CARMARTHENSHIRE LBAP MARSH FRITILLARY ACTION PLAN

Introduction

The marsh fritillary (*Eurodryas aurinia*, Britheg y gors) is an attractive butterfly that is usually on the wing from mid May until mid June. The larvae live communally in a silk web on devil's-bit scabious and they can be easily identified in late summer. The larvae overwinter low down in the vegetation and emerge the following spring, before pupating in May.



Marsh fritillaries live in metapopulations, i.e. a group of local colonies connected by occasional dispersal, in which there can be local extinctions and colonisations on any individual site over time. Individual colonies are also prone to local crashes and recoveries due primarily to a small parasitic wasp. Similarly, adverse weather conditions will also have an impact.

As marsh fritillary metapopulations requires a large area of suitable habitat to survive in the long term, habitat loss or fragmentation can have a significant impact on the butterfly's survival.

In Wales the butterfly's habitat is usually damp neutral/acidic grassland with the larval host plant, devil's-bit scabious. It has exacting habitat requirements. Wet grassland supporting marsh fritillary populations should ideally receive moderate cattle or pony grazing to maintain a mosaic of short and tussocky sward – the short sheltered spots provide warm microclimates to aid larval development. Sheep grazing is unsuitable, as they preferentially graze the larval food plant and produce a short homogenous sward.

The marsh fritillary has rapidly declined in the UK and it has become extinct over much of its original range. South-west Wales is now one of its strongholds. Most of Carmarthenshire's colonies are aggregated to the south-east of the county and follow the South Wales Coalfield belt, with scattered colonies elsewhere. The size of many colonies is unknown, and whilst many may be small, collectively they make a significant contribution to the national population. Many sites are suffering from inappropriate levels of grazing; in particular a lack of grazing which has allowed pastures to become rank with associated scrub encroachment. Parts of this area are already highly developed and are under continued pressure for more housing and employment, which is another threat to the species.

Caeau Mynydd Mawr SAC (made up of three SSSIs) near Cross Hands is designated for the marsh fritillary and the marshy grassland. To meet requirements under the Habitats Directive, where developments in the Cross Hands area may impact upon the butterfly or its habitat, a <u>project</u> has been established which seeks to ensure enough connected habitat is in good or suitable condition for the butterfly within a defined area to make sure that its conservation status is maintained/enhanced in the area. This involves entering into agreements with local landowners to undertake management to improve habitat for the butterfly.

Eight Carmarthenshire SSSIs are designated with marsh fritillaries as a feature; additionally, the WTSWW has a nature reserve at Rhos Cefn Bryn where the butterflies occur.

The local planning authority requires that surveys are undertaken to inform the planning/decision making/ of any plan/project that has the potential to affect marsh fritillaries as part of their statutory/policy responsibilities.

Vision statement and objectives

Our vision for this important species is to prevent further loss of suitable habitat for the butterfly within the metapopulation areas, and to enhance suboptimal habitat through appropriate management to ensure sustainability of the populations and encourage expansion of their range. In addition, this species could be promoted as a flagship species within Carmarthenshire to raise the profile of our rich biodiversity, its links with local people's historic and current land management, and the factors that are threatening our natural environment. Any action would seek to meet one or more of the following objectives:

- **MF1** To maintain and increase the population size and range of the marsh fritillary butterfly in Carmarthenshire
- **MF2** To continue to survey and monitor the distribution and status of the marsh fritillary in Carmarthenshire
- **MF3** To raise awareness of the importance of the marsh fritillary in Carmarthenshire and provide advice on habitat management

Summary of action achieved by LBAP Partners (for more information contact the biodiversity officer – Biodiversity@carmarthenshire.gov.uk) or visit the national Biodiversity Action Reporting System - http://ukbars.defra.gov.uk:

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• Management agreements with landowners in the Mynydd MF Project - BC	MFI
• Llyn Llech Owain CP – habitat management for MF – CCC/Vols	MF1
• Llyn Llech Owain CP – propagated Devil's Bit Scabious plants from seed –	
CCC/Vols	MF1

- Supplementary Planning Guidance produce to inform development that may impact on Caeau Mynydd Mawr SAC – CCC

 MF1
- Gwendraeth grassland project marshy grassland managed to improve conditions for MF butterfly at sites in county PONT, WTSWW, NBGW, Grasslands TrustMF1
- Habitat survey of MF metapopulation around Cross Hands completed CCC/CCW MF2
- Surveys/monitoring of MF sites in the county; record new sites, revisit old sites BC/vols

 MF2
- Landscape permeability model created for MF around Cross Hands CCC MF2

2013

Press release on Devil's Bit scabious sent out - CCC
 Landscape-scale project formed to secure and manage marshy grassland habitat for MF around Cross Hands; employ project officer - CCC
 Landowner liaison re management of land for MF
 MSc looking at germination of devil's bit scabious underway - NBGW
 MF3

