



Pearl-bordered fritillary - *Boloria euphrosyne*

This butterfly has two large silver spots, or “pearls” in the middle of the underside of its hind wing, with a further row of seven “pearls” ringed by red chevrons also on the underside of its hind wing. The adults can be found between late April and early July, depending upon location.

The pearl-bordered fritillary typically uses broadleaved and mixed woodland clearings, especially those created by coppicing or recent clearance. Some populations also use bracken and grass mosaic habitats. Whichever of these habitats it uses, it requires abundant, young fresh growth of violets, particularly common dog-violet (*Viola riviniana*), amongst leaf litter with sparse ground cover, as these are the foodplants of the caterpillars.

The female pearl-bordered fritillary lays her eggs on the dead bracken or leaf litter near to violets. The caterpillars that hatch then feed on the youngest growth of the violets. In cooler weather, the caterpillars bask in the sun on the leaf litter before feeding. They also hibernate amongst this litter or dry bracken, before starting to feed again

the next year, and then pupating in the leaf litter. The pearl-bordered fritillary is susceptible to changed management regimes in its habitat, as it depends on colonizing newly cleared areas of woodland before grass, brambles and other plants cover the violets and shade the leaf litter. The decline of coppicing has led, within the last hundred years, to the rapid loss of the pearl-bordered fritillary from much of England and Wales, where it was once widespread and locally abundant. The remaining strongholds for the species within the UK are Scotland, parts of Wales, southern and western England. The butterfly is considered to be Nationally Scarce in Great Britain and it is a UK Biodiversity Action Plan priority species. It receives protection under the Wildlife and Countryside Act 1981 with regard to sale.

Within Kent, the pearl-bordered fritillary was previously widespread, but is now restricted to the woods in the Canterbury area, where surveys carried out in 1997 and 1998 revealed the presence of two main colonies and a handful of smaller ones. It is considered in the Kent Red Data Book to be vulnerable and thought today to be



close to extinction in the county.

The main threats to the pearl-bordered fritillary come from a lack of management of broadleaved woodlands and sometimes

inappropriate management where management does occur. As it depends on a temporary habitat and therefore the colonies are temporary too, the species needs regular management or clearance of vegetation in areas close to current colonies, in order to continuously provide new areas of suitable habitat.

Most of the sites where the pearl-bordered fritillary has been recorded from in Kent are within SSSIs (Site of Special Scientific Interest) and SNCIs (Sites of Nature Conservation Interest), which gives them some partial protection against habitat destruction. More active measures to improve habitat quality for the pearl-bordered fritillary are also underway, both in places where it already occurs, such as Orlestone Forest SSSI, and in places where it is hoped the pearl-bordered fritillary could return, such as Tudeley Woods RSPB reserve. Through increasing awareness amongst the owners of woods about the requirements of this butterfly, and improving woodland management in reserves and SSSIs, it is hoped that the decline of this species can be halted and reversed.

DISTRIBUTION:

The Pearl Bordered Fritillary is present very locally in the North East of Kent although thought today to be very close to extinction.

FURTHER INFORMATION:

Butterfly Conservation: www.butterfly-conservation.org

'The Butterfly Conservation is the UK charity taking action to save butterflies, moths and their habitats'

UK Biodiversity Action Plan: www.ukbap.org.uk

English Nature: www.english-nature.org.uk

Kent Wildlife Trust: www.kentwildlife.org.uk

Kent Biodiversity Action Plan: www.kent.bap.org.uk

The Kent Red Data Book, available from Kent County Council: www.kent.gov.uk/biodiversity

Kent Landscape Information System:
www.kent.gov.uk/klis

Kent and Medway Biological Record Centre:
www.kmbrc.org.uk

fritillary