

Environment & Heritage Service

Northern Ireland Species Action Plan

One-sided Wintergreen

Orthilia secunda

March 2006

Northern Ireland Species Action Plan
One-sided Wintergreen
Orthilia secunda
March 2006

1 Current Status

- 1.1** One-sided wintergreen *Orthilia secunda* is a hairless, rhizomatous perennial, with erect stems 8-15 cm high. Its leaves are alternate, broadly ovate to elliptical, and very finely toothed, 2-4 cm long, mostly situated near the base of the stem with much smaller, narrow leaves borne on the stem higher up. Flowers are in a terminal, one-sided raceme 3-5 cm long. There are 5 greenish-white petals (Webb *et al.*, 1996). It inhabits heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus* dominated communities, mostly in *Pinus* spp. and *Betula* spp. woodland but also on open moorland. It also grows in clefts on ledges in rocky gullies, and on rocky stream banks from 30 m to 690m (Curtis *et al.*, 1988).
- 1.2** In Europe one-sided wintergreen occurs in the north, characteristic of boreal forest and in mountains in the south. It is also found in North America (Stewart *et al.*, 1994).
- 1.3** In Britain it occurs in Scotland and northern England and in south Wales. In its southern range in Britain one-sided wintergreen grows in narrow crevices of steep, broken and dry rocks, but often in rather humid ravines and gullies (Stewart *et al.*, 1994).
- 1.4** In Ireland one-sided wintergreen was formerly known from counties Offaly, Londonderry, Fermanagh and Antrim but is now only known to be extant in Fermanagh (Curtis *et al.*, 1998). In Antrim it has occurred at Glenarm, Sallagh Braes, Agnew's Hill, and Cranny Burn. In Londonderry it has occurred at Errigal Banks, Garvagh (Stewart *et al.*, 1992).
- 1.5** In Fermanagh one-sided wintergreen was found in 1899 by W. N. Tetley who came across it at the Carrick Lough end of the Correl Glen. Præger came to Fermanagh in 1904 and found the species on many of the Lough Navar scarps. R. J. Welsh noted the species at Carricknagower in 1926 and E. N. Carrothers saw it east of Parabaun Lough in 1938. Northridge and Northridge (2004) located the species on Carricknagower scarp in 1979 and subsequently found it on 10 scarps in the area.
- 1.6** The species is protected in Northern Ireland under Schedule 8 of the *Wildlife (Northern Ireland) Order, 1985*, which makes it an offence to pick or root, or to destroy this plant.

2 Current Factors Causing Loss or Decline

- 2.1** Woodland management – in the past conifers were planted too close to some of the scarps and this interfered with the natural vegetation of the scarps (Northridge & Northridge, 2004).

- 2.2 Grazing – can curtail its distribution.
- 2.3 Burning – heather burning can restrict its range.
- 2.4 Global warming – it is possible that, in the longer term, this northern species will be affected by global warming, either by increasing temperature or the drying out of the scarps (Northridge & Northridge, 2004).

3 Current Action

- 3.1 Under the *Nature Conservation and Amenity Lands (Northern Ireland) Order 1985*, Areas of Special Scientific Interest (ASSIs) are identified and declared by the Department of the Environment (DOE) through the Environment and Heritage Service (EHS). *The Environment (Northern Ireland) Order 2002*, strengthened the protection of ASSIs, recognising the importance of working in partnership with owners and occupiers and facilitating the positive management of these sites. The Lough Navar Forest Scarps are included in an Area of Special Scientific Interest (ASSI).
- 3.2 The Management of Sensitive Sites Scheme (MOSS), launched in 2002 by EHS, is a voluntary scheme designed to ensure the positive management of ASSI features to maintain their extent and favourable condition. Under the scheme, landowners can receive payment for carrying out conservation work within the framework of a written agreement. MOSS covers issues such as dumping, grazing and control of invasive 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 Northern Ireland priority species was published in March 2004. This list includes one-sided wintergreen.
- 3.4 Regional Planning and Transportation Division within DRD is responsible for coordinating the implementation of the *Regional Development Strategy (RDS) for Northern Ireland 2025* (DRD, 2001). The RDS contains a Spatial Development Strategy and related Strategic Planning Guidelines (SPGs). The emphasis in the SPGs is on competitiveness, sustainable development and tackling social exclusion and division. Operational policies to give effect to the SPGs are contained in Planning Policy Statements (PPSs). Some of these policies have a direct or indirect bearing on the prevention of adverse impacts on priority habitats and species.
- 3.5 *PPS2 Planning and Nature Conservation* (DOE, 1997) (under review) contains planning policy for the hierarchy of sites of nature conservation importance. It also addresses trees and woodlands, and protection of species.
- 3.6 *PPS14 Sustainable Development in the Countryside* is due to be published by Regional Planning and Transport Division (RPTD) of the Department of Regional Development (DRD) by the end of 2006.

