

Friends of the Roman Road and Fleam Dyke Newsletter Number Fourteen August 2004

Summer News - butterflies and flowers everywhere by Julia Napier

On 28th July, I decided I must go and say hello to the flowers and the butterflies on Fleam Dyke. As I parked, a car drew up behind me and there was Naomi Brookes, the Green Belt Project Manager, with a cheerful smile and a large screwdriver. One of the sheep gates had been damaged by the sort of person or persons unknown who have nothing better to do. The bolts had been unscrewed, and the gate had been twisted round and left half on half off, upside down. It was not the first gate on to the dyke, but the second, as if even these poor fools did not fancy being responsible for fatal accidents caused by wandering sheep. Fortunately, there were no sheep on the dyke, but it does show that when we have sheep on this site, we do need Friends to take walks there. If you could help with this, please contact one of us on the phone numbers at the end of the newsletter.

For a consolation prize, we then walked along the dyke to the Bedford Gap, and I was amazed to see the improvement this summer. I have only known this site since April 2001, when the chalk grassland flora was confined to a narrow band along the top of the path. Several hundred yards on the western side had just been cleared of scrub and were nothing but bare chalk, treated tree stumps and sprouting nettles. It was hard to imagine that chalk grassland flowers would ever return, but I was told that earlier clearances had looked similarly unpromising. Since then the Green Belt Project have continued to mow and rake as much as possible, with some help from work parties by the Friends. Last autumn, Ted Clover brought 36 Norfolk Horns to graze the banks. They did a remarkably effective job: browsing on scrub regrowth, and grazing in the long grass; but they also deposited a lot of droppings on the top of the bank, and heavily overgrazed the rock roses and thyme.

However, these plants can tolerate a lot of grazing, recovering fairly well during the winter, and this stretch of the Fleam Dyke has been transformed. One is no longer walking along a narrow band of flowers. The area of chalk grassland flora at the top of the dyke must be twice or three times as wide as it was. There are many places where rock roses, salad burnet, carline thistle, harebells, thyme, horseshoe vetch and the short fescue grasses have spread down the banks for several yards. There are wide crescents of flower-rich turf shimmering with low-growing Lady's Bedstraw. Things certainly did not look like this last summer.

I am not an expert, so feel free to adjust my rose-tinted spectacles for me; but I am sure of one fact. When I first walked along in the summer of 2001, there were only a few obvious patches of Squinancywort. The little mounds of starry white flowers seemed very vulnerable. This summer there is a lot of it, some growing well below the top of the bank. Without the scrub clearance paid for by English Nature, and all the follow up work of mowing and raking, this increase in chalk grassland species could not have happened, but the sheep seem to have speeded up progress quite significantly. We hope that the return of a smaller flock in the autumn will bring further improvement while avoiding overgrazing.

If you have had enough of this sort of summer rhapsody, feel free to turn to page 3. I will rephrase that: feel free to skip the next page. What follows is for those of you who love flowers and have not managed to get to Fleam Dyke at the right time.

The drawings on pages 1 and 3 are from Flowers of the Field, by the Rev. C.A. Johns, revised edition 1902. The artist or artists are not credited.



Horseshoe
Vetch



Squinancywort

Mutlow Hill, more flowers and butterflies

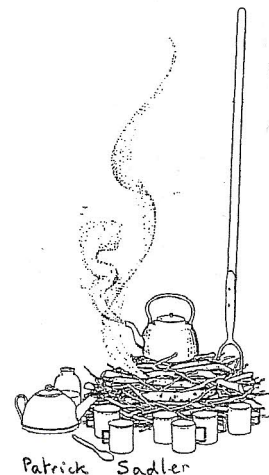
On my first visit to Mutlow Hill in April 2001, I was extremely disappointed. This was a Site of Special Scientific Interest and a Scheduled Ancient Monument, but it was covered with False Oat Grass and Old Man's Beard, with some Wild Parsnip and the occasional plant of Field Gromwell. Since then I have walked across the hill many times in summer, noting the almost total absence of butterflies, but still looking hopefully for some sort of increase in the wildflowers. A small area of chalk grassland flora had survived, and been looked after, in front of the big beech tree. It contained Common Knapweed, a bit of Lady's Bedstraw, some Yellow Rattle and not much else. Elsewhere in the long grass there were solitary examples of other meadow species. However, repeated mowing and raking by the Green Belt Project has completely changed the picture.

