

**PEMBROKESHIRE MARSH FRITILLARY
RECORDING GROUP**

**MARSH FRITILLARY SURVEY
2007**



Photo courtesy of PCNPA

May 2008

Introduction

In June 1997, the Pembrokeshire Marsh Fritillary Recording Group was formed to repeat the survey carried out by Annie Poole in 1995-96. The group includes the Wildlife Trust South and West Wales, the Countryside Council for Wales, Pembrokeshire Coast National Park, National Trust and Pembrokeshire County Council.

The group aims to monitor the distribution of marsh fritillaries on all known sites annually by searching for both adult butterflies and larval webs. Such annual surveillance has enabled the group to monitor the marsh fritillary and its habitat over the county over a period of time.

The group and production of the annual report was co-ordinated by Gayle Wootton until 2007. Since then the group has been co-ordinated by Jon Hudson.

Methodology

Forty sites were initially selected by CCW and several have been added since as populations were discovered. Of these six have now been removed from the survey as the populations are thought to be extinct.

Where possible, recorders are asked to make two visits to their adopted sites each year. The first visit is made during June to search for adult marsh fritillaries and a second in September-October to search for larval webs. Another visit in the spring to check for webs is optional.

The methodologies used are adopted from that specified by Butterfly Conservation (see enclose recording forms for details).

As always in the case of private land, the owner/occupier should be contacted either by telephone and/or in person for permission to access the sites. For common land, the owners or relevant grazier/s should be contacted (there is no need to contact all graziers on large sites, just the ones the surveyor deems appropriate e.g. most active, most local etc). However, future changes in Open Access legislation may affect this but it is still good practice and can help the local landowners to understand the importance of these sites in a nature conservation context.

Results

The results for monitoring during 2007 are tabulated below (Table 1). Twenty-two sites were visited in 2007. Caterpillar webs were found on just two of the sites. Adults were seen flying on five sites. All counts (apart from at Castlemartin) were low. 2007 seems to have been a very poor year for the Marsh fritillary in Pembrokeshire with very few records for the species being recorded. This may reflect the wet and cool summer that no doubt affected both the butterfly and the recording effort.

Only at Castlemartin does the species appear to have done well in 2007, with **more than 1375** adults having been recorded. All other populations seem to have dropped to worryingly low levels, with no more than **25** individual butterflies being recorded from the rest of Pembrokeshire. It is more important than ever that recording goes ahead in 2008 and that we keep an eye on what is happening to our Pembrokeshire Marsh Frit's.

Table 2 gives the history of records for each site from 1995. Notes for interpreting tables: The grid reference is as given by CCW and may refer to a central site within the whole site. However, site boundaries are supplied with the survey maps.

2008

The survey is set to go ahead as usual. If you have any queries about the survey or feel unable to help out again, then please get in touch so that alternatives can be arranged. As ever, if you are not finding any signs of marsh fritillaries on your adopted site, but know of other areas of suitable habitat nearby, then please take time to look at these sites as well. We all know these butterflies exist in metapopulations, and if they have disappeared from one site, they may be found nearby. Maps of potentially suitable alternative sites with the habitat were sent with the forms last year but please contact me if you haven't received them or need extra copies.

Acknowledgements

Thank you to all the recorders in Pembrokeshire for visiting the sites and collecting the data for the report. We hope to recruit more volunteers next year through the Biodiversity Partnership newsletter, but if anybody knows of any keen bodies or has any queries about volunteering, please get in touch as soon as possible.

This report was written by the project co-ordinator, Jon Hudson. please address any queries to Jon Hudson, c/o CCW, Llanion House, Llanion Park, Pembroke Dock, Pembrokeshire, SA72 6DY
Tel. 01646 624000.

