

**European Community Directive  
on the Conservation of Natural Habitats  
and of Wild Fauna and Flora  
(92/43/EEC)**


**Second Report by the United Kingdom under  
Article 17  
on the implementation of the Directive  
from January 2001 to December 2006**

**Conservation status assessment for  
Species:  
S1065 - *Euphydryas aurinia* - Marsh fritillary  
butterfly**

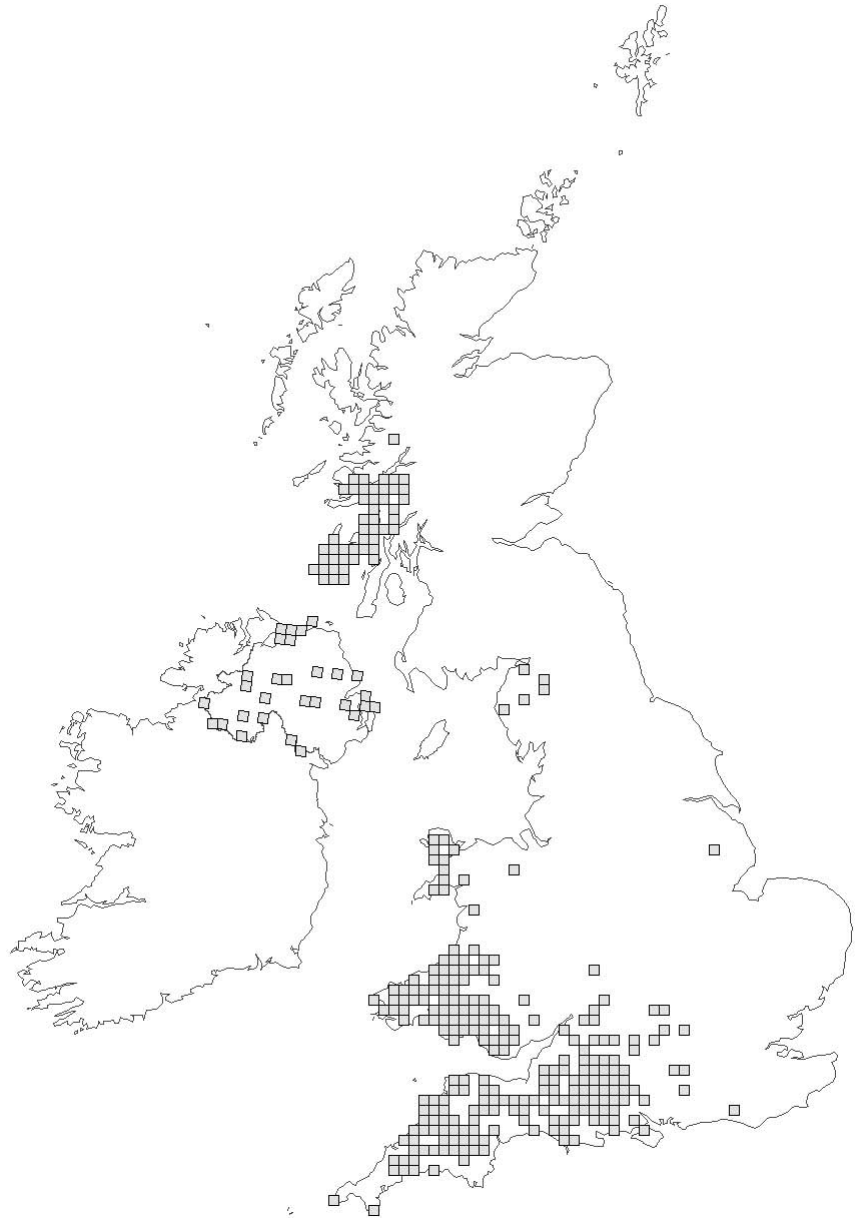
The information in this assessment corresponds to the "species fact sheet" submitted by the UK to the European Union in February 2008 (second and final submission). Please note that this is a section of the UK's report. For the complete report visit <http://www.jncc.gov.uk/article17>

Please cite as: Joint Nature Conservation Committee. 2007. *Second Report by the UK under Article 17 on the implementation of the Habitats Directive from January 2001 to December 2006*. Peterborough: JNCC. Available from: [www.jncc.gov.uk/article17](http://www.jncc.gov.uk/article17)

**Species Name: *Euphydryas aurinia***

<b>1. National level</b>	
Species Code	S1065
Member State	United Kingdom
Biogeographic regions concerned within the Member state	ATL
1.1 Range map	 A map of the United Kingdom showing the distribution of the butterfly species <i>Euphydryas aurinia</i> . The distribution is indicated by shaded grey areas. The species is found in several regions: the Scottish Highlands, the Scottish Islands, the Shetland Islands, the Orkney Islands, the Hebrides, the Pennines, the Yorkshire Dales, the Peak District, the Midlands, the Cotswolds, the Wessex, the Dorset, the Devon, the Cornwall, the Channel Islands, and the Isle of Man. There are also several small square markers scattered across the map, possibly indicating specific collection sites or records.

## 1.2 Distribution map



## 2. Biogeographic level

### 2.1 Biogeographic region

ATL

### 2.2 Published sources and/or websites

ASHER, J., WARREN, M.S., FOX, R., HARDING, P., JEFFCOATE, G. & JEFFCOATE, S., 2001. The Millennium Atlas of Butterflies in Britain and Ireland. Oxford: Oxford University Press.

COWLEY, M., THOMAS, C., THOMAS, J. & WARREN, M. 1999. Flight areas of British butterflies: assessing species status and decline. Proceedings of the Royal Society of London (Series B), 266: 1587-1592.

