woodland.

**2.4** Development has been identified as a factor that may threaten some lowland dry acid grassland in Northern Ireland. In particular, road building, mineral and rock extraction, landfill and over fastidious clearing and spraying of forest track-ways have, or could potentially impact on the species.

**2.5** Habitat fragmentation has been identified as one of the factors that may threaten lowland dry acid grassland in Northern Ireland. Reduction of parcel size and isolation of unimproved grassland parcels results in reduced opportunities for desirable species to colonise relatively impoverished lowland dry acid grassland. Fragmentation further increases the chances and severity of piecemeal habitat loss and extinction in these areas.

**2.6** Airborne pollution, which can result in acidification and nitrogen enrichment, has been identified as one of the factors that may threaten lowland dry acid grassland in Northern Ireland.

**2.7** Recreational pressure has been identified as a factor that may threaten lowland dry acid grassland in Northern Ireland. Recreational pressure may be critical in areas where the species grows close to track-ways (see 2.8)

**2.8** Erosion, as a result of natural processes or recreational pressure, as well as overgrazing and poaching, can lead to accelerated loss of thin acid soils, especially where they are sparsely vegetated. In the first instance it is likely that these processes created suitable conditions for *G. sylvaticum* but excessive trampling will have a detrimental impact.

**2.9** Afforestation, especially with commercial coniferous plantations, has in the past, resulted in loss of lowland dry acid grassland in Northern Ireland, where *G. sylvaticum* could have occurred. Afforestation historically assisted this species through drying out

soils and creating suitable bare ground alongside trackways, in clearings and on plantation edge but maturation of plantations has resulted in further declines.

**2.10** Predictions of temperature and sea level rises as a result of climate change have been modelled by the MONARCH project (Harrison *et al*., 2001). These suggest a smaller impact in Ireland than in Great Britain but may result, or may have resulted in changes in species composition and diversity.

**2.11** A lack of awareness of the species' presence and its management requirements combined with identification problems for non-experts has undoubtedly led to the loss of some colonies.

**2.12** The lack of any specific statutory protection has resulted in the destruction of one known colony in County Fermanagh.

## 3 Current Action

**3.1** Statutory site designation granted to areas such as National Nature Reserves (NNRs) is important in the conservation of threatened habitats and species. Management plans exist for all NNRs and should include actions for *G. sylvaticum* as appropriate.

**3.2** Under Article 28 of the *Environment (Northern Ireland) Order 2002*, Areas of Special Scientific Interest (ASSIs) are currently identified and declared by the Department of the Environment (DOE) through the Environment and Heritage Service (EHS). The *Environment (Northern Ireland) Order 2002* strengthened existing protection of ASSIs by introducing a mechanism for the positive management of these sites. The Management of Sensitive Sites Scheme (MOSS) is a voluntary scheme run by EHS and is designed to ensure the positive management of ASSIs, recognising the importance of working in partnership with owners and occupiers. No ASSIs are known to currently support this species.

**3.3** In 2000, the Northern Ireland Biodiversity Group (NIBG) produced its recommendations to Government (NIBG, 2000). These recommendations were accepted by the Northern Ireland Executive in 2002, with the publication of the *Northern Ireland Biodiversity Strategy* (DOE, 2002). As part of this process, a revised list of priority species was published in March 2004. This list includes *G. sylvaticum*.

**3.4** Regional Planning and Transportation division within DRD is responsible for the implementation of the *Regional Development Strategy* (RDS) for Northern Ireland 2025, which provides an overarching framework for competitive and sustainable development in Northern Ireland (DRD 2001). Operational policies to give effect to the Strategic Planning Guidelines of the RDS are contained in Planning Policy Statements (PPSs).

**3.5** Planning Service assesses the impact of development proposals on wildlife using policies in *Planning and Policy Statement 2 – Planning and Nature Conservation* (currently under review). EHS is a statutory consultee to Planning Service and provides advice on site specific impacts both within designated sites and in the wider

countryside, when requested to do so. Impacts of development proposals are assessed and the proposals amended or mitigated to ensure continued sustainable development in the countryside.

**3.6** Site protection policies are included in Development Plans. These include the identification of Sites of Local Nature Conservation Importance (SLNCIs). Planning Service is currently considering which SLNCIs will be formally identified in Development Plans. Where such sites are confirmed in adopted plans, specific planning policies will be applied to development proposals on those sites.

**3.7** The development of Local Biodiversity Action Plans (LBAPs) based on District Council areas and/or discrete landscape areas, and the appointment of Local Biodiversity Officers will help to build on the SLNCI network and encourage, co-ordinate and inform local biodiversity action.