Table 1 – Summary of Pembrokeshire marsh fritillary recording **2007**

SITE DETAILS	PREVIOUS RECORD	NUMBER OF ADULTS	NUMBER OF WEBS	HABITAT SUITABILITY
Ambleston Common	2005	0	0	No comment.
Big Pencoed	2006	0	0	No comment.
Castlemartin	2006	At least 1375	0	Vegetation 5-12 cm, no hoof marks
Comins Tre Rhos	2004	0	0	Only small patches of suitable habitat
Copybush	?	0	0	No comment.
Cwm Wern	2000	1	0	Rare succisa, vegetation >25cm, hoof marks on tracks
Dowrog	2006	0	0	No comment.
Ffynnon Samson	2004	2	0	Patchy, sparse succisa, 12-25cm high
Furzehill	2006	0	0	No comment.
Gweunydd Bleancleddau	2006	10-20	3	No comment.
Jeffereston Pastures	2004	0	0	No comment.
Mountain Park	2003	0	0	No comment.
Ramshorn	2006	0	0	No comment.
Shortland Moors	2003	0	0	No comment.
Somerton Farm	2006	2	0	No comment.
Springfield	2006	0	0	Habitat good
Tedion Moor	2006	0	0	No comment.
Tedion Mountain	2006	0	0	No comment.
Wallis Moor	1999	0	0	Abundant succisa, vegetation generally >25cm, cattle grazed
Yerbeston Gate Moors	2006	0	0	No comment.
Yerbeston Tops	2006	0	0	No comment.

Table 2. Site records from 1995 onwards.

Metapopulation A: Mynachlog-ddu

Site Name		Cwm Wern	Caeau Pentre Galar	Ffynnon Samson	Gweunydd Blaencleddau	Maen Llwyd	Waun Isaf
Grid Ref.		SN120297	SN18-30-	SN111258	SN15-31-	SN09-29-	SN143305
Status					SSSI/ cSAC	Extinct	
Last MF record		1999	1999	1997	1999	1984	1999
Previous recorder		Julie Webber	Matt Sutton/ Ann Humble	Julie Webber	Matt Sutton/CCW	Joan Saunders	Alison Wheeler ? /Joan Saunders
2007	Sw	0	/	0	0		/
	Ja	1	/	2	10-20		/
	Aw	0	/	0	3		/
2006	Sw						
	Ja						8
	Aw				137		
2005	Sw						
	Ja						
	Aw						
2004	Sw						
	Ja			0			
	Aw			0			
2003	Sw		/	/	/		
	Ja		/	0	0		
	Aw		/	0	0		
2002	Sw						
	Ja						
	Aw						
2001	Sw						
	Ja			0			
	Aw						
2000	Sw	0	/	/	/		
	Ja	0	/	/	302		/
	Aw	0	/	/	218		68
1999	Sw	/	/		/		/
	Ja	0	100		216		/
	Aw	0	/		147		76
1998	Sw	/		/	/		/
	Ja	0		/	6		31
	Aw	0		0	11		94
1997	Sw	/		/	/		/
	Ja	0		/	/		27
	Aw	0		11	31		142
1996	Sw	/		4	3		/
	Ja	/		/	/	/	/
95	Aw	0		4	15	0	9

Table 2. Site records from 1995 onwards.

Metapopulation B: Ambleston –Puncheston

Site Name	Ambleston Common	Comins Tre-rhos	Maes-yr-afon	Puncheston 1km sq	Puncheston Common	Spittal Common	Springfield	Wallis Moor	Waun Fawr, Puncheston	Wood End
Grid Ref.	SM99-26-	SM92-27-	SM999281	SN01-29-	SN00-30-	SM972225	SM916249	SN01-26-	SN01-30-	SM973242
Status		SSSI					PII	SSSI/ cSAC	SSSI	
Last MF record	2003	1986	1995	1999	1996	1991		1999	1993	2003
Previous recorder	Andrew Tuddenham	Jon Hudson	Julie Webber/Tir Gofal staff	Bob Haycock/Annie Poole	Sam Bosanquet	Trevor Theobald	Jon Hudson	Jon Hudson	Bob Haycock/Annie Poole	Sam Bosanquet
2007	Sw	/	0	/	/	/	0	0	/	/
	Ja	/	0	/	/	/	0	0	/	/
	Aw	/	0	/	/	/	0	0	/	/
2006	Sw									
	Ja						1			
	Aw								40	
2005	Sw									
	Ja	4								
	Aw	0								
2004	Sw									
	Ja		0							
	Aw		/							
2003	Sw	/		/	/			/		
	Ja	10		/	/			/		
	Aw	0		/		14		0		
2002	Sw	/								
	Ja	3								3
	Aw	/			1					
2001	Sw					/		/		
	Ja					/				
	Aw					/		0		
2000	Sw	/		0	/	0		/		
	Ja	1		0	/	0		/		
	Aw	/		0	/	0		/		
1999	Sw							/		
	Ja							6		
	Aw							/		
1998	Sw			/		/		/		
	Ja			0		0		30		
	Aw			/		0		2		
1997	Sw	/	/	/	/	/		/		
	Ja	0	/	/	0	0		40+		
	Aw	5	0	/	0	0		5		
1996	Sw	1	0	/	1	/		/	0	
	Ja	/	0	/	1	/		/	0	
95	Aw	1	0	8		0		5	0	

