

Environment & Heritage Service

NORTHERN IRELAND SPECIES ACTION PLAN DINGY SKIPPER

April 2008

Northern Ireland Species Action Plan
Dingy Skipper *Erynnis tages*
April 2008

1 Current Status

- 1.1** The dingy skipper *Erynnis tages* (Linnaeus, 1758) is classified within the Hesperiiidae, a group of generally non-descript primitive butterflies that are generally referred to as skippers.
- 1.2** It is an active, early summer species, associated with warm, open grassland habitats (Shreeve *et al.*, 2001). It can be described as a small, cryptically coloured i.e. dull brown and grey, butterfly that can easily be confused with some day-flying (diurnal) moths such as the burnet companion *Euclidea glyphica* (Linnaeus, 1758) and the mother shipton *Callisteges mi* (Clerck, 1759) which can utilise the same habitat at the same time of year (Rippey, 2000).
- 1.3** The dingy skipper is widely distributed across Europe, Asia and China (to 62°N), although it is declining in several European countries (Asher *et al.*, 2001). The species is locally distributed throughout the southern half of the UK and is the only skipper to be found in Ireland. However it has suffered a serious decline across its range in recent years, becoming extinct in Essex, south-east England around 1990 and now very scarce throughout the eastern counties of England south of the Humber (Asher *et al.*, 2001). Data from the Butterfly Monitoring Scheme has shown an accelerating population decline in Britain over the period 1995 – 2004 (Fox *et al.*, 2006)
- 1.4** In Great Britain the species can be found in a variety of habitats including dunes, sea-cliffs, heath, woodland glades, wet grassland and old quarries. Brownfield sites are increasingly becoming a refuge for this species in the British Midlands (Anon., 2005).
- 1.5** In Ireland the species can be found in limestone areas and on eskers and is most commonly reported in Counties Clare and Sligo and in the Midlands. In Northern Ireland the species is restricted to the limestone regions of Co. Fermanagh.
- 1.6** In Fermanagh the dingy skipper has been recorded at 19 sites since 1990 and is confined to the north and west of the county. These colonies occur on calcareous grasslands and in suitable habitat on roadside verges and quarries (Nelson, 1998). The species however is now thought to have become extinct from several roadside verges and disused quarries. A number of remaining colonies along roadside verges in the areas of Enniskillen, Derrygonnelly and Belleek are also considered to be at risk of extinction.
- 1.7** In Ireland the flight period of the dingy skipper is May and June, comparable with British populations. There is only a single generation of the species known in Ireland (Thompson & Nelson, 2003). Common bird's-foot-trefoil *Lotus corniculatus* is the butterfly's host plant. Eggs are laid singly on the host plant and larvae feed on the leaves. The young larvae construct a shelter by spinning together the leaves of the plant. A new shelter is

constructed as the old shelter is consumed. It hibernates as larvae in autumn and pupates in spring, without further feeding (Bourn *et al.*, 2000).

- 1.8 Common bird's-foot-trefoil is widespread throughout Northern Ireland (Preston, Pearman & Dines, 2002). However, the dingy skipper shows a restricted distribution despite the widespread nature of the host plant. Known sites of dingy skipper in Co. Fermanagh not only contain a high host plant density but also show very specific attributes. The dingy skipper only uses sites occurring on sunny, south facing slopes where there is an abundance of common bird's-foot-trefoil and patches of bare ground. This high degree of habitat selection puts major constraints on the distribution of the species.
- 1.9 The dingy skipper is known to occur in small isolated colonies. It is a sedentary species and is unlikely to colonise new areas of habitat unless they are close to existing populations, although observations of natural colonisations suggest that a few individuals can travel several kilometres (Bourne *et al.*, 2000). It is therefore important that appropriate habitat close to existing colonies is protected to encourage re-colonisation.
- 1.10 The dingy skipper receives legal protection in Northern Ireland where it is fully protected under the *Wildlife (Northern Ireland) Order 1985*. It is listed under Schedule 5 as a species which is protected at all times and under Schedule 7 as a species which may not be sold alive or dead at any time. It is listed as a Priority Species under the Northern Ireland Biodiversity Strategy.

