## Pearl-bordered Fritillary (Boloria euphrosyne)

**Areas and status:** Very localised distribution within England, Wales and Ireland. Quite widespread in Scotland. Significant declines in distribution (-95%) and abundance (-71%) 1976-2014. The UK's second most rapidly declining butterfly and now extinct over large parts of its former range.

Woodland type: Upland Broadleaved Woodland, Lowland Broadleaved Woodland, PAWS, Scrub

**Preferred habitat niches:** Glades, rides, edges, clear-fell, coppice, scrub and open grassland mosaics. Breeds on violets; favours short (<5cm) sparse vegetation, comprising low grass cover, some bare ground and shallow Bracken (<15cm) or leaf litter in woodland rides and clearings & non-wooded habitats with mosaics of Bracken, grass and scrub.

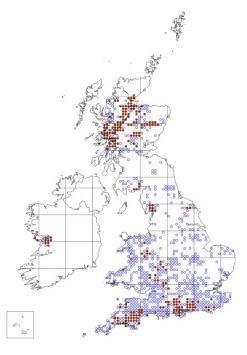
## Potential habitat management issues associated with decline:

- Overshading and scrubbing up of glades, rides, edges, clearings, scrub and open grassland mosaics
- Abandonment or irregular coppicing and felling leading to loss of canopy gaps
- Scrub/dense field layer developing on areas of sparse grassland and Bracken mosaic
- Re-stocking of woodland clearings and tree planting of open areas adjacent to woodlands
- Intensive management of rides and clearings, such as repeated mowing (e.g. more than once a year) leading to grassy swards and loss of larval food plants
- Abandonment of management in scrub mosaics, e.g. cessation of burning in scrub mosaics containing Gorse
- Abandonment/agricultural improvement of wood-pasture (Scotland only) and suitable habitat adjacent to woodlands, e.g. Bracken & scrub mosaics
- Habitat fragmentation and loss of connectivity leading to isolation of surviving populations

Potential habitat management solutions:	
Prescription	Comment
Rides, Glades	Cut in 2 zones: 1 regularly for access and nectar sources, 2 on a 4-7 yr rotation. Scarify rides to create shorter vegetation with patches of bare ground; do not scarify whole ride at once. Cut glades on rotation to ensure sward height 1-5 cm. Retain nectar patches in sunny, sheltered areas. Widen and enlarge if necessary; widths should be >1.5 times the height of nearby trees; scallop ride edges to create sheltered conditions. Creating new east-west rides and box junctions within woods can be valuable.
Rotational coppice (<12 yr rotation)/Small group clear-fell	Coppice 70x70m to 140x140m coupes on short (<12yrs) rotations, leaving less than 10-15% standards canopy cover (about 40 standards/ha). Remove brash to leave at least 50% of the ground clear. Clear-fell coupes (max. 50x50m) on 15-30yr cycles. Coppice/fell adjacent coupes or locate coupes beside wide rides and glades.
PAWS	Retain scrub and open grassland mosaic; enlarge rides and glades as necessary.
Scrub (including wayleaves)	Cut on rotation when cover exceeds 20% by area. If known in past reinstate controlled rotational burning (swaling) in grassland/scrub mosaic.
Bracken	Where stands are very dense spray, cut or bruise Bracken on a 3-10 yr rotation. Cattle and/or ponies can break up dense stands in winter/early spring.
Grazing	To maintain wood-pasture, woodland edges and other open habitat lightly graze with cattle/ponies.  Fence where livestock/deer are having a negative impact on coppice re-growth. Deer control will also be required if they are causing significant problems.
Connectivity	Manage woodlands on a landscape-scale by widening rides which connect clearings within woods and link up with rides/clearings in adjacent or nearby woods.



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Pre 2005

2005 – 2014

Source: Butterfly Conservation