

## **SMALL PEARL-BORDERED FRITILLARY *Boloria selene* SPECIES ACTION PLAN**

### **DESCRIPTION**

The small pearl-bordered fritillary butterfly has bright orange-brown wings with black spots and veins. The underside is yellow and orange, the hind wings having several pale silvery patches and seven silver 'pearls' around their outer margin. The butterfly's body is covered with dark brown hairs.

The small pearl-bordered fritillary is found in a variety of habitats from woodland clearings to damp grassland habitats, moorland and bracken, scrub and grassland mosaics. The larval food plant is marsh violet *Viola palustris* in wet areas and common dog violet *Viola rivinianas* at drier sites. In the Yorkshire Dales National Park the butterfly appears to be restricted to mire communities where marsh violet is abundant. The preferred habitat is wet meadows with open and flowery vegetation.

### **LOCAL BIODIVERSITY IMPORTANCE**

The small pearl-bordered fritillary is a nationally declining species and is one of the rarer species in north east England. An apparent recent range expansion is probably related to past under-recording rather than a genuine increase. Within the Yorkshire Dales National Park it is currently known from six 10km squares (ten tetrads) where it occurs on about eight sites with about eleven recently confirmed populations. This species may be present at a limited number of other sites.

### **NATIONAL & INTERNATIONAL BIODIVERSITY IMPORTANCE**

The small pearl-bordered fritillary has been identified by Butterfly Conservation as being of Medium National Priority but of High Regional Priority in North East England. This species is protected under Schedule 5 of the Wildlife and Countryside Act in respect to trade only.

### **CURRENT ISSUES, OPPORTUNITIES & THREATS**

The main threat to this species is the loss of suitable damp grassland and moorland mire habitat where marsh violet is present. Due to this species' reliance on wetland habitats it is particularly susceptible to changes in the hydrology of these areas as well as the encroachment of scrub. The application of fertiliser and inappropriate grazing regimes, especially overgrazing by sheep, can have a detrimental affect on the species.

The fragmentation of areas of suitable habitat has resulted in small isolated populations of the small pearl-bordered fritillary increasing the risk of local extinctions.

In order to make sites suitable for small pearl-bordered fritillary, drainage can be selectively impeded to increase the amount of suitable habitat for marsh violet. Appropriate grazing regimes can also be implemented to control rank vegetation and encroaching birch and sallow can be removed. Some grazing by cattle or ponies may be beneficial as poaching of the ground may promote the regeneration of violets.

## AIMS OF THE SPECIES ACTION PLAN

- To ensure that there is no further decline in the current distribution and status of small pearl-bordered fritillary in the Yorkshire Dales National Park.
- Where appropriate increase the amount of suitably managed habitat adjacent to existing colonies of small pearl-bordered fritillary.

## OBJECTIVES

To achieve these aims we need to:

- Determine the current distribution and status of small pearl-bordered fritillary in the Yorkshire Dales National Park by 2003.
- Ensure that all known sites are in positive conservation management for this species by 2004.
- Increase the area of suitable habitat within 5 km of existing colonies to allow for future population expansion by 2004.

## ACTIONS & TARGETS

To achieve these objectives the following actions should be carried out and the targets achieved within the time-scale given:

<b>Actions</b>	<b>Target date</b>	<b>3 year cost £</b>
Devise and implement a survey to determine the status of small pearl-bordered fritillary in the Yorkshire Dales National Park.	2003	2000
Devise and implement a monitoring program to determine any population changes of small pearl-bordered fritillary in the Yorkshire Dales National Park by establishing a minimum of two transect surveys at a key site(s).	Annually From 2003	Volunteers
Encourage landowners and managers, through the use of advice and management grants, to ensure that all known colonies are in positive conservation management for small pearl-bordered fritillary.	2004	Agri-environment Scheme Funding
Encourage landowners and managers, through the use of advice and management grants, to restore habitat in the former range of the small pearl-bordered fritillary to encourage natural re-colonisation from occupied sites.	2010	Agri-environment Scheme Funding

**WHO WILL BE RESPONSIBLE FOR THE ACTION PLAN?**

<b>Lead Agency</b>	<b>Key Partners</b>
Butterfly Conservation	Yorkshire Dales National Park Authority English Nature Landowners and managers DEFRA/RDS