2. Current Factors Causing Loss or Decline

- 2.1 Loss and alteration of calcareous grassland habitat through agricultural improvement, overgrazing and abandonment may impact on dingy skipper populations. The Northern Ireland Countryside Survey (NICS) 2000 (Cooper and McCann, 2001) found a significant decrease in calcareous grassland in Fermanagh mainly due to conversion to agricultural grassland.
- 2.2 Overgrazing and undergrazing can result in the deterioration and loss of dingy skipper habitat. Grazing may also have a significant indirect affect on the reproductive success of the dingy skipper. The eggs and larvae of the dingy skipper are usually found close to the tip on long shoots of common bird's-foot-trefoil putting them at risk from predation by grazing, potentially resulting in high mortality (Gutiérrez *et al.*, 1999).
- 2.3 The habitat of the dingy skipper is transient by nature and is therefore directly threatened by lack of appropriate management. The species requires open areas of bare ground colonised by common bird's-foot-trefoil. Lack of appropriate management on sites that contain dingy skipper colonies can lead to natural succession of grassland to scrub vegetation causing a decline in the host plant and therefore a decline in the species.
- 2.4 The fragmentation of habitat can lead to small isolated colonies, which are vulnerable to extinction through natural population fluctuations, genetic decline and chance events.

- 2.5** The dingy skipper occurs in isolated colonies and has a very restricted distribution due to a high degree of habitat specialisation and its sedentary nature. The species is vulnerable to changes in the environment and it is therefore likely that the species may be at risk from climate changes.

3. Current Action

- 3.1** Gutiérrez *et al.*, (1999) carried out the first detailed ecological study of the dingy skipper in Wales. No other detailed studies are currently being carried out on this species but some monitoring and conservation management is being implemented throughout the UK.
- 3.2** Butterfly Conservation Northern Ireland (BCNI) has been actively recording butterflies and producing annual reports summarising butterfly records since 1989.
- 3.3** BCNI carried out a survey of dingy skipper colonies on roadside verges in Co. Fermanagh in May 2000 (Rippey, 2000). The survey arose from concerns that roadside colonies were at risk from extinction due to natural succession and the encroachment of scrub vegetation. The aim of this survey was to identify how many sites supported dingy skipper colonies, to determine which colonies had become extinct and to determine if any sites were suitable for management. It was found that nearly all sites were subject to natural succession. The results of this survey led to the management of one roadside verge at Kinarla.
- 3.4** BCNI approached the Roads Service of the Department of Regional Development (DRD) regarding the dingy skipper colony at Kinarla. DRD Road Service agreed to carry out management of this roadside verge in 2001 as a one-off project. Management included the clearance of scrub vegetation and removal of cuttings to prevent soil enrichment. The cut stumps however were not treated with herbicide to prevent re-growth. After an initial increase in dingy skipper numbers due to remedial management a more vigorous growth of scrub has now caused numbers to decline once again.
- 3.5** 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 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. There are currently no ASSIs designated specifically for the dingy skipper. Monawilkin, West Fermanagh Scarplands and Knockninny ASSIs however are known to support populations of the dingy skipper. All other colonies in Northern Ireland are unprotected and therefore potentially vulnerable to extinction.
- 3.6** 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 dingy skipper.

- 3.7** DRD Regional Planning and Transportation 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).
- 3.8** 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.
- 3.9** Site protection policies are included in Development Plans. These include the identification of Sites of Local Nature Conservation Importance (SLNCIs). The 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. There are currently no SLNCIs designated specifically for the dingy skipper.
- 3.10** 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. It is anticipated that the Fermanagh LBAP will include specific prescriptions relating to the dingy skipper and its associated habitat.
- 3.11** The Department of Agriculture and Rural Development (DARD), through its Countryside Management Branch (CMB), have developed a series of agri-environment schemes. These include the Environmentally Sensitive Area Scheme (ESAS) (revised in 2003) and the Countryside Management Scheme (CMS). A further revision to both the ESAS and CMS has recently been approved under the current Northern Ireland Rural Development Programme (2000-2006). The objectives of the schemes are to protect both habitats and species by encouraging more sensitive management practices. Both schemes have similar management provisions, are voluntary and apply to the whole farm. They provide a useful mechanism for delivering the targets listed in a number of species and habitat action plans. Many of the dingy skipper colonies in Co. Fermanagh are adjacent to agricultural land and would benefit from such schemes.
- 3.12** 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.

