Friends of the Roman Road and Fleam Dyke
January 2023 Newsletter 61

Events. Our **next AGM** will be held from **3-5 pm** on **Saturday 25 March 2023** at the Townley Memorial Hall, Fulbourn, with guest speaker **Sharon Hearle**. Her title is **Conservation of Threatened Butterflies and Moths in East of England**. Sharon has been the Regional Manager for Butterfly Conservation in East Anglia for 20 years. She has done butterfly transect recording on Devil's Dyke for many years.

On **Sunday, 23rd July 2023**, we will be leading a guided walk on Fleam Dyke to see the summer chalk grassland flowers and butterflies, particularly the Chalkhill Blue butterfly, which should be present in good numbers. Meet at 2pm in Stonebridge Lane, Fulbourn by the entrance to Fulbourn Fen Nature Reserve. We will walk along Fleam Dyke as far as Bedford Gap and return to Fulbourn at around 4pm. There is no charge but donations to the Friends would be welcome.

Conservation news - The Northwest end of Fleam Dyke

In the autumns of 2017 and 2018 scrub was cleared from the NW part of Fleam Dyke from Mutlow Hill to close to the NW end. After the clearance the area was seeded with Upright Brome Grass (*Bromopsis erecta*); the original plan was to graze the newly established grassland but that did not happen. Now, in January 2023, vegetation is regrowing on the cleared areas and some Brome has established, but unless there is further treatment most of the areas will revert to scrub, though probably of a somewhat different species composition compared to the former scrub (less Hawthorn now).

Mutlow Hill January 2018 (Photo R Lemon)

January 2023 (Photo E Tanner)

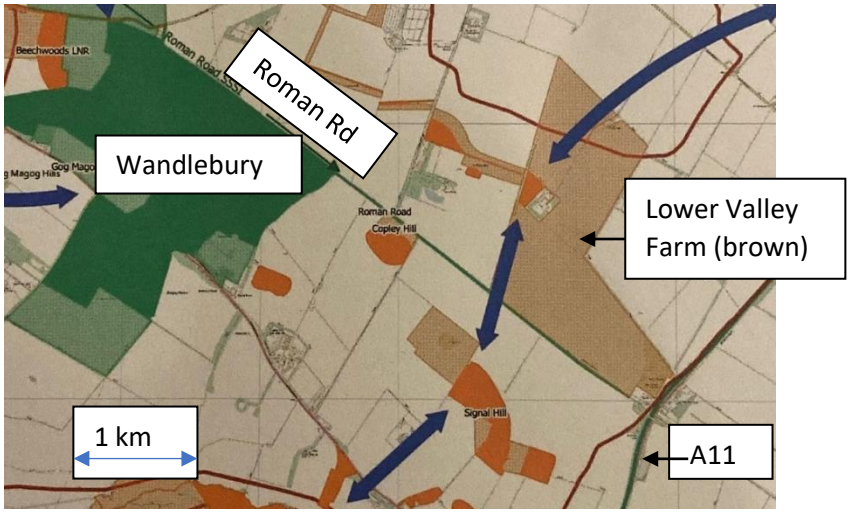
Pictures looking southeast at Mutlow Hill on the Fleam Dyke that was cleared of scrub in the winters of 2018 showing the 'scrubbing-up' of some of the area by 2023. Notice that the fence and gate in the left picture in 2018 are obscured by brambles in the right picture in 2023.

View northwest along Fleam Dyke from just north of the railway cutting, with the pumping station visible past the field on the left.

These views show a lot of Bramble (*Rubus fruticosus* agg.) growth on the right hand side (NE side) of the dyke in the righthand photo. There is also a lot of Old Man's Beard (*Clematis vitalba*) and some Rose (*Rosa* spp.), sucker shoots of privet (*Ligustrum vulgare*) are also present. The resulting scrubby vegetation is half a metre tall, with some stems 1-2 m tall. The likely cost of removing and poisoning the regrowing scrub is high - simply cutting woody shoots down to the ground, without killing the rootstock, will delay but not prevent woody regrowth.

Lower Valley Farm Fulbourn

Cambridgeshire County Council's County Farms own Lower Valley Farm, Fulbourn, which is situated next to the Roman Road. As part of a 'phased and extensive' Biodiversity Net Gain programme, County Farms has established a large area of grassland coupled with a significant tree and hedge planting programme; this together with fencing and water supply is in preparation for grazing by native breed beef cattle. The grazing plan will also include sheep and conservation for Winter feed supplies. Half of the farm has already been planted with Perennial Rye Grass (*Lolium perenne*), the most common pasture grass in lowland UK, the plan is to plant the other half of the farm to grass in this Autumn. This is an opportunity to increase biodiversity because the pasture could be 'enriched' by sowing in wildflowers and creating fairly species-rich neutral grassland (neutral refers to the soil pH, which is about 7, the surface soil is rich in clay, but has many chalk fragments). One object of the conversion from arable to pasture is to increase the soil organic matter, thus effectively sequestering carbon, which would otherwise be in the atmosphere as extra carbon dioxide. As part of the tree planting programme, there will be established a separate new plantation of about 2000 trees (representing the number of people who died of COVID in Cambridgeshire). Also planned are new permissive footpaths effectively allowing access from the Roman Road.