Table 2. Site records from 1995 onwards.

Metapopulation C: St. Davids

Site Name	Dowrog Common	Hendre Eynon Pastures	Llandigige/Tretio Common	Solva	St. Davids Airfield Heaths	Trefeiddan Moor	Tretio Common	Waun Fawr, St Davids	Ysgeifiog Moor
Grid Ref.	SM775273	SM776277	SM795288	SM81-25-	SM786263	SM733252	SM785283	SM762262	SM809278
Status	SSSI/ cSAC	SSSI/ cSAC	SSSI/ cSAC	Extinct	SSSI/ cSAC	SSSI/ cSAC	SSSI/ cSAC	SSSI/ cSAC	
Last MF record	2003	1999	1996	1983			1995	1985	
Previous recorder	Jim Dale	Ian Jamieson?	Andrew Tuddenham		Matt Sutton	Ann Humble	Andrew Tuddenham	Andrew Tuddenham	PII survey showed good habitat - vacancy
2007	Sw	0	/	/	/	/	/	/	/
	Ja	0	/	/	/	/	/	/	/
	Aw	0	/	/	/	/	/	/	/
2006	Sw		/	/	/	/	/	/	/
	Ja	2	/	/	/	/	/	/	/
	Aw			0	/	/	/	/	/
2005	Sw								
	Ja								
	Aw				0				
2004	Sw								
	Ja		/	/	0			/	
2003	Sw	/	/	/	/	/	/	/	/
	Ja	5	/	/	0		/	0	
	Aw	0		0	0		0	0	
2002	Sw				0				
	Ja	14			0				
	Aw	0			0				
2001	Sw	5							
	Ja	45							
	Aw	15							
2000	Sw	Y			/		/	/	
	Ja	56			0		0	0	
	Aw	48			/		/	/	
1999	Sw	9							
	Ja	21							
	Aw	7							
1998	Sw	7							
	Ja	17							
	Aw	3							
1997	Sw	15	/	/	/	/	/	/	/
	Ja	44	/	/	/	/	0	0	
	Aw	6		0	0	0	0	0	
1996	Sw	4	0	1	0	0	/	0	
	Ja	1	2	1	0	/	/	/	
95	Aw	0	0	1	0	0	0	0	

Table 2. Site records from 1995 onwards.