- 3.13** 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.
- 3.14** The Management of Sensitive Sites (MOSS) scheme was launched in 2002 by EHS. It is a voluntary scheme designed to ensure the positive management of site features within ASSIs. Such site features might include calcareous grassland. The MOSS scheme covers issues that have relevance to the conservation of site features including agricultural improvement, grazing and control of invasive scrub species. Under the scheme, landowners can receive an annual payment for carrying out conservation work within the framework of a written agreement or a discretionary payment for one-off works that will aid management of the site for wildlife.
- 3.15** Roads Services policy on environmental management is contained in the following publications: the *Design Manual for Roads and Bridges*, a UK wide technical standards document produced in 1997 by the Highways Agency, the Scottish Office, the Welsh Office and DOENI; the *Environmental Management of Highways*, an Institution of Highways and Transportation book and the *Environmental Handbook* (DOE, 1998) which includes guidance on the maintenance of roadside verges. While the handbook helps to recognise the importance of herb-rich roadside verges, it does not prescribe specific management measures.
- 3.16** 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. There are currently 240 records of the dingy skipper held by CEDaR, with dates ranging from 1901 to 2004. These records however are not considered to provide a complete data set for the dingy skipper. Many historical records are not currently available through CEDaR.

4. Action Plan Targets

- 4.1** Maintain the existing 18 populations of dingy skipper.
- 4.2** Maintain the range of the Dingy Skipper at 8 occupied 10x10km squares.
- 4.3** Increase the number of populations of dingy skipper to 25 sites.
- 4.4** Increase the range of the dingy skipper to 10 occupied 10x10km squares

5 Proposed Action with Lead Agencies

5.1 Policy & Legislation

- 5.1.1 Ensure that all dingy skipper 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, Roads Service, District Councils)
- 5.1.2 Ensure that any future revision of agri-environment schemes and MOSS schemes includes, where appropriate, the habitat requirements of the dingy skipper and the potential for habitat restoration.
(ACTION: DARD, EHS)
- 5.1.3 By 2008, target positive management through MOSS, agri-environment schemes, the LBAP process and grant aid for biodiversity to secure favourable management on dingy skipper sites.
(ACTION: EHS, DARD)
- 5.1.4 Where appropriate, include the habitat requirements of the dingy skipper in mitigation and restoration measures in the development control process for defunct quarries, located near to existing colonies.
(ACTION: Planning Service, EHS, District Councils)
- 5.1.5 By 2010, include the habitat requirements of the dingy skipper in the management of public open spaces including roadside verges i.e. seeding new roadside verges with common bird's-foot-trefoil, cutting at the appropriate time of year, management of scrub vegetation and maintenance of bare ground.
(ACTION: District Councils, EHS, DRD)

5.2 Site Safeguard & Management

- 5.2.1 By 2009, ensure that all known dingy skipper sites are identified and highlighted to lead agencies.
(ACTION: EHS)
- 5.2.2 By 2009, ensure all roadside verge colonies, both current and historical, are notified to Roads Service.
(ACTION: EHS)
- 5.2.3 By 2008, initiate discussions with Roads Service to encourage protection of colonies and help deliver effective management.
(ACTION: EHS, Roads Service)
- 5.2.4 By 2008, consider appropriate legal protection for roadside verge populations e.g. Kinarla, Co. Fermanagh.
(ACTION: EHS)