Solid green – Existing core habitats. Stippled green – Extensions to core habitats. Solid orange – stepping stone habitats (for example woodland in the Gog Magog priority area). Stippled orange – potential new stepping stone habitats / extensions to existing stepping stones. Blue - potential connections,

Butterflies on the Roman Road and Fleam Dyke – Highlights of our Monitoring Programme

Our two linear sites, which run through an arable landscape, contain areas of chalk grassland, which provide a rich habitat for butterflies.

As part of the Butterfly Monitoring Scheme, organised by Butterfly Conservation, we have been making regular counts on both sites since 2007 and these have produced interesting results.

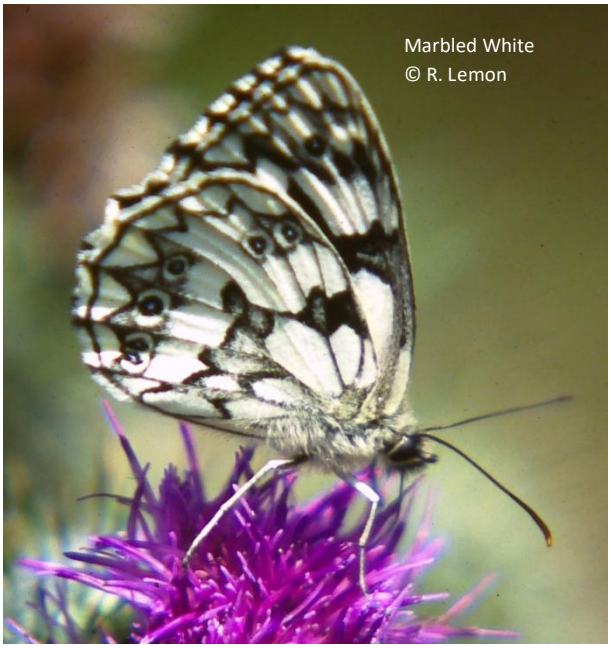
In total, 29 species have been recorded. Many of these are common generalist species, which can be seen in fairly large numbers during the appropriate season, although they do fluctuate from year to year, mainly as a result of changing weather conditions. They include the Brimstone, the larvae of which feed on Buckthorn (*Rhamnus catharticus*), and the adults of this species are one of the first butterflies to be seen on fine days in early spring, when they come out of hibernation.

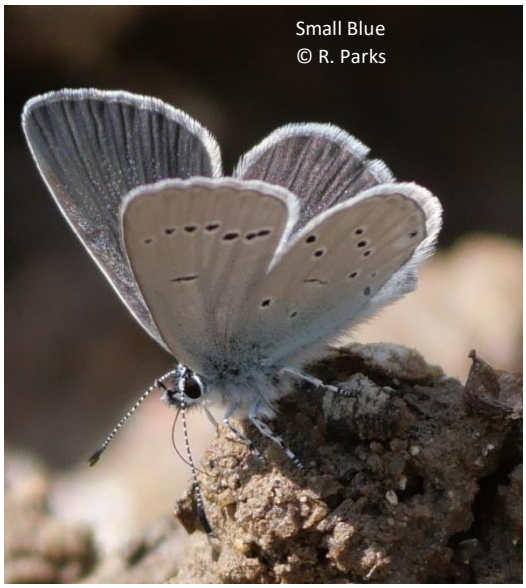
One of the less common and perhaps our most iconic species is the Chalkhill Blue. The food plant of this species is Horseshoe Vetch (*Hippocrepis comosa*), and in the UK it is confined to the chalk grasslands of southern England. In fact, our sites, together with Devils Dyke, are towards the northern extent of its range. Although they had been recorded in the past, very low numbers were seen when we started our monitoring programme. However, with appropriate habitat management, on Fleam Dyke, numbers have increased dramatically. Chalkhill Blues are also present on the Roman Road but probably because suitable habitat is less extensive, numbers are much smaller.

A second habitat-specialist species, which is present in relatively small numbers, is the Green Hairstreak. On Fleam Dyke, it was confined for many years to the section between the Fulbourn end and Mutlow Hill. Although its food plant is primarily Rock-rose (*Helianthemum chamaecistus*), which is quite common, it is dependent on areas of scrub for its territorial and courtship behaviour and, as discussed in Newsletter 60, numbers declined when the scrub was cleared from this area. However, the population has increased in the area southeast of the A11 and the 2022 season produced the highest numbers we have seen during our 16 years of monitoring.

Another less common grassland species, which we see in most seasons, is the Dark Green Fritillary, so-named because the underside of the hind wings is flushed with green. It never occurs in large numbers but when it is present, this spectacular butterfly is easily seen.

A species which occurred only occasionally in our earlier counts between 2007 and 2017 but which has increased dramatically on both sites since 2018 is the Marbled White, a member of the browns or subfamily Satyrinae. This species tended to be confined to grassland in southern England but, perhaps as a result of a warming climate, is now extending its range northwards and eastwards and we see quite large numbers on our sites during late June and early July.





Another species, which seems to be increasing in numbers in our area of the country, is our smallest British butterfly, the Small Blue, found in sheltered grassland habitats where its food plant, Kidney Vetch (*Anthyllis vulneraria*), grows. We have recorded just one individual and this was in 2022 on the Roman Road. We hope that numbers will increase and we can also hope that we will see the Adonis Blue, which has now been recorded on Devils Dyke and Therfield Heath and the Dingy and Grizzled Skippers, both of which have occurred on our sites in the past.

More details of our results, including graphical illustrations can be seen on our website, www.frrfd.org.uk

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