

MARSH FRITILLARY LARVAL WEB SURVEY/MONITORING

INFORMATION SHEET FOR SURVEYORS

The standard method for surveying or monitoring Marsh Fritillary by larval web counts is described below. Please record any data on the enclosed '**Marsh Fritillary Larval Web Recording Form**'. Data recorded in this way will be of most use for conservation purposes.

How to survey/monitor:

1. The best period to survey is when the webs are most conspicuous, ideally during late August or early September. Counts can be done into mid to late September but often by then the larvae will have entered hibernation, or heavy rain may destroy the webs.
2. Prepare a large scale map of your target site (1:5,000 or enlarged 1:20,000) to take with you.
3. If you are looking for larvae on a potential new site (**survey**) first identify the extent of habitat which looks suitable for the butterfly, the best indicator being the presence of abundant Devil's-bit Scabious (the larval food plant). Search this area systematically, recording the number of **occupied** larval webs that you see. Mark the location of any occupied webs found on your map with a cross (x). If the site is large, or you do not have time to conduct a full search, walk a path (transect) through the identified habitat recording any occupied webs 1m either side of you (i.e. a 2m band across the site). In this case you will need to mark the route you have taken on your map and record its length in metres. Aim to cover around 100m per hectare depending on the size of the site, do not preferentially target areas with dense Devil's-bit Scabious but take a path which covers a representative sample of the total area of suitable habitat.
4. If you have offered to help with **monitoring** a known breeding site you can also search all suitable habitat in a systematic way or walk a sample transect through the suitable habitat as above. In this case you are likely to have been provided with a map of previous larval web locations and any established sampling path to guide your efforts.
5. It is unnecessary to count individual larvae or webs with no larvae present (unless vacated webs are the only record for the site). If in doubt stop and look closely at a proportion of the webs, sometimes they appear to have larvae when only shed larval skins are present. Note any moribund larvae surrounded by the small white cocoons of the parasitic braconid wasp *Cotesia*.
6. Mark on your map the boundary of suitable habitat and the path taken if the site was sampled rather than systematically searched. Estimate the area of suitable habitat in hectares, if you can, and give an approximate length of your sample path (transect) in metres, as well as the total number of occupied webs found for the whole site or per sub-section if you have divided the site into a number of areas (show these clearly on the map).
7. Complete the habitat information boxes as far as possible and add clarifying notes on management or site access.
8. Even if larval webs are not found please record the habitat information for sites which appear suitable for the butterfly but do not presently have them.

General Information:

1. ACCESS

Please make sure you have the permission of the owner before surveying a site.

2. HEALTH & SAFETY

Surveyors should be aware of the potential risks of field surveying and should take sensible precautions to reduce these risks.

If you have any queries please contact: Brian Nelson at Brian.Nelson@ahg.gov.ie or Niamh Phelan at nphelan@biodiversityireland.ie.