- 5.2.5 By 2008, establish criteria for describing and assessing favourable condition of dingy skipper habitat.
(ACTION: EHS)
- 5.2.6 By 2009, secure favourable management on selected historical sites with dingy skipper to encourage the recovery of these 'extinct' populations.
(ACTION: EHS, Roads Service)
- 5.2.7 By 2008, produce conservation objectives for all statutory designated SAC, ASSI and Nature Reserve (NR) sites where colonies of dingy skipper are known to be present ensuring that where possible the objectives do not conflict with the requirements of dingy skipper.
(ACTION: EHS)
- 5.2.8 By 2009, establish and implement management plans for all sites with current populations of dingy skipper and encourage the sensitive management of potential sites for colonisation/re-colonisation. Consider management of land adjacent to these sites, in particular the potential for spray drift of pesticide and herbicides.
(ACTION: EHS, DRD, DARD, District Councils)
- 5.2.9 By 2010, development of a network of suitably managed habitats along roadside verges where dingy skipper colonies are known to occur.
(ACTION: EHS, Roads Service, DARD, District Councils)
- 5.2.10 By 2010, ensure all roadside verge colonies are clearly marked.
(ACTION: Roads Service, EHS)

5.3 Species Management & Protection

- 5.3.1 By 2010, ensure that all known sites are managed in a manner that is beneficial to the conservation of the dingy skipper.
(ACTION: EHS, DARD, Roads Service, District Councils)

5.4 Advisory

- 5.4.1 By 2009, produce advisory leaflets highlighting the conservation issues surrounding the dingy skipper, detailing the optimum habitat requirements for the dingy skipper and providing advice on practical habitat management. Ensure that this information is available to all those who could play a role in its conservation and recovery.
(ACTION: EHS)
- 5.4.2 Advise conservation agencies, agri-environment scheme staff, land owners and managers on the location of occupied and other suitable sites and on practical habitat management for the dingy skipper and how to incorporate this with other management priorities and interests.
(ACTION: EHS, DARD)

5.4.3 Ensure the conservation importance and management requirements of the dingy skipper are incorporated into any relevant national and LBAPs.
(ACTION: EHS, District Councils)

5.4.4 Ensure all records of the species are submitted to CEDaR.
(ACTION: ALL)

5.5 International

5.5.1 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 & Monitoring

5.6.1 Establish the population status and distribution of the dingy skipper.
(ACTION: EHS)

5.6.2 Monitor existing colonies of dingy skipper by establishing transect walks which take in known colonies of the species in order to measure year on year variations in population size, to determine any change in status and to ensure that habitat is in favourable condition.
(ACTION: EHS)

5.6.3 Monitor historical sites with the potential for re-colonisation to look for new populations.
(ACTION: EHS)

5.6.4 By 2010, identify potential for new dingy skipper sites within 10 km of existing sites.
(ACTION: EHS)

5.6.5 By 2009, conduct research into the biology, ecology, genetics and population dynamics of the dingy skipper.
(ACTION: EHS)

5.6.6 Conduct research on the dispersal ability of the dingy skipper and the effect of habitat loss and isolation of colonies on population viability.
(ACTION: EHS)

5.6.7 By 2008, 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 & Publicity

- 5.7.1 Publicise this action plan to raise awareness of the decline of the dingy skipper and the importance of conservation management. Highlight the ability of the dingy skipper to survive at low population levels and the need for careful monitoring at current and historical sites.
(ACTION: EHS, DARD, District Councils)
- 5.7.2 Promote greater awareness of the dingy skipper amongst landowners, managers and the general public to help achieve its conservation and recovery.
(ACTION: EHS, DARD, DRD, District Councils)
- 5.7.3 Consider promoting the dingy skipper as a high profile flagship species, which can be used as a direct indicator of habitat change, health or quality and which can be used to illustrate wider issues in the environment i.e. climate change.
(ACTION: EHS)

6 Links with Other Plans

- 6.1 It is likely that the implementation of this plan will also benefit the Northern Ireland populations of the small blue *Cupido minimus*.
- 6.2 This plan should be considered in conjunction with the following UK and Northern Ireland Habitat Action Plans:
- Calcareous Grassland
- 6.3 There may be additional links with species and habitats listed in the Northern Ireland Biodiversity Strategy.

7 Key References

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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
NMNI	National Museums 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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