- 3.7** 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.
- 3.8** DARD, through its Countryside Management Branch (CMB), has developed a series of agri-environment schemes including the Environmentally Sensitive Areas (ESA) Scheme (revised in 2000) and the Countryside Management Scheme (CMS). A further revision to both the ESA and CMS has recently been approved under the current Northern Ireland Rural Development Programme (2000-2006). Their objective is 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 a mechanism for delivering some of the targets listed in action plans for many species and habitats, targeting areas of as little as 0.1 ha of semi-natural habitat in order to maintain or improve their present conservation value. Around 230,000 ha of farmland are currently in agri-environment schemes in Northern Ireland, approaching a quarter of the total agricultural land in the Province. A sample of habitats is under long-term monitoring by QUB's Agri-environment Monitoring Unit (QUB, 2004b).
- 3.9** The designation of ESAs commenced in 1988 and today there are five 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 Habitat Improvement Scheme (HIS) aims to help farmers protect, enhance and establish habitats which are considered to have major conservation value. This is achieved by taking land out of agricultural production or by entering into a 10 year agreement which involves extensive grazing based on non-application of fertilizers and pesticides to the land. No new applications for the HIS are being accepted as the scheme closed in mid-1999. The scheme has been replaced by the Countryside Management Scheme (CMS).
- 3.11** The 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, being based on who can offer the greatest environmental benefits.
- 3.12** Under agri-environment schemes all moorland is classified as blanket bog, wet heath, dry heath or rough moorland grazing. Management includes controlling livestock numbers, removal of livestock from November to February to improve heather regeneration and heather burning/flailing, if appropriate.
- 3.13** Within the Environmentally Sensitive Areas (ESA) and Countryside Management Schemes (CMS), grant aid is available to manage areas of broadleaf woodland greater than 0.1ha – oak, ash or wet woodland – and scrub. *Betula* spp. woodland would be

classified and managed as wet woodland under agri-environment. Management would include grazing/no grazing and removal of dumped material.

- 3.14** Farmers in receipt of Single Farm Payment are required to observe certain conditions known as Cross Compliance, part of which states that they must keep their land in Good Agricultural and Environmental Condition. Claimants must ensure that all semi-natural habitats are maintained, not over grazed or undergrazed, not trampled or poached and they must not place supplementary feeders on habitats.
- 3.15** Grants for woodland planting, regeneration and some other management practices are available from the Forest Service, DARD. Forest Service's main grant scheme is the Woodland Grant Scheme (WGS) which is part funded by the European Union (Council Regulation 1257/1999) and offers grants towards the costs of establishing new woodland and management of existing woodland. Establishment Grants are designed to assist new planting, restocking and natural regeneration. Woodland Improvement and Sustainable Forestry Operations Grants are available for existing woodlands to bring them back to sustainable management and secure environmental, social and economic benefits
- 3.16** Other relevant information is gathered through specialist biological recording groups, Non-Governmental Organisations (NGOs), universities and other government bodies. Biological records are currently stored in the 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 underway 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 information network of accessible biological data for biodiversity information.

4 Action Plan Targets

- 4.1** Maintain the current populations of one-sided wintergreen at 12 sites.
- 4.2** Maintain the current range of one-sided wintergreen at 2 10x10km squares.
- 4.3** By 2015, increase the number of one-sided wintergreen populations to 15 sites.
- 4.4** By 2015, increase the range of one-sided wintergreen to 3 10x10 km squares.

5 Proposed Actions with Lead Agencies

5.1 Policy and legislation

- 5.1.1 By 2008, ensure that important one-sided wintergreen sites are recognised 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).
(ACTION: Planning Service, EHS, DARD, Forest Service, District Councils)
- 5.1.2 By 2007, monitor and review the effectiveness of MOSS and agri-environment schemes to ensure that one-sided wintergreen populations are being maintained and enhanced across Northern Ireland.
(ACTION: EHS, DARD)
- 5.1.3 By 2007, ensure that agri-environment scheme prescriptions relevant/appropriate to one-sided wintergreen are contributing to maintaining and enhancing the population across Northern Ireland.
(ACTION: DARD, EHS)
- 5.1.4 By 2008, target positive management through MOSS, agri-environment schemes, the LBAP process and grant aid for biodiversity to secure favourable management on one-sided wintergreen sites.
(ACTION: EHS, DARD)