On July 29th, I went to record butterflies and to attempt to photograph the changes brought about by the recent clearance. It was a lovely warm morning, and to my surprise there were Meadow Brown butterflies and Gatekeepers in the wooded path that leads up to Mutlow Hill from the A11 footbridge. Usually there are a few Small Whites and two or three patrolling Speckled Woods, which feed on honeydew from aphids and do not need flowers with nectar. As I opened the gate onto Mutlow Hill, I was greeted by lots of butterflies: 12 Meadow Browns, 8 Gatekeepers, 2 Common Blues, 1 Holy Blue, a few Small Whites and Green-veined whites, the odd Skipper and a Brown Argus. They were nectaring on an area by the gate where Common Knapweed, Lady's Bedstraw and Upright Hedge Parsley were in flower. Lady's Bedstraw is also thriving all along the path to the large beech tree, while a slight slope beside the beech has been completely taken over by Yellow Rattle, with an obvious reduction in the amount of grass. There are several patches of Hare Bells beside the path and in the previously area of rank grass on the other side of the beech tree, where a variety of other flowers have also seeded and spread: Toad Flax, Hedge Bedstraw, Mignonette, Wild Parsnip and Meadow Crane's-bill and Cowslips. Last year's purple Aquilegeas seem to have disappeared, but the small stock of Hawkweed Oxtongue, *Picris hieracioides*, which I noticed in 2002, has spread extensively. This substantial improvement is a tribute to the work of the agencies involved: English Nature, The Green Belt Project, Cambridgeshire County Archaeological Service and Cambridgeshire County Farms.



The section between Mutlow Hill and the Disused Railway remains the best area for flowers with an abundance of chalk grassland flowers of all sorts. Squinancywort seems to be more abundant, but there is less Eyebright this year, and although several butterfly enthusiasts have been looking hopefully, no reports of Chalkhill Blues or Marbled Whites have reached me. In the next edition, I am hoping to include an updated version of the survey of butterflies and flora which I did in 2003 in the newly cleared areas of Fleam Dyke. Then it was not too hard to make a rough count of the number of flowering plants. I am glad to say that this year the job will be much more difficult. Clustered Bell flowers, Greater Knapweed, Common Knapweed, and Harebells have bloomed all along the path to the Pumping Station, edging the path with blue and purple in an abundance that I could not have imagined. The shape of the monument is clear once more, and in many places two people can walk abreast along the grassy bank.

How has this magical effect been achieved? Our Awards for All grant of £5,000 paid for the top of the bank to be cleared of scrub. The County Archaeological Service paid for the clearance of the east bank in this section. English Nature provided funding for the clearance of the ditch, and a small surplus in the bank account of the Friends paid for a spring brush-cut which took the strength out of the rough grasses and allowed the flowers to bloom as well as they have. Last but not least, I must mention the regular work done by the Mid-Week Conservation Volunteers and occasional work parties composed of the Friends of the Roman Road and Fleam Dyke. Congratulations all round!



The Roman Road and Fleam Dyke as Part of My Life by Ann Waldock



Cornflower

I started life in 1939 (Dad said all the best things were made pre-war!), living beside the Roman Road at Hill Farm, Fulbourn, near the Magpas aerial, on top of the Gog Magog Hills. The Roman Road and the farm were my playground.

It was my grandparents' farm and we lived in the farm worker's cottage because Mum worked on the farm. She had four younger sisters who went for walks and picnics with their boyfriends and I gather that I was taken along as chaperone. A few years ago I met one old boy friend who said his round shoulders were from giving me piggybacks along the Roman Road.

As I grew older, my passion was egg collecting. How awful, you younger ones will say! But in those days of plentiful birds, every child was encouraged to collect; but we could take only one of each type of egg, and we kept them for years in biscuit tins lined with cotton wool or sawdust, so I don't think we did very much harm.

Mum had lived on the farm most of her life, so she taught me where to look, and the names of the birds, which are not always the names in the books today. I cannot bring myself to call a Hedgibit a 'Dunnock' (sorry), and a 'Great Tit' was a Black Cap. In those days the real Black Caps weren't seen around here.

I loved to go to the Roman Road because I could climb some of the beech trees and this was a treat, because most of the hedges were hawthorn and brambles. Between the farm and the Roman Road was an area of about two acres which was left wild. We called it 'The Bushes'. It was mostly brambles and yearly we picked baskets of black berries for Mum's jam. There were rabbits galore and I learned to set snares for Rabbit Stew. Meat was on ration then, but we never went hungry.

I knew where to look for different wild flowers. A special corner for cornflowers and another for Bluebells, Flax and Lady's Bedstraw. Have you noticed the Sainfoin growing on the roadside of the Gog's Hill between the Beechwoods and the top of the hill? Well, Mum claims that is because my grand-dad grew it as a crop for his horses on the fields beside the Beechwoods, and it has been there ever since as a wild flower. I like to think it is true, but it may not be. Mum also claims that the road was not tarmacked when she was a girl.

If you walk those fields after the plough, you will find bits of white clay pipes which came to the fields in the manure which my grand-dad collected from the stables of an inn in Regent Street, Cambridge.