Metapopulation D: Yerbeston Moors

Site Name	Big Pencoed	Copybush Moors	Furzehill	Jeffreyston Pastures	Loveston Valley Mire	Mountain Park	Ramshorn	Shortland Moors	Tedion Moor	Tedion Mountain	Yerbeston Farm	Yerbeston Gate Moors	Yerbeston Tops
Grid Ref.	SN05-10-	SN05-10-	SN05-10-	SN089059	SN08-09-	SN05-10-	SN05-10-	SN05-10-	SN039083	SN05-10-	SN063084	SN05-10-	SN05-10-
Status	SSSI	SSSI	SSSI	SSSI		SSSI	SSSI	SSSI	SSSI	SSSI	Extinct	SSSI	SSSI/ cSAC
Last MF record				1997	1999						1995	2000	
Previous recorder	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton	Matt Sutton		Matt Sutton	Matt Sutton
2007	Sw	0	0	0	0	/	0	0	0	0		0	0
	Ja	0	0	0	0	/	0	0	0	0		0	0
	Aw	0	0	0	0	/	0	0	0	0		0	0
2006	Sw			/									
	Ja	/		/			1						1
	Aw	/		/									
2005	Sw												
	Ja	0		0			6+						3
	Aw			/			0		0	0			0
2004	Sw												
	Ja				14								
	Aw			/									
2003	Sw	/	/	/	/	/		/	/	/		/	/
	Ja	0	/	/	/	/	21+	/	/	/		/	/
	Aw	/	0	/	0	/	0	7	0	1	0	/	2
2002	Sw			/									
	Ja			/									
	Aw			/									
2001	Sw												
	Ja												
	Aw												
2000	Sw		/		/				/				Y
	Ja		/		/				0				100s
	Aw		0		/				/				1
1999	Sw				3								/
	Ja	2			/								100s
	Aw				/								818
1998	Sw			/									
	Ja			0									
	Aw			/									
1997	Sw			/							/	/	
	Ja			0					5		0	5	
	Aw			1							/	/	
1996	Sw			/							4	/	
	Ja			2							/	/	
95	Aw			0							4	14	

Table 2. Site records from 1995 onwards.

Metapopulation E: Keeston-Tiers Cross

Site Name		Keeston Moor	Marloes Mere	Nattshook	Ratford Bridge Pastures	Sutton Mountain
Grid Ref.		SM896184	SM77-08-	SM884141	SM90-12-	SM897154
Status			Extinct			
Last MF record		1996	1978		1999	1996
Previous recorder		Mary Chadwick		PII survey identified good habitat - vacancy	Matt Sutton	John Collier/vacant? (Sam B in 2005)
2007	Sw	/		/	/	/
	Ja	/		/	/	/
	Aw	/		/	/	/
2006	Sw				/	
	Ja				/	
	Aw				/	
2005	Sw					
	Ja					0
	Aw				0	
2004	Sw					
	Ja	/				
	Aw	0				
2003	Sw	/			/	
	Ja	/			/	
	Aw	/			/	
2002	Sw					
	Ja					
	Aw					
2001	Sw					
	Ja					
	Aw					
2000	Sw	/			/	/
	Ja	/			0	/
	Aw	0			/	/
1999	Sw				/	
	Ja				2	
	Aw				/	
1998	Sw					
	Ja					
	Aw					
1997	Sw	/				/
	Ja	0				0
	Aw	0				0
1996	Sw	0				8
	Ja	1				/
95	Aw	0				7

Table 2. Site records from 1995 onwards.

Metapopulation F: Castlemartin

Site Name		Castlemartin Range	Somerton Farm
Grid Ref.		SR9194/ SR9493	
Status		SSSI/cSAC	
Last MF record		2003	
Previous recorder		Bob Haycock/Annie Poole	David & Holly Harries
2007	Sw	0	0
	Ja	At least 1375	2
	Aw	0	0
2006	Sw		
	Ja	1121+	
	Aw	2189	
2005	Sw		
	Ja	898+	
	Aw	291	
2004	Sw		
	Ja	900+	
	Aw	64	
2003	Sw		
	Ja	5	
	Aw	6	
2002	Sw		
	Ja		
	Aw		
2001	Sw		
	Ja		
	Aw		
2000	Sw		
	Ja		
	Aw		
1999	Sw		
	Ja		
	Aw		
1998	Sw		
	Ja		
	Aw		
1997	Sw		
	Ja		
	Aw		
1996	Sw		
	Ja		
95	Aw		

Table 2. Site records from 1995 onwards.