**3.8** The Department of Agriculture and Rural Development (DARD) through its Countryside Management Branch (CMB) has developed a series of Agri-environment schemes including the ESA scheme and the Countryside Management Scheme (CMS). Further revisions to both the ESA and CMS have recently been approved under the current Northern Ireland Rural Development Programme (2000 - 2006). Their objectives are to protect and enhance semi-natural habitats and species by encouraging more sensitive management practices. Both these schemes have similar management provisions, are voluntary and apply to the whole farm. These schemes provide mechanisms for delivering some of the targets in Action Plans for species and habitats and are currently targeting areas of as little as 0.1 ha of semi-natural habitat in order to maintain and improve their present conservation value. Around 230,000ha of farm land, approaching one quarter of total agricultural land in Northern Ireland is currently in agri-environment schemes.

**3.9** The designation of ESAs started in 1988 and today there are 5 ESAs in Northern Ireland. DARD has determined a number of priority habitats, which, if they occur on the farm, must be brought under agreement and managed according to relevant prescriptions determined by DARD.

**3.10** The Countryside Management Scheme (CMS), launched in 1999, was developed with the primary aim to maintain and enhance biodiversity and is open to all farmers and landowners outside ESAs. Where funding is limited entry into the scheme is competitive and based on who can offer the greatest environmental benefits.

**3.11** A new agri-environment scheme, called the NICMS (Northern Ireland Countryside Management Scheme), will be launched in late Spring/early summer 2008. The NICMS is an integral part of the Northern Ireland Rural Development Programme 2007 – 2013 (NIRDP). This programme is part-financed by the European Agricultural Fund for Rural Development (EAFRD) with co-funding provided by the Department of Agriculture and Rural Development (DARD). The NICMS will play an important role in delivery of Axis 2 of the NIRDP - Improving the environment and the countryside through land management.

**3.12** The NICMS aims to make a major contribution to the conservation action required for many Northern Ireland priority habitats and species. The habitat management plans in NICMS specify how farmers and land managers can best contribute to the conservation of these priority habitats and species.

**3.13** The Roads Service has produced an environmental booklet (DOE, 1998) to give guidance to road contractors, to help minimise impact of roads, from design stage through to construction, including the protection of species and habitats, both inside and outside designated areas. This provides some appropriate advice for site managers and contractors where *G. sylvaticum* is known to occur on or close to tracks and roads.

**3.14** Appointment of Local Biodiversity Officers by councils in Northern Ireland will result in the development of Local Biodiversity Action Plans (LBAPs) which will encourage, co-ordinate and inform local biodiversity action. The majority of *G. sylvaticum* records in Northern Ireland were from undesignated sites so the LBAP process will provide a mechanism to highlight key sites.

**3.15** Quarries and sand pits are important for the species and the Quarry Products Association (QPA) have appointed an LBAP officer.

**3.16** Other relevant information is gathered through specialist biological recording groups, NGOs, universities and other government bodies. Biological records are currently stored in Museum and Galleries of Northern Ireland (MAGNI) at the Centre for Environmental Data and Recording (CEDaR). CEDaR was established in 1995 in partnership with EHS, MAGNI and the biological recording community. There are currently over 1.4 million records held by CEDaR and there are plans under way to make these records more accessible through the internet. This will be achieved through the National Biodiversity Network - a union of organisations throughout the UK working together to create an informal network of accessible biological data for biodiversity information. (EHS, 2005b).

**3.17** There is currently no research being undertaken on *G. sylvaticum* in Northern Ireland.

## 4 Action Plan Targets

**4.1** Maintain the number of populations of *G. sylvaticum* at 20 sites.

**4.2** Maintain the range of *G. sylvaticum* at 12 10x10km squares.

**4.3** By 2015 increase number of populations to 24 sites.

**4.4** By 2015 increase range to 15 10x10km squares.

# 5 Proposed Action with Lead Agencies

## 5.1 Policy and Legislation

5.1.1 By 2008, review coverage of *G. sylvaticum* within ASSIs and NNRs and if necessary notify further sites to fill any gaps.
(ACTION: EHS)

5.1.2 By 2008, ensure all *G. sylvaticum* sites are identified and, where appropriate, site protection policies are included in statutory and non-statutory plans e.g. Development Plans and other strategic plans including Local Biodiversity Action Plans (LBAPs). The 14 recorded squares (Preston, 2002) should be surveyed as a priority.
(ACTION: Planning Service, EHS, DARD, District Councils)

5.1.3 Monitor and review effectiveness of MOSS and agri-environment schemes to ensure *G. sylvaticum* populations are being maintained and enhanced.
(ACTION: EHS, DARD).

