

AONB Conservation Fund Final Report – Small Pearl-bordered Fritillary (SPBF) Project

Caroline Uff 10/11/2023

This project builds upon work started in 2022. It aims to improve the condition of wet flush habitat on multiple sites, to benefit the Small Pearl-bordered Fritillary (SBPF) butterfly. It will achieve this with the help of volunteers from the local community. The long-term aim is to create a more robust and resilient population of this rare and threatened butterfly by providing more extensive and linked areas of suitable wetland habitat in good condition.

The following activities funded by the AONB Trust have all been completed.

- **Assess (by walkover) the results of practical work carried out in 2022 (strimming and raking).**
- **Assess the success of marsh violet planting 2022 and take marsh violet leaf cuttings.**
- **Deliver webinar introducing SPBF and their identification to members of the community.**
- **Deliver on-site training events related to SPBF to members of the community.**
- **Survey SPBF populations on at least 8 sites in the area with the help of volunteers.**
- **Identify areas for strimming in 2023 based on recent butterfly surveys and strimming results from 2022.**
- **Strim soft rush on 4 sites: Norbury, Hollies, Nipstone and Black Rhadley.**
- **Rake up arisings on all 4 sites with help from volunteers.**

Results of Strimming Management 2022

The following sites were revisited in spring 2023 to assess the impact of the practical management work.

- **Norbury Hill (Middle Marches Community Land Trust).**
- **The Hollies (Shropshire Wildlife Trust).**
- **Nipstone (Shropshire Wildlife Trust).**
- **Black Rhadley (Linley Estate).**

All areas strimmed in 2022 showed a slight but clear decrease in rush height density. This can be seen in the image (right) from The Hollies. Marsh Violet remained at very low levels on both Norbury and The Hollies but appeared to have expanded significantly on Nipstone. On Black



Rhadley Marsh Violet remained stable and locally frequent. Two previously unrecorded, but reasonable extensive established patches of violet were discovered on Norbury Hill and The Hollies. Both were in danger of being smothered and so were included in the areas to be managed.

Violet propagation pilot – results from 2022 and propagation 2023

Violets that had been propagated and planted out in 2022 on Norbury Hill and The Hollies, were surveyed in spring and autumn 2023 to see whether they had survived.



In all planting areas some violets were confirmed to have survived (*e.g.* pictured left at the Hollies). However, some were not found and those that were identified had not spread significantly. It was concluded that whilst technically successful, the propagation needs to be scaled-up massively with the violets planted in much denser patches to have a significant impact. This recommendation was included in a new and successful project bid via Stepping Stones for 2024.

Forty leaf cuttings were taken in May 2023. The image (right) shows some of the leaf cuttings that have grown into established plants. The original intention was to plant the cuttings out in Autumn. However, given the decision to significantly scale-up this aspect of the project, the young plants were passed on to a professional horticulture company (Robert Lee) to provide seed for propagation next year (2024).



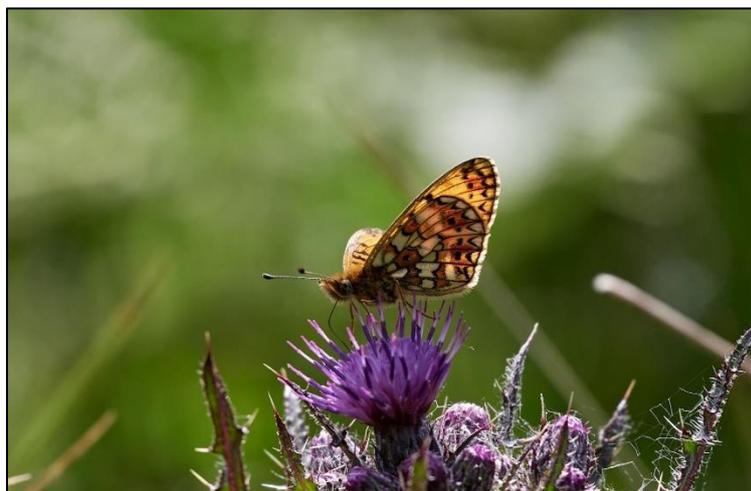
Webinar and On-site Training

A webinar about SPBFs in the AONB, and how to identify and survey them, was delivered by Charlie Bell on 17th May. It was supported by Caroline Uff, Jenny Joy, and Rob Rowe. The invite was widely circulated with 28 people registering an interest and 17 attending the webinar live. The webinar was well received and a recording of it was circulated to those who couldn't attend. Participants were sent a list of potential survey sites and details of how to share their findings. They were also invited to an onsite training event. Several events took place as follows.