Isolated Populations in North East Pembrokeshire

Site Name		Brithdir Mawr	Cilgwyn	Cwm Blaen Bwlan	Dyffryn Gwaun	Pentwd Marshes/Teifi Marshes	Rhosfarched Fawr
Grid Ref.		SN07-37-	SN07-36-	SN236381	SN050348	SN18-44	SN115359
Status			Extinct		SSSI/SAC	Extinct	
Last MF record		1970s	1976	1993	2005	1994	1999
Previous recorder		Tony Lewis/ Sam?		Matt Sutton	Sam Bosanquet Mary Chadwick		Mike Howe
2007	Sw	0		/	/	/	/
	Ja	0		/	/	/	/
	Aw	0		/	/	/	/
2006	Sw			/			
	Ja			/			6
	Aw			/			0
2005	Sw						
	Ja				100		
	Aw			0			
2004	Sw						
	Ja						
2003	Sw			/			
	Ja			/			
	Aw			/			
2002	Sw			/			
	Ja			/			
	Aw			/			
2001	Sw						
	Ja						
	Aw						
2000	Sw	/					/
	Ja	/					0
	Aw	/					0
1999	Sw						/
	Ja						/
	Aw						2
1998	Sw						/
	Ja						5
	Aw						/
1997	Sw			/		/	/
	Ja			0		/	/
	Aw			/		0	0
1996	Sw		/	0			0
	Ja		/	0			/
95	Aw		0	0			0

Table 2. Site records from 1995 onwards.

Isolated Populations in North West Pembrokeshire

Site Name	Hendrewen-Trebrython	Penrallt Ddu/Pontfaen/Y Gotti	Portheiddy Moor	Rhos-loew Common	Rhos-y-Clegyrn	Rhydau Llannerch	Rhyd-fach, Rosebush	Ty-Rhos nursery	Tyriet, Pontfaen
Grid Ref.	SM929342	SN04-33-	SM807310	SM933383	SM912354	SN061355	SN068284	SN084377	SN029331
Status			SSSI						
Last MF record	1995	1999	1987		1992				
Previous recorder	Ann Humble/Maggie Humble	Mike Howe	Jon Hudson	PII survey identified good habitat - vacancy	Jon Hudson	Vacant - No recorder	Mike Snow	Tony Lewis	Mike Howe
2007	Sw	/	/	/	/	/	/	0	/
	Ja	/	/	/	/	/	/	0	/
	Aw	/	/	/	/	/	/	0	/
2006	Sw								
	Ja				0				
	Aw	0							0
2005	Sw								
	Ja				/				
	Aw				/				
2004	Sw								
	Ja								
	Aw								
2003	Sw		/		/				
	Ja		/		/				
	Aw		0		0				
2002	Sw				0				
	Ja				0				
	Aw				0				
2001	Sw								
	Ja								
	Aw								
2000	Sw	30	/	/	/	0			/
	Ja	30-100	0	/	/	0			/
	Aw	/	0	/	/	0			0
1999	Sw	/							
	Ja		13						
	Aw		3						
1998	Sw	/				/	/		/
	Ja		18			0	0		0
	Aw	/				0	/		/
1997	Sw	/				/	/		/
	Ja	/				0	0		/
	Aw		14			0	0		0
1996	Sw	/	/	0	/	/	/		/
	Ja	/	/	/	/	0	/		/
95	Aw	3	0	0	0	0	0		0

Table 2. Site records from 1995 onwards.

Isolated Populations in Mid Pembrokeshire

Site Name		Canaston
Grid Ref.		SM986164
Status		
Last MF record		2005
Previous recorder		Transco Consultants
2007	Sw	
	Ja	
	Aw	
2006	Sw	
	Ja	
	Aw	
2005	Sw	
	Ja	48
	Aw	
2004	Sw	
	Ja	
	Aw	
2003	Sw	
	Ja	
	Aw	
2002	Sw	
	Ja	
	Aw	
2001	Sw	
	Ja	
	Aw	
2000	Sw	30
	Ja	30-100
	Aw	/
1999	Sw	
	Ja	
	Aw	
1998	Sw	
	Ja	
	Aw	
1997	Sw	
	Ja	
	Aw	
1996	Sw	/
	Ja	/
95	Aw	3

	= Extinct
	= SSSI/SAC
Sw	=Spring web
Ja	= June adult
Aw	=Autumn web