FOWLES, A.P. & SMITH, R.G. 2006. Mapping the habitat quality of patch networks for the marsh fritillary *Euphydryas aurinia* (Rottemburg, 1775) (Lepidoptera, Nymphalidae) in Wales. Journal of Insect Conservation, 10: 161-177.

HOBSON, R., BOURN, N.A.D., WARREN, M.S. & BRERETON, T.M. 2001. The marsh fritillary in England: a review of status and habitat

	<p>condition. S01-31. Butterfly Conservation.</p> <p>THOMAS, J.A. TELFER, M.G., ROY, D.B., PRESTON, C.D., GREENWOOD, J.J.D., ASHER, J., FOX, R., CLARKE, R.T., LAWTON, J.H., 2004. Comparative Losses of British Butterflies, Birds, and Plants and the Global Extinction Crisis. <i>Science</i>, 303, 1879-1880.</p> <p>THOMAS, C.D. &amp; ABERY, J. C. G., 1995. Estimating rates of butterfly decline from distribution maps: the effect of scale. <i>Biological Conservation</i>, 73, 59-65.</p> <p>Map Data Sources</p> <p>UK records (1990-2004):          Butterfly Conservation; Tullie House Museum; HBRG Lepidoptera dataset; Invertebrate Site Register – England; Invertebrate Site Register – Scotland; EHS Species Datasets; SW Pilot Project BAP Species Inventory 2002; Devon Biodiversity Records Centre; UK Biodiversity Action Plan - Invertebrate data for Ceredigion; Dorset SW Pilot species dataset; Wiltshire &amp; Swindon Biological Records Centre (via the NBN Gateway)</p> <p>Additional Northern Ireland records (2006):          B. Hamill (pers. comm), Environmental Heritage Service.</p>
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### 2.3 Range of species in the biogeographic region or marine region

2.3.1 Surface range of the species (sq km)	55219
2.3.2 Date of range determination	1990-2006
2.3.3 Quality of data concerning range	Good
2.3.4 Range trend	Decreasing (-)
2.3.5 Range trend magnitude (%)	Unknown
2.3.6 Range trend period	1994-2006
2.3.7 Reasons for reported trend	3 - Direct human influence; 4 - Indirect anthropo or zoogenic influence;

### 2.4 Population

2.4.1 Population size estimation	Minimum	315	Maximum	315
	Units	Other Occupied 1-km squares		
2.4.2 Date of population estimation	2005			
2.4.3 Method used for population estimation	2 - Extrapolation from surveys of part of the population			
2.4.4 Quality of population data	Good			
2.4.5 Population trend	Decreasing (-)			
2.4.6 Population trend magnitude (%)	Unknown			
2.4.7 Population trend period	1990-2006			
2.4.8 Reasons for reported trend	3 - Direct human influence; 4 - Indirect anthropo or zoogenic influence;			

2.4.9 Justification of % thresholds for trends (optional)	Not applicable
2.4.10 Main pressures	100 - Cultivation; 102 - Mowing / Cutting; 110 - Use of pesticides; 120 - Fertilisation; 140 - Grazing; 141 - Abandonment of pastoral systems; 161 - Planting; 180 - Burning; 590 - Other forms of transportation and communication; 620 - Outdoor sports and leisure activities; 629 - other outdoor sports and leisure activities; 703 - soil pollution; 810 - Drainage; 950 - Biocenotic evolution;
2.4.11 Threats	102 - Mowing / Cutting; 140 - Grazing; 141 - Abandonment of pastoral systems; 180 - Burning; 620 - Outdoor sports and leisure activities; 629 - other outdoor sports and leisure activities; 703 - soil pollution; 950 - Biocenotic evolution;
<b>2.5 Habitat for the species in the biogeographic region or marine region</b>	
2.5 Habitats for the species	The marsh fritillary butterfly <i>E. aurinia</i> is found in a range of habitats in which its larval food plant, devil's-bit scabious <i>Succisa pratensis</i> , occurs. Marsh fritillaries are essentially grassland butterflies in the UK, and although populations may occur occasionally on wet heath, bog margins and woodland clearings, most colonies are found in damp acidic or dry calcareous grasslands (including 6410 <i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils ( <i>Molinion caeruleae</i> ) and 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates ( <i>Festuco-Brometalia</i> )). In Northern Ireland it occurs in fens and on sand dunes and there are two dune populations in Wales. Management in both wet and dry situations is predominantly by low-intensity cattle or pony grazing. Sheep selectively graze devil's-bit scabious and are therefore detrimental to marsh fritillary populations, except at very low stocking rates. Burning and mowing are also known to have caused the extinction of populations.
2.5.2 Area estimation (sq km)	50
2.5.3 Date of estimation	2000
2.5.4 Quality of data	Poor
2.5.5 Trend of the habitat	Decreasing (-)
2.5.6 Trend period	1994-2006
2.5.7 Reasons for reported trend	3 - Direct human influence; 4 - Indirect anthropo or zoogenic influence;
<b>2.6 Future prospects</b>	
2.6 Future prospects for the species	Poor prospects_Species likely to struggle unless conditions change
<b>2.7 Complementary information</b>	
2.7.1 Favourable reference range (sq km)	60883
2.7.2 Favourable reference population	410
2.7.3 Suitable Habitat for the species	Unknown
2.7.4 Other relevant information	
<b>2.8 Conclusions</b> <i>(assessment of conservation status at end of reporting period)</i>	
(2.3) Range	(U1) - Inadequate
(2.4) Population	(U2) - Bad

(2.5) Habitat for the species	(U2) - Bad
(2.6) Future prospects	(U1) - Inadequate
Overall assessment	(U2) - Bad