- **30th May 2023.** A free SPBF training event was held at the very start of the flight period to encourage people to go out and survey areas on their own. It was coordinated by Charlie Bell and led by Caroline Uff and Rob Rowe. It was fully booked (14 people). Participants were shown the habitat requirements of the butterfly and examples of the management that had been carried out in 2022. Several freshly emerged fritillaries were seen during the event.
- **07th June 2023.** A visit to Nipstone was arranged by a local wildlife recording group (The Joy of Wildlife). Caroline Uff attended and introduced the group to the fritillary project. As well as 5 fritillaries in the main area, a Mother Shipton Moth and Bilberry Bumblebees were also recorded.
- **21st June 2023.** Jenny Joy and Mike Williams led a group of volunteer recorders on a training day on Long Mynd, as part of the Upland Commons Project. The session was opened to those keen to record SPBFs as part of the current project. The group had multiple sighting of at least 2 individual SPBFs on Burnall's Flush and an unconfirmed sighting on Belmore Flush.

SPBF survey results

Surveys (well in excess of the 8 proposed) were carried out by a range of volunteers across multiple



sites. The results below just show the peak counts rather than the results of all visits. Also included are the results from NE's regular monitoring of Stiperstones NNR (kindly shared by Cassy Clayton, NE). Fritillaries were recorded on several new sites.

Image left: Small Pearl-bordered Fritillary at Nipstone taken by D. Williams (Joy of Wildlife visit)

Site name	Central Grid Ref	Peak SPF sightings	Peak Count Date
Black Rhadley east & central	SO34519614	0	3+ visits
Black Rhadley west	SO34349617	0	3+ visits
Bog Marsh (new site)	SO355984	3	22/06/2023
Brook Vessons main	SJ382007	17	14/6/2023
Brook Vessons north	SJ382010	0	14/6/2023
Colliersfor Gutter (new site)	SO42739762	3	22/06/2023
Darnford Brook (new site)	SO42149785	1	22/06/2023
Darnford Brook (new site)	SO42279785	1	22/06/2023
Long Mynd, Bilbatch	SO41219537	1	15/06/2023
Long Mynd, Burnalls Brook	SO41369633	2 (+)	21/06/2023
Long Mynd, Catbatch	SO421968	0	14/06/2023
Monastery of St Antony and St Cuthbert	SO382999	2	14/06/2023
Nipstone main	SO35779708	7	08/06/2023
Nipstone north (around pond)	SO35639715	0 (1 flying over)	30/05/2023
Norbury Brow Farm (north)	SO362950	7	10/06/2023
Norbury MMCLT (no recent records)	SO365945	1	10/06/2023
Hollies Farm (north & south)	SO378997 & SO374993	0	1 visit only but weather poor.
Stiperstones Gatton Bog	SO372993	32	13/06/2023
Stiperstones, Deadoaks flush	SO37239890	2	13/06/2023
Stiperstones, Gatten Deadoaks	SO37349907	17	13/06/2023
Stiperstones, Gatten Fush	SO372992	9	13/06/2023
Stiperstones, Gatten Marsh	SO374991	12	13/06/2023
Stiperstones, Thorn's Flush	SO370981	1	13/06/2023
The Bog (woodland path - new site)	SO35449754	1	16/06/2023
The Hollies Nature Reserve	SJ383013	0	3+ visits

Site Management

Practical management (strimming, raking and scrub/bracken clearance) was carried out to reduce the density of rush and bracken. This allows flowering plants to flourish, which in turn provide food for both adults and larvae of the SPBF. It also introduces structural diversity to otherwise uniform stands of vegetation, providing the microhabitats which are important for the butterfly.

The priority areas for management were reviewed considering the walk-over assessments, butterfly surveys, and long-term management plans. Areas for strimming were flagged on the ground and then strimmed by contractors (Black Rhadley and Norbury) or Shropshire Wildlife Trust (Nipstone and The Hollies). All areas were then raked with the help from over 20 volunteers.

- Black Rhadley – strimmed 28/10/2023. Raked 3/11/2023 with help from 7 volunteers.
- Norbury – strimmed 30/10/2023. Raked 10/11/2023 with help from 16 volunteers.
- The Hollies – strimmed 3/11/2023. To be raked 24/11/2023 – 11 volunteers already signed up.
- Nipstone – strimmed 19/10/2023. Raking started 28/10/2023 with help from 2 volunteers and a further half-day planned with 6 volunteers.



Contractors Matt and Phil preparing to strim



Rush raking with volunteers

Next Steps

The National Trust, Natural England, Butterfly Conservation, Middle Marches Land Trust and Shropshire Wildlife Trust have all supported this project by way of in-kind contributions and this will continue to some extent. It is anticipated that cattle grazing will be used on Black Rhadley and Norbury to help maintain the open sward in the long term (avoiding the need for annual strimming). A bid by Stepping Stones to Natural England's Species Recovery fund has been successful. This will allow the current SPBF project to continue for another year. It will support on-going targeted management of key sites where needed and includes a significant scaling-up of the violet propagation aspect of the project.

We would like to thank the AONB Trust for providing essential funding to support this project in 2023 through its Conservation Fund. This in turn has helped to secure further funding for the SPBF in 2024. Thanks also to Charlie Bell, Rob Rowe, Jenny Joy and Stephen Lewis who formed the steering group for this project, and to all the volunteers and contractors who helped with the butterfly surveys, strimming and raking.