

MARSH FRITILLARY *Euphydryas aurinia* SURVEY - SPECIFIC REQUIREMENTS

The Marsh Fritillary butterfly *Euphydryas aurinia* is a European Protected species which is included in Annex 2 of the EC Habitats Directive 1992, and is protected under Schedules 5 and 7 of the Wildlife (NI) Order 1985. It is an offence to intentionally kill, injure or take the Marsh Fritillary butterfly. It is also an offence to damage or destroy a breeding site of this butterfly.

Suitable Marsh Fritillary habitat includes damp, flower-rich grasslands, dunes, heaths, fens and bogs where there is an abundance of Devil's-bit Scabious *Succissa pratensis*, the food plant of the Marsh Fritillary butterfly in Northern Ireland.

To ensure development proposals comply with the Order, Northern Ireland Environment Agency has asked you to carry out an appropriate Marsh Fritillary survey, noting the presence of adult Marsh Fritillary Butterfly on the wing. You should follow these guidelines:

- The surveyor contracted to undertake this work must have relevant experience which is deemed acceptable to the Department, for example an ecological consultant with experience of, and/or qualifications in invertebrate surveying. The qualifications of the surveyor should be included in the survey report.
- The date, time and weather conditions of the survey should be included in the survey report.
- **Surveys should be conducted in late August and September when the webs are most visible.**
- It is preferable that a survey of adult butterflies takes place between **May and July**, as this can aid identification of web locations. Adult butterflies only fly in warm, sunny conditions, so visits should only be undertaken in favourable weather conditions between 10.30 and 16.30. **However, if a visit between May and July is not possible, due to the timing of the survey request, we will expect details of all survey transects to ensure the area was thoroughly searched.** The presence of adults confirms that there is a marsh fritillary colony in the area. However, the precise whereabouts of the breeding colony can only be confirmed from the presence of larvae.
- **The standard method of monitoring Marsh Fritillary populations is to count the larval webs. Due to the different development stages of the larvae, only occupied webs should be recorded. Where several occupied larval webs are in close proximity and visibly linked by old web material, they should be recorded as a single web having developed from a single egg batch.**
- The survey effort must cover all areas of Devil's-bit Scabious that will be affected by the development.
- The information should be presented in a written report and must include large scale maps at 1:500 scale. The locations of marsh fritillary sightings and all larval webs must be mapped using GPS.

- If necessary, the report should recommend the most appropriate ways in which the Marsh Fritillary and its habitat can be protected during the construction works, for example, by changing the layout of the development to avoid breeding areas.
- Surveys should be carried out within one year of submission to the Department.
- As Marsh Fritillary populations function at a landscape scale, they are prone to local extinctions. This is balanced by its ability to colonise sites, but only within a range of about 10 km. **If larval webs are not recorded during the survey, but there are known colonies within 10km of the site, or adult butterflies are recorded on the wing, further surveying is likely to be required.**
- In the event that the planning application goes to appeal or public inquiry, the consultant contracted may be required to appear and/or give evidence.
- More guidance and information on survey methodology is available from NIEA, Natural Heritage.

NIEA reserve the right to determine whether the survey is adequate or when additional information is required.