• project looking at genetics of devil's bit scabious underway – NBGW	MF3
 Annual larval web surveys undertaken at sites in the county 	MF2
 Annual monitoring at Rhos Cefn Bryn Reserve – WTSWW 	MF2
• Median Farm purchased for management for MF (incorporates SAC fields) – NI	
Article written for UK Biodiversity News	MF3
2014	
• Mynydd Mawr Marsh Fritillary Project (MMMFP) - Management of 10 sites	
	MF1
• MMMFP – Installation of 1375 m of fencing by a local contractor to	
• • • • • • • • • • • • • • • • • • •	MF1
• MMMFP – 1000 m ² of marshy grassland translocated to a Llyn Llech Owain	
Country Park as part of mitigation plan for Cross Hands West development –	
	MF1
• MMMFP – Open days, talk to local school children and survey and habitat	
work with volunteers in – CCC	MF3
• Two studies undertaken to look at Devil's bit scabious plant– NBGW/Aber	
Uni/CCC	MF3
• Conservation grazing and annual larval web count carried out at Rhos Cefn	
Bryn. 24 webs found – WTSWW	MF2
• Conservation grazing and annual larval web count carried out at Caeau Ffos	
	MF2
• Grassland management and fencing at Median Farm, Cross Hands for MF –	
1885 m fenceline installed, 372 m ditch cleared involving 16 days vol time –	
	MF1
• Marsh fritillary adult/larval webs surveys undertaken throughout county. New	
sites identified - 11 new fields around Brynamman, 1 in Llansadwrn, 1 in	
\mathcal{C}	MF2
• Habitat/larval web survey undertaken around Brynamman – 47 webs and >) (F)
\mathcal{E}	MF2
• Scrub management at Ynysdawela Nature Park to restore grassland for MF.	ME1
Adults and 11 larval webs found in 2014 – CCC/WTSWW/Vols	MF1
2015	
• Habitat survey undertaken in the Amman valley to establish links between	
Cross Hands and Brynamman – new sites found – BC	MF2
• Monitoring of MF populations throughout the county – BC/WTSWW/CC/NRW	MF2
• Survey of new sites in the county – BC/NRW/CCC	MF2
Habitat management at key sites within the Caeau Mynydd Mawr MF	
project area – CCC/BC/NRW/WTSWW	MF1
• Visits to schools and talks via Mynydd Mawr Marsh Fritillary project - CCC	MF3
• School project to propagate devil's bit scabious plants – Menter Cwm	
Gwendraeth	MF3
Proposed future action	
• Promote importance of MF and its habitat in the Cross Hands area – CCC/BC	MF3
• Continue with Mynydd Mawr Marsh Fritillary Project – CCC	

Legislation

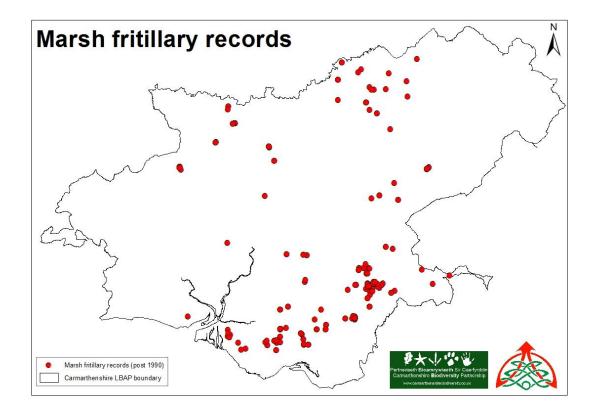
The marsh fritillary is listed on Annex II of the EC Habitats Directive and Appendix II of the Bern Convention. It also has full protection under Schedule 5 of the Wildlife and Countryside Act 1981. The following acts are an offence under the legislation:

- Intentional killing, injuring, taking.
- Possession or control (live or dead animal, part or derivative).
- Damage to or destruction of any structure or place used by a scheduled animal for shelter or protection.
- Disturbance of any animal occupying such a structure or place.
- Obstructed access to any such structure or place.
- Selling, offering for sale, possessing or transporting for the purpose of sale (live or dead animal, part or derivative).
- Advertising for buying or selling live or dead animal, part or derivative.

Useful links:

• Butterfly conservation – marsh fritillary

The marsh fritillary was once known as the greasy fritillary because its bright colours fade after a few days and leaving the butterfly with a shiny appearance





Partneriaeth **Bioamrywiaeth** Sir Gaerfyrddin Carmarthenshire **Biodiversity** Partnership

www.carmarthenshirebiodiversity.co.uk

The <u>Carmarthenshire Biodiversity Partnership</u> (CBP) is made up of the following organisations: <u>Carmarthenshire County Council</u> (CCC), <u>Wildlife Trust of South and West Wales</u> (WTSWW), <u>Natural Resources Wales</u> (NRW), <u>RSPB</u>, <u>Wildfowl and Wetlands Trust</u> (WWT), <u>Carmarthenshire Bird Club</u> (CBC), <u>National Botanic Gardens Wales</u> (NBGW), <u>Butterfly Conservation</u> (BC), <u>Carmarthenshire Rivers Trust</u> (CRT), <u>National Trust</u> (NT), <u>Botanical Society of the British Isles</u> (BSBI), <u>Llanelli Naturalists</u> (LN), <u>Bat Conservation Trust</u> (BCT), <u>West Wales Biodiversity Information Centre</u> (WWBIC), <u>Amphibian and Reptile Conservation</u> (ARC), Woodland Trust (WT)