24/10/2020 Glos BC AGM:

"Limestone's Living Legacies"- BftB project update for the period 26/10/2019 to 24/10/2020 (Julian Bendle)

<u>Please note:</u> The following only includes work on butterflies and moths and does not include any work which has been carried out in this period for our other project target species which include plants, beetles, bumblebees, bats and reptiles.

• Large Blue Butterfly

With the last confirmed sighting of Large Blue at Rodborough Common [last years' reintroduction site] in 1870, it was a magical occasion when on the 27th May, the first Large Blue for 150 years to be seen flying at the site was recorded by Helen Taylor and her son Alasdair. A small number of dedicated branch members then went on to carry out 23 surveys, with the highest single visit count of 32 and a total of 220 individuals sighted.

Unfortunately, Large Blues at Painswick Beacon didn't fair quite so well this year. Disappointingly, only nine individuals were recorded, despite nearly 20 surveys being carried out. Again, this was only possible with the help of branch members. Egg counts were also lower this year, though far more were found in the more sheltered southern section, where perhaps the Wild Thyme wasn't so affected by the drought as on the exposed ramparts in the north.

A successful bid to the national BftB team for additional funding allowed the Large Blue to be reintroduced to a further two new sites this summer, with 621 larvae being released. This now means that of the six sites in the county where Large Blue is currently present, four of these are as a result of reintroductions funded and supported by our BftB project.

Following the reintroductions as part of the BftB project, to maintain these sites in favourable condition for the larvae, adults and host ants, targeted paddock grazing using temporary electric fencing was funded and organised at the reintroduction sites. In addition, with Scheduled Monument consent, the Cotswolds Voluntary wardens helped plant 377 Wild Thyme and Marjoram plants into the Iron-Age ramparts at Painswick Beacon. Contractors installed some 300 metres of water pipe at the site to allow two new troughs to be installed. This has allowed better control of the grazing at the site this year for species with very different needs like the Large Blue and Duke of Burgundy, as well as some of our project plant and beetle species.

Duke of Burgundy Butterfly

Targeted paddock grazing using temporary electric fencing has been funded and organised at 6 Duke sites. Natural England's Hebridean sheep have been grazing at Huddinknoll Hill and Juniper Hill, where two volunteer work parties were held to clear the route and install the electric fenced paddocks, as well as carry out more scrub clearance work.

Unfortunately, both the adult and larval feeding damage ID volunteer workshops had to be cancelled due to Covid-19. As a result, we were unable to provide refresher training to our newer volunteers, so numbers carrying out surveys was greatly reduced. By the time we were allowed out on site, both Jen and I had lost most of the flight period. I did manage to carry out larval feeding damage surveys at Painswick Beacon and Huddinknoll Hill BC Key Sites and in total 1,117 plants were examined. At Huddinknoll there were signs of possible feeding damage in one area and at Painswick in three separate distinct locations. At one of the Painswick sites eggshells and one tiny caterpillar were found to positively confirm the presence of Duke.

Marsh Fritillary

Marsh Fritillary is confined now to just two permanent sites in Gloucestershire, south-east of Stroud, at Strawberry Banks and Westley Farm, both of which are privately owned.

Strawberry Banks: [Glos BC Key Site 162]

By the beginning of March this year 15 larval webs had been found, possibly containing around 1,000 larvae. This compares to eight webs the previous year and seven in 2018. During the flight period the peak

season count was 71, compared to 18 last year and 31 in 2018. This August 25 larval webs were recorded, compared to 14 last year and 11 in 2018; so "hopefully" numbers are beginning to slowly pick back up following the crash in 2017.

Westley Farm: [Glos BC Key Site 163]

At the beginning of March one web was found, with about 50 larvae, confirming that Marsh Fritillary is still breeding at this site. One volunteer work party was carried out in March in preparation for the permanent fencing to be carried out which is part funded by the Countryside Stewardship agreement. A number of subsequent work parties had been organised to carry out the fencing in the following months, ready for grazing in the autumn, but Covid-19 wrecked these plans! Work parties resumed in August, though socially distanced and restricted to six people. The volunteers are trying their best, but if the permanent fencing isn't completed in time, temporary electric fencing will be used to allow grazing with cattle this winter. Nearly 3,000 Devils-bit Scabious seeds will be collected at the end of this month and supplied to a commercial plant nursery so that they can be grown on into plug plants. These will be planted by contractors next autumn to provide an additional 3ha of Marsh Fritillary habitat.