5.2 Site safeguard and management

- 5.2.1 By 2007, review the coverage of one-sided wintergreen sites within cSAC, ASSI and NNR series and, if necessary, notify further sites to fill significant gaps.
(ACTION: EHS)
- 5.2.2 By 2006, produce conservation objectives for all statutory sites containing one-sided wintergreen ensuring that where possible the objectives do not conflict with the requirements of one-sided wintergreen.
(ACTION: EHS)
- 5.2.3 By 2007, review the coverage of one-sided wintergreen sites within cSAC, ASSI and NNR series and, if necessary, notify further sites to fill significant gaps.
(ACTION: EHS)
- 5.2.4 By 2009, secure favourable management of selected historical sites for one-sided wintergreen to encourage the recovery of these 'extinct' populations.
(ACTION: EHS)

5.3 Species management and protection

- 5.3.1 By 2009, ensure that all known sites are managed in a manner that is beneficial to the conservation of one-sided wintergreen.
(ACTION: EHS)

5.4 Advisory

- 5.4.1 By 2007, provide advice to land owners with one-sided wintergreen on their land about suitable management requirements of the species.
(ACTION: EHS, DARD)
- 5.4.2 By 2007, ensure that information on one-sided wintergreen in Northern Ireland is available to all those who could play a role in its conservation and recovery.
(ACTION: EHS, DARD, Forest Service)

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 the exchange of information and experience in research, management techniques, education and conservation strategies.
(ACTION: EHS)

5.6 Future research and monitoring

- 5.6.1 By 2007, establish the distribution and abundance of one-sided wintergreen populations.
(ACTION: EHS)
- 5.6.2 Periodically review monitoring protocols and condition assessment methodology for statutory sites with one-sided wintergreen.
(ACTION: EHS)
- 5.6.3 By 2007, monitor and review the effectiveness of MOSS and agri-environment schemes to ensure that one-sided wintergreen populations are being maintained and enhanced across Northern Ireland.
(ACTION: EHS, DARD)
- 5.6.4 Monitor habitat condition and management to ensure that optimal site management is achieved.
(ACTION: EHS)
- 5.6.5 By 2006, set in place a reporting and monitoring structure to encourage progress towards the delivery of the targets and the completion of actions identified in this plan.
(ACTION: EHS)

5.7 Communications and publicity

- 5.7.1 Raise awareness of the species among the general public, volunteers, botanists and professional conservation workers and researchers e.g. by means of reports, publications, field meetings and presentation of research results at conferences.
(ACTION: EHS)

5.8 Links with other Action Plans

- 5.8.1 This plan should be considered in conjunction with the following UK and Northern Ireland Habitat Action Plan:
- Upland Heathland
 - Montane Heath

6 References

Curtis, T.G.F. & McGough, H.N. (1988) *The Irish Red Data Book 1: Vascular Plants*. Stationery Office, Dublin.

Department of the Environment for Northern Ireland. (1997). *Planning Policy Statement 2: Planning and Nature Conservation*. Department of the Environment for Northern Ireland (Planning Service), Belfast.

Department of the Environment. (1998). *Roads Service Environmental Handbook*. Roads Service, Belfast.

Department of the Environment (2002). *Northern Ireland Biodiversity Strategy*. Environment and Heritage Service, Belfast.

Department of Regional Development (2001). *The Regional Development Strategy 2025*. DRD, Belfast.

Northern Ireland Biodiversity Group (2000). *Biodiversity in Northern Ireland: Recommendations to Government for a Biodiversity Strategy*. HMSO, Belfast.

Northridge, R&H., (2004) *Plant and Site Monitoring Co. Fermanagh*.

QUB, 2004b. Baseline monitoring of the countryside management scheme in Northern Ireland. Report to DARD.

Stewart, A., Pearman, D.A. & Preston, C.D., (1994) *Scarce Plants of Britain*, JNCC. Peterborough

Stewart & Corry., (1992) *Flora of the North East of Ireland*, 3rd edition.

Webb D. A., Parnell J., & Dougan D., (1996) *An Irish Flora*, 3rd edition.

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
DOE	Department of the Environment
DRD	Department for Rural Development
EHS	Environment and Heritage Service
ESA	Environmentally Sensitive Area
ESCRs	Earth Science Conservation Review Site
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
NICS	Northern Ireland Countryside Survey
NNR	National Nature Reserves
PPS	Planning Policy Statement
RA	Rivers Agency
RSPB	Royal Society for the Protection of Birds
SAC	Special Area of Conservation
SLNCI	Sites of Local Nature Conservation Importance
SoCC	Species of Conservation Concern
SPA	Special Protection Area
WFD	Water Framework Directive
WWT	Wildfowl and Wetlands Trust