

Hello to all our members, 2023 was an interesting year especially for the Fleam Dyke – see below.

Events. Our **next AGM** will be held from **3-5 pm** on **Saturday 9 March 2024** at the Townley Memorial Hall, Fulbourn, with guest speaker **Bob Jarman**. His title is **The Birds of Cambridgeshire - winners and losers**. The talk will be about "changes in our lifetimes, and about everyone of us and our relationship with and adventures in the natural world."

Bob has watched birds for most of his life. He remembers the winter of 1962/3 and finding dead waders, forced inland, on his school playing field in Arbury. He went to Aberystwyth University to be near the UK's only breeding Red Kites; now he sees them over his house in Chesterton. He has written several papers on birds, especially House Sparrows, and recently a monthly article in the Cambridge Independent paper. He is a co-author of the Birds chapter in the book 'The Nature of Cambridge' edited by Mark Hill and published by Pisces Publications.

Guided Walk Sunday, 4th August 2024 Valley Farm to see Biodiversity Net Gain Land. See page 4.

Conservation news – Wildlife Trust acquires land next to and NE of the Fleam Dyke.

During 2023 the Wildlife Trust for Beds, Cambs & Northants acquired a strip of land to the NE and adjacent to the Fleam Dyke, from the A11 to near the NW end of the Dyke (bordering the Townley estate). This area is about 50 m wide and about 1.5 km long. The plan is to use it for conservation grazing, much like the area immediately to the NE of the Devil's Ditch between the B1102 and the A14.

New information boards on the Fleam Dyke.

We finally put up two new information boards on the Fleam Dyke, one at the NW end and the other just SE of the A11. These illustrate the Fleam Dyke and some of its interesting flora and fauna. They have been long in the making. Julia Napier started the process some years ago, and when Julia was no longer able to be involved the rest of the committee took up the work. This involved getting permission from the Museum of Archaeology and Anthropology in Cambridge to reproduce a picture of a pot in their collection (do go and see the real thing). We then went through several rounds of proofs before the final boards were printed. Go and see the boards and admire them - they cost £2412- all paid for by an anonymous donor, to whom we are exceptionally grateful.





New information boards. On left Roger Lemon on Fleam Dyke just SE of the A11. On right Edmund Tanner near NW end of Fleam Dyke.

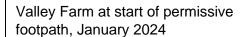
Valley Farm next to the Roman Road: Biodiversity Net Gain Land.

In 2024 the County Council-owned Valley Farm was set up as Biodiversity Net Gain land.

(https://www.local.gov.uk/pas/topics/environment/biodiversity-net-gain-local-authorities).

The area which formerly comprised large arable fields has been subdivided by fences and planted with either a grass mixture or tree saplings. The biodiversity units are being sold by Bidwells. Roger Lemon and Edmund Tanner walked through the area in January 2024. There are several new paths and one long new vehicle track. We took the following photographs. The change in the land use will greatly increase the biodiversity partly because of what is being planted and partly by plants and especially animals coming in from the surrounding countryside, which includes about 1.3 km of the Roman Road immediately adjacent to Valley Farm and which in this area is a Site of Special Scientific Interest.

Entrance to Valley Farm from the Roman Road close to Mount Farm, January 2024





Valley Farm with what appears to be areas for wildflowers on left and tree saplings on right, January 2024



Valley Farm looking SE from the public footpath from Roman Road to the Fulbourn to Balsham Road, January 2024

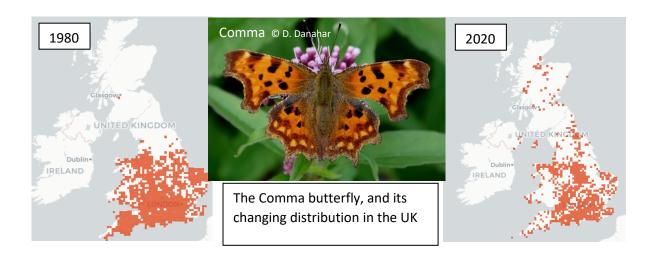




Butterflies on Fleam Dyke and the Roman Road – Changes in Numbers and the possible Effects of Climate Change

Our butterfly monitoring programme, carried out as part of a national scheme organised by Butterfly Conservation and involving some 2000 sites across the country, continued for its seventeenth season in 2023. We have now recorded a total of 30 species, a few of which are chalk grassland specialists but many of which are common generalist species found in the wider countryside. Numbers of butterflies can vary from year to year, mainly due to changing weather conditions, and it is often difficult to see trends in the relatively short term. However, some species, which were absent when we started our monitoring programme, have now been recorded and have increased in numbers over the monitoring period. Others have only recently appeared for the first time, and a few once common species are showing a downward trend.