MARSH FRITILLARY LARVAL WEB

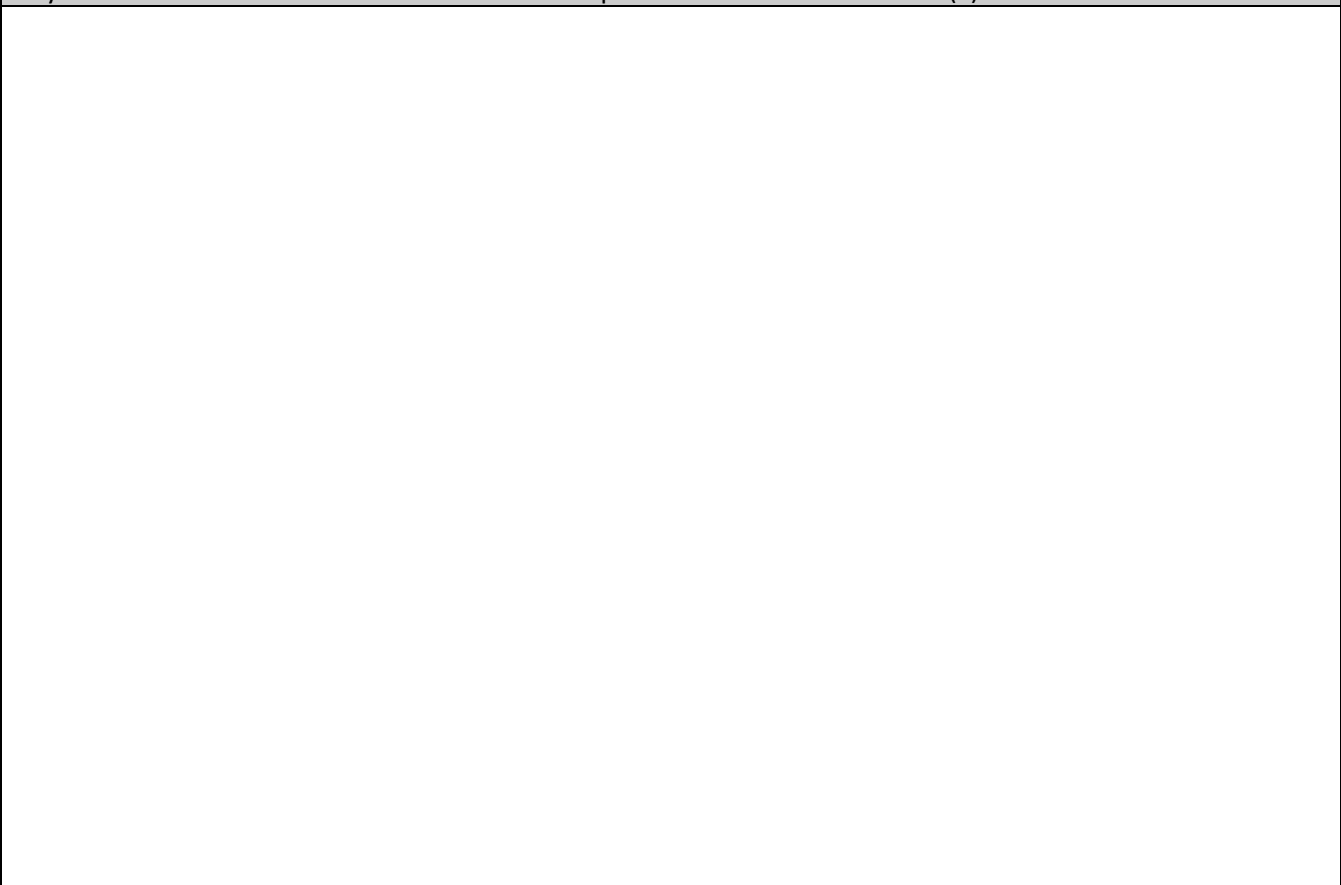
RECORDING FORM

SITE DETAILS

SITE NAME:		NETWORK/ LARGER SITE:	
COUNTY:		PRINCIPAL HABITAT:	
VICE COUNTY:		SECONDARY HABITAT:	
CENTRAL GRID REF.: (e.g.S215502)			
RECORDER NAME & CONTACT DETAILS:			
SITE OWNER & CONTACT FOR ACCESS:			

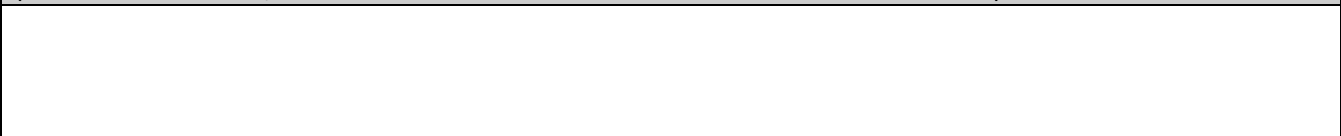
SITE MAP

Copy/Attach an OS map at 1:10 000 or equivalent showing scale, 1 km gridlines and boundary of suitable and/or occupied habitat marked by thick black line (use a separate sheet if necessary). Please mark the route of your transect and indicate the location of occupied larval webs with a cross (x).



PREVIOUS RECORDS

Are there previous records of Marsh Fritillary adults or larvae at this site?
(Please include dates, numbers of adults or larvae recorded and recorder if known)



LARVAL WEB SURVEY/ MONITORING

DATE OF VISIT:	SITE/SUB-SITE (if applicable):	NUMBER OF OCCUPIED WEBS FOUND:	LENGTH OF TRANSECT (metres):	AREA OF SUITABLE HABITAT (hectares):	POPULATION SIZE/ ESTIMATED POP. SIZE (webs):

N.B.: Estimated population size if sample survey, not full search, is given by multiplying up the proportion of webs found in the sample area given in ha (length of transect in m x 2m width/ 10,000) to the total area of suitable habitat (1 ha = = 100 m x 100 m = 10,000 m²).

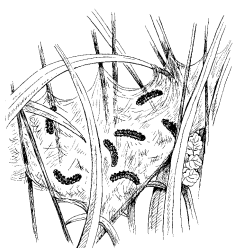
HABITAT OBSERVATIONS

(N.B.: Complete a separate HABITAT CONDITION ASSESSMENT FORM if conducting a detailed survey)

Please indicate the abundance of Devil's-bit Scabious over the site surveyed (circle one category)	Average vegetation height (circle one category)	Animal poaching (circle one category)
Widespread and abundant	<5cm	No livestock hoof marks
Frequent	5 to 12cm	Hoof marks confined to tracks
Patchy (locally abundant)	12 to 25cm	Some poaching of wetter areas
Patchy Sparse	>25cm	Majority of site poached
Rare		

Additional notes on present habitat condition and management – such as types of animals grazing, any burning or mowing; and suggested management needs.

The information supplied here is sent to the National Biodiversity Data Centre on the understanding that the data provided by the recorder will be entered into a computerised database and will be used for nature conservation, research, education and public information.



Please send the completed form to:
 National Biodiversity Data Centre,
 WIT West Campus,
 Carriganore,
 Waterford,
 X91 PE03