5.1.4 Ensure agri-environment scheme prescriptions, relevant/appropriate to *G. sylvaticum* are contributing to maintaining and enhancing the population across Northern Ireland.
(ACTION: DARD, EHS)

5.1.5 By 2009, target positive management through MOSS, agri-environment schemes, and the LBAP process to secure favourable management of *G. sylvaticum* sites.
(ACTION: EHS, DARD)

5.1.6 By 2008, review the *Wildlife Order (Northern Ireland) 1985* and consider adding *G. sylvaticum* to Schedule 8 Part I to give *G. sylvaticum* full protection under article 14(1)(a) and (2).
(ACTION: EHS)

## 5.2 Site Safeguard and Management

5.2.1 By 2009, produce conservation objectives for all designated sites with *G. sylvaticum* ensuring that where possible the objectives do not conflict with the requirements of *G. sylvaticum.*
(ACTION: EHS)

5.2.2 By 2010, secure favourable management of current and other selected sites to maintain existing populations and aid the re-establishment of former populations.
(ACTION: EHS, Roads Service, Forest Service)

## 5.3 Species Management and Protection

5.3.1 By 2010, ensure all known sites are managed in a manner that is beneficial to the conservation of *G. sylvaticum*.
(ACTION: EHS)

### 5.4 Advisory

5.4.1 By 2008, provide advice to landowners with *G. sylvaticum* on their land about suitable management requirements of species.
(ACTION: EHS, DARD)

5.4.2 By 2008, ensure that information on *G. sylvaticum* in Northern Ireland is available to all those who could play a role in its conservation and recovery including competent authorities and environmental consultants involved in the preparation of Environmental Impact Assessments (EIAs).
(ACTION: EHS, DARD)

### 5.5 International

5.5.1 Further develop links with The Republic of Ireland and other European and international organisations and programmes such as the European Environment Agency and the European Centre for Nature Conservation to promote and exchange information and experience in research, management techniques, education and conservation strategies
(ACTION: EHS)

### 5.6 Future Research and Monitoring

5.6.1 By 2008, establish the current distribution, abundance and viability of *G. sylvaticum* populations.
(ACTION: EHS)

5.6.2 By 2008, commission research into the ecology of the species in Northern Ireland to inform management prescriptions.
(ACTION: EHS)

5.6.3 As required, review monitoring protocols and condition assessment methodology for statutory sites with *G. sylvaticum*.
(ACTION: EHS)

5.6.4 Monitor habitat conditions and management to ensure that optimal site management is achieved.
(ACTION: EHS)

5.6.5 By 2008, set in place a reporting and monitoring structure to encourage progress towards delivery of targets and completion of actions identified in this plan.
(ACTION: EHS)

5.6.6 By 2008, devise and conduct experiments into exposing the seed bank in areas where *G. sylvaticum* was known to occur.
(ACTION: EHS)

### 5.7 Communication and Publicity

5.7.1 Raise awareness of *G. sylvaticum* among the general public including volunteers, botanists, professional conservation workers and researchers eg. By means of reports, publications, field meetings and presentation of research results at conferences. (ACTION: EHS)

## 6 Links with other Action Plans

**6.1** This plan should be considered in conjunction with the following UK and Northern Ireland Habitat Action Plans.

- Lowland Dry Acid Grassland

**6.2** This plan should be considered in conjunction with the following UK and Northern Ireland Species Action Plans.

- Smooth cat's ear *Hypochaeris glabra*

## 7 References

CEDaR. Centre for Environmental Data and Recording. Museums and Galleries of Northern Ireland

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## List of Useful Acronyms

| | |
|---|---|
| ASSI | Area of Special Scientific Interest |
| BAP | Biodiversity Action Plan |
| CEDaR | Centre for Environmental Data and Recording |
| CMB | Countryside Management Branch |
| CMS | Countryside Management Scheme |
| DARD | Department of Agricultural and Rural Development |
| DCAL | Department of Culture, Arts and Leisure |
| DETI | Department of Enterprise, Trade and Investment |
| DENI | Department of Education for Northern Ireland |
| DOE | Department of the Environment |
| DRD | Department for Regional Development |
| EHS | Environment and Heritage Service |
| ESA | Environmentally Sensitive Area |
| ESCRs | Earth Science Conservation Review Site |
| FCB | Fisheries Conservancy Board |
| HAP | Habitat Action Plan |
| JNCC | Joint Nature Conservation Committee |
| MAGNI | The National Museums and Galleries of Northern Ireland |
| NESA | New Environmentally Sensitive Area |
| NIBG | Northern Ireland Biodiversity Action Group |
| NICMS | Northern Ireland Countryside Management Scheme |
| NICS | Northern Ireland Countryside Survey |
| NNR | National Nature Reserves |
| NT | National Trust |
| PPS | Planning Policy Statement |
| RA | Rivers Agency |
| RSPB | Royal Society for the Protection of Birds |
| SAC | Special Area of Conservation |
| SAP | Species Action Plan |
| SLNCI | Site of Local Nature Conservation Importance |
| SoCC | Species of Conservation Concern |
| SPA | Special Protection Area |
| UWT | Ulster Wildlife Trust |
| WFD | Water Framework Directive |
| WWT | Wildfowl and Wetlands Trust |

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