



Butterfly
Conservation

The Marsh Fritillary

needs your help



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Management Summary

- ◆ Aim for an uneven sward at the end of the grazing season between 8 and 25 cm (3-10") high.
- ◆ Extensive cattle and pony grazing is best, though stocking rates may need to vary from year to year.
- ◆ Feed supplements on improved land to avoid damaging your damp grassland.
- ◆ Only burn on sites with a history of burning and burn a maximum of a third of each site/field in a year.
- ◆ Cut scrub as necessary from only part of the site each year.

Further help

Under Defra's Environmental Stewardship Scheme, administered by the Rural Development Service, there are financial incentives to manage wet grassland habitats in a way that is sympathetic to the needs of Marsh Fritillaries and other wildlife. Visit www.defra.gov.uk for more details.

Butterfly Conservation would like to thank English Nature for their assistance in producing this leaflet.



Butterfly Conservation

Saving butterflies, moths and their habitats



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A guide to managing damp grassland

The Marsh Fritillary is a beautiful butterfly that needs your help. It has suffered a 66% decline since 1990 in England due to the loss and neglect of flower-rich grassland. This leaflet has been written in consultation with landowners and managers who are conserving the Marsh Fritillary on their land.



Spring caterpillars



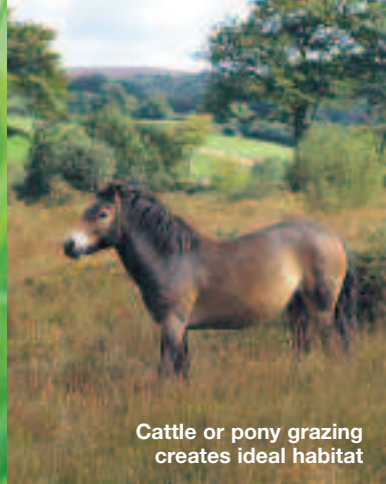
Devil's-bit Scabious, the caterpillar's foodplant



Grazing is vital to maintain Marsh Fritillary sites in suitable condition



Adult underside



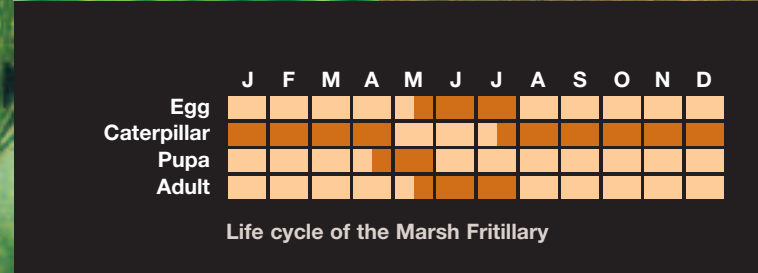
Cattle or pony grazing creates ideal habitat

looking after its needs

The Marsh Fritillary breeds on damp, flower-rich grasslands in the west of England. These grasslands contain a mixture of rushes, marshy grasses and wet heathland. Good breeding areas are usually a patchwork mix of short and long tussocky grass with plentiful Scabious plants. Some grass or leaf litter is important for the caterpillars to bask on.



Egg clusters are laid on the underside of the leaves



Marsh Fritillary life cycle

The butterfly flies in late May and June. The female lays batches of eggs on the underside of large Devil's-bit Scabious plants. From August until late September the brown, spiny caterpillars feed together on Scabious leaves inside a silken web. During the winter they hibernate together in a small web, hidden in grass tussocks. The caterpillars emerge in February or early March and separate; sometimes wandering several metres to find fresh Scabious leaves. By late April the caterpillars change pupate and emerge as adult butterflies 2 to 3 weeks later.

How to manage for the Marsh Fritillary

Grazing

The aim is to produce an uneven patchwork of short and long vegetation by the end of the grazing period.

Extensive grazing in spring and summer with cattle or ponies is ideal for the Marsh Fritillary. Sheep grazing is unsuitable. Proven grazing systems include:

- ◆ Traditional breeds of suckler cow, either pure bred or crossed with continentals, such as Charolais x North Devon, grazing during the summer.
- ◆ Holstein Friesian dairy replacements or stores, e.g. to release improved pasture for forage cropping.
- ◆ Hardier beef stores, such as Welsh Black or Belted Galloway.
- ◆ Native ponies, such as Exmoor or Dartmoor.

Grazing animals should be removed if the drier areas become shorter than 8cm (3") or if the ground is too wet.

Stocking rates may need to vary according to the productivity of the site or year. Roughly 1 cow every hectare (2.5 acres) for 3 months per year is recommended.

Use improved land for supplementary feeding to avoid damaging the damp grassland.

Burning

Burning is used to maintain some sites but it can kill Marsh Fritillary caterpillars. The following guidelines will help protect the caterpillars:

- ◆ Burn between January and March
- ◆ Avoid burning more than one third of a field in a year
- ◆ Cool, quick fires are best but are difficult to control so cut firebreaks or use natural breaks such as wet, rushy areas or ditches.

Mowing

Mowing is unsuitable for Marsh Fritillary breeding areas and is difficult on these wet, tussocky grasslands.

Scrub cutting

Some scrub cutting is necessary on most sites. It is best to cut a little each year, between October and February. When necessary treat the stumps with a suitable herbicide to prevent re-growth. Avoid clearing all the scrub as other insects and birds use it for shelter and breeding.

Restoring neglected sites

Re-introduce management gradually to neglected sites. This spreads the work and enables you to assess how your stock is responding.

These management practices will also benefit other insects such as the Narrow-bordered Bee Hawk-moth