In addition to Strawberry Banks and Westley Farm, unusually Marsh Fritillaries were seen this year at seven other sites in Gloucestershire, including both BC reserves! Dr Dan Hoare, BC's Director of UK Conservation, reckoned that it might be because of the anticyclonic conditions we had this spring, which tend to make Fritillaries at least go up into the air column and therefor travel much longer distances than normal.

• Pearl-bordered Fritillary

Led two groups of Cotswold Voluntary Wardens to carry out coppicing and clearance work at the Cirencester Park Estate in an area where a number of Pearl-bordered Fritillarys were recorded last year. In total 17 volunteers provided more than 100 hours of help.

• Landowner/manager habitat management site advice visits

Carried out 11 site advice visits to discuss habitat management for butterflies and moths including specific species like Large Blue, Duke of Burgundy, Marsh Fritillary and Grizzled Skipper.

Organised and funded contractor works:

Construction of 10 electric fenced paddocks, installation of two livestock drinking troughs, scrub removal, ruderal control and soil scrape creations at a number of site across the Cotswolds to specifically benefit Large Blue, Duke of Burgundy, Marsh Fritillary, Dingy Skipper, Grizzled Skipper and Small Blue butterflies as well as other butterfly and moth species.

• Volunteer habitat management work parties

Organised and led 16 volunteer habitat management work parties [842 hours] planting larval food-plants, removing scrub, clearing ruderals, electric and permanent fencing, coppicing and ride clearance. This work was to benefit Large Blue, Duke of Burgundy, Marsh Fritillary, Pearl-bordered Fritillary, Dark Green Fritillary Grizzled Skipper, Dingy Skipper and Small Blue butterflies.

In addition to the habitat management work parties, 24 butterfly surveys were carried out by volunteers.

Glos BC Key Butterfly Sites: [In addition to those already mentioned]

Glos BC Key Site 78 Breakheart Hill:

Advised and persuaded the owner to create a soil scrape whilst constructing a new access track and alter timing of grazing at this important Grizzled Skipper and Chalkhill Blue site.

Glos BC Key Site 79 Breakheart Quarry:

Led a volunteer work party to clear scrub encroaching into the main quarry. Have organised contractors this winter to clear scrub encroachment in key Grizzled Skipper areas.

Glos BC Key Site 81 Stinchcombe Hill:

Organised and funded contractors to clear scrub and cut/remove grass in a number of areas. This work was primarily to benefit the Rock-rose Pot Beetle, though should benefit many of the sites butterfly species.

Glos BC Key Sites 121,122,123,124,125,126 Rodborough Common:

Organised and funded erection of temporary electric fencing to allow targeted paddock grazing. Liaised with Commoners to provide grazing.

Glos BC Key Site 139 Juniper Hill:

Organised and led the Cotswolds Voluntary Wardens to clear the routes for the two temporary electric fenced paddocks to allow rotational grazing of the site.

Glos BC Key Site 152 Painswick Beacon:

Organised and funded the golf club green keepers to construct, move and maintain the electric fenced paddocks. The Dexter cattle are back grazing the site and the new troughs I had contractors install in January are allowing grazing to be more targeted this year.

Glos BC Key Site 160c Larkhill:

Led South District Cotswolds Voluntary Wardens to clear scrub at this Dark Green Fritillary and Dingy Skipper site.

Glos BC Key Site 181 Oakley Wood:

Organised and led the Cotswolds Voluntary Wardens to re-coppice an area to benefit Pearl-bordered Fritillary.

Glos BC Key Site 277 Barton Larches:

Five of the old quarry pits re-excavated by contractors. This work is primarily to benefit Cotswolds Pennycress, but should benefit the Small Blue and Dingy Skipper if they are still present on site.

Glos BC Key Site 278b Nosehill Farm

Persuaded Breedon Quarry Group [owners] to scrape areas at the quarry base to create new bare ground/scree. This work is primarily to benefit Cotswolds Pennycress and Fine-leaved Sandwort, though should benefit many of the sites butterfly species.

Glos BC Key Site 293 Hornsleasow Quarry:

Secured permission from owners [Breedon Quarry Group] for Glos BC members to survey the site.