Changes in butterfly populations from year to year can be affected by a number of factors, which include not only weather conditions, but habitat changes, food plant availability and levels of parasitism and predation. In recent years there has been much speculation regarding the effects of climate change but, because of the variation from one year to the next, this can only be determined with any confidence after many years of detailed monitoring. British butterflies have been monitored for many years and are probably the most closely studied populations in the world (Jane Hill 2021). The data show that some species have clearly benefited from climate change and expanded their ranges northwards. The Comma, for instance, once confined to the south-west, is now breeding in Scotland, having expanded its range northwards at a rate of about 10km a year and the Speckled Wood has also spread northwards but at a somewhat slower rate, both of these species have been present in this area since we started our monitoring programme. It is interesting to consider whether the arrival of new species or increases in numbers of others may be associated with climate change.



(maps from NBN Atlas occurrence download at https://nbnatlas.org accessed on 11 January 2024)

Our most iconic species and chalk-grassland specialist, the Chalkhill Blue, is at the northern edge of its range in Cambridgeshire. It has increased in numbers on Fleam Dyke from a very occasional sighting when we started monitoring in 2007 to our most abundant species in more recent years. Similarly, the Marbled White, a species found mainly to the south and west of our region was seen only in very small numbers in the early years of our monitoring, but has shown a dramatic increase in numbers, starting in 2018. Some other species, such as the Small Heath, despite fluctuations from year to year, have shown an overall upward trend over the monitoring period.

It is encouraging to have recorded two species for the first time in the last two seasons. A Small Blue was recorded on the Roman Road in 2022 and another in 2023. This is our smallest British butterfly, found in sheltered grassland habitats where its food plant, Kidney Vetch grows, and does seem to be making a comeback in this part of the country after many years of absence. Similarly, the Adonis Blue, previously confined to chalk downs in the South and Southeast of the country, has been recorded on Devil's Dyke and Therfield Heath in very recent years and in June 2023 we recorded five on Fleam Dyke for the first time.



The most notable downward trend has been seen in the Ringlet butterfly. From a peak in 2014, it has fallen in number on both sites and only one was recorded on Fleam Dyke in 2023. This may or may not be linked to climate change but the Ringlet is a species that frequents cool, damp habitats and numbers may have been affected by the hot, dry conditions, particularly in 2022. Another species which had a particularly bad year on our sites in 2023 was the Small Tortoiseshell but numbers of this species do move up and down rather erratically from year to year and previous studies have shown that parasitism may be involved.



Jane Hill (2021) states that "much of our understanding about the ecological consequences of global climate change comes from studies of butterflies in Britain" and it is therefore important that we continue to make a contribution to that knowledge with our monitoring programme on Fleam Dyke and the Roman Road.

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

Reference

Hill, Jane T (2021), *Climate Change and British Butterflies*, Butterfly, Issue 138, published by Butterfly Conservation.

(https://butterfly-conservation.org/news-and-blog/climate-change-and-british-butterflies)

Guided Walk along Roman Road and Valley Farm. On Sunday, 4th August 2024, there will be a walk starting on the Roman Road to look at the Biodiversity Net Gain area. We should see chalk grassland flowers and butterflies, particularly the Chalkhill Blue butterfly. Meet at 2 pm at Mount Farm, Babraham (in what3words.com 'removes.storeroom.sliders'). Access is from the A1307 opposite High Street, Babraham, parking near Mount Farm and across the bridge over the A11 near Worsted Lodge.

Newsletter written by E Tanner & R Lemon and approved by the committee of FRRFD January 2024.