Later on, when I was in my teens, we moved to the other end of the village, between Fulbourn and Great Wilbraham. Our land ran up to Wilbraham Common, then a heaven of cowslips, rabbits, ant hills and water ways - something I had not known on the dry Gog's Hills. My brother and I spent hours on the Common. The Fulbourn Flower Show had a class for the best bunch of wildflowers collected by a child. I won several times, because I knew the chalk hills and the fen area at both ends of the village.



Lady's
Bedstraw



Sainfoin

Later, I began courting with a Great Wilbraham boy. He took me for walks along the Fleam Dyke, approaching it from Great Wilbraham. I had never been there before, although I knew Fulbourn 'Park' well because my widowed grandmother had moved to Station Road, Fulbourn, but I had not been further. (You probably know the 'Park' as the Nature Reserve)

Well, time went on and I married the Wilbraham boy and had two sons. They were taken for walks along the Fleam Dyke and I hope we showed them as much as my parents showed me, but now they show me things and know far more 'proper' names than I do. I'm glad my grand-daughter enjoys moth trapping and conservation work with her Dad, but I am sad when I show my grandson things and he says 'Boring'. Still, we can't all be the same. Perhaps as he grows older, he will come to appreciate natural things, instead of a keyboard and square screen. I live in hope.



Ann with the 'Wilbraham boy', Peter Dawson



Fulbourn Windmill by Sarah Mardon

Fulbourn Windmill 1975
drawing by Richard Sell

As you walk along the Roman Road adjacent to the Wandlebury Golf Course, if you glance over your shoulder to the north, you will see in the folds of the hills, the white sails of Fulbourn Windmill. The windmill stands on an outlier of the Gog Magog Hills, 5 miles to the east of the city of Cambridge. The cap of the windmill rises to 160ft above sea level and from it there is an uninterrupted view of Ely Cathedral and the Gog Magog Hills. The site is ideally suited for a windmill. In 1496 the site of the mill was already known as Mill Hill, although nothing is known about earlier mills.

The present mill was built following the enclosure of the parish. The Act of Enclosure for Fulbourn was passed in 1806. The commissioners redrew field boundaries and planned new, straight roads. They also designed a network of drains to carry water off the marsh, Fulbourn fen being only 20ft above sea level. The drainage of the parish reduced the level of water in the upper reaches of Great Wilbraham River on which the manorial water mill was situated. In 1808, the machinery of the water mill on the Great Wilbraham River was put up for sale. This mill had been first recorded in the Domesday Book of 1086.

John Chaplin's Windmill

A new mill was, therefore, needed and the enclosure commissioners allotted one acre on Mill Hill to build a new mill and miller's cottage, to John Chaplin, landowner and farmer. Using Old Moore's Almanack as a diary, he recorded: on 11th July 'laid the first brick of my mill', 22nd November 'sails put up', 15th December 'began grinding'. The ownership of the mill remained in the hands of the Chaplin family for 112 years, until 1920 when it was sold to Cherryhinton Granaries. During this time it became unworkable.

There is no complete list of millers employed at the mill, although the names of some are known. They lived in the miller's cottage, which was demolished in the 1960's. Graffiti in the desk of the miller records one name, John Nunn, who arrived to work on the mill in 1889. Seth Pettit came to Fulbourn in 1894, from the water mill at Grantchester. His family were Huguenots, who had fled France in 1685. Seth Pettit's grandfather built the mill at Little Sampford, north Essex. He worked the Fulbourn mill until he died, aged 74, in 1924. Ernest Reed was appointed by Colonel Mapey of Cherryhinton Granaries in 1930. He was the last to work the windmill, leaving in 1937 after storm damage to the mill the previous year. His son is a regular visitor to the mill.

In the middle of the 19th century, the windmill benefited from its position in the heart of East Anglia, which since Roman times has produced a surplus of grain for export beyond its borders. The mill occupied a central place in the economy of the parish. It served the larger land owners, the lord of the manor, the rector and the Chaplins, the smallest tenant farmers and the poorest villagers who brought their gleanings from the fields.

A Time of Economic and Technical Change

The last quarter of the 19th century, however, was a time of agricultural depression. The population rose dramatically and the pressure on the food supply was met chiefly by imported corn from America. The hard spring wheat was found to make a better loaf. Wind and water power were also challenged by steam power. Large steam mills were sited at ports receiving imported wheat. In 1863, a steam mill already existed at Fulbourn; it closed in 1963. Windmills became marginal to the economy of the country. In the last stages of its working life, Fulbourn Windmill was only grinding animal feedstuffs for the smaller farmers of the village.

Lightning Never Strikes Twice?

In the summer of 1933, the windmill was struck by lightning twice in one thunderstorm and 'split from top to bottom on one side'. Colonel Mapey repaired the damage only to be faced with another storm three years later in which the fan blew off. Some grinding took place in 1936 and 1937 using the auxiliary power of a tractor connected to the northern runner stone. The shutters were removed from the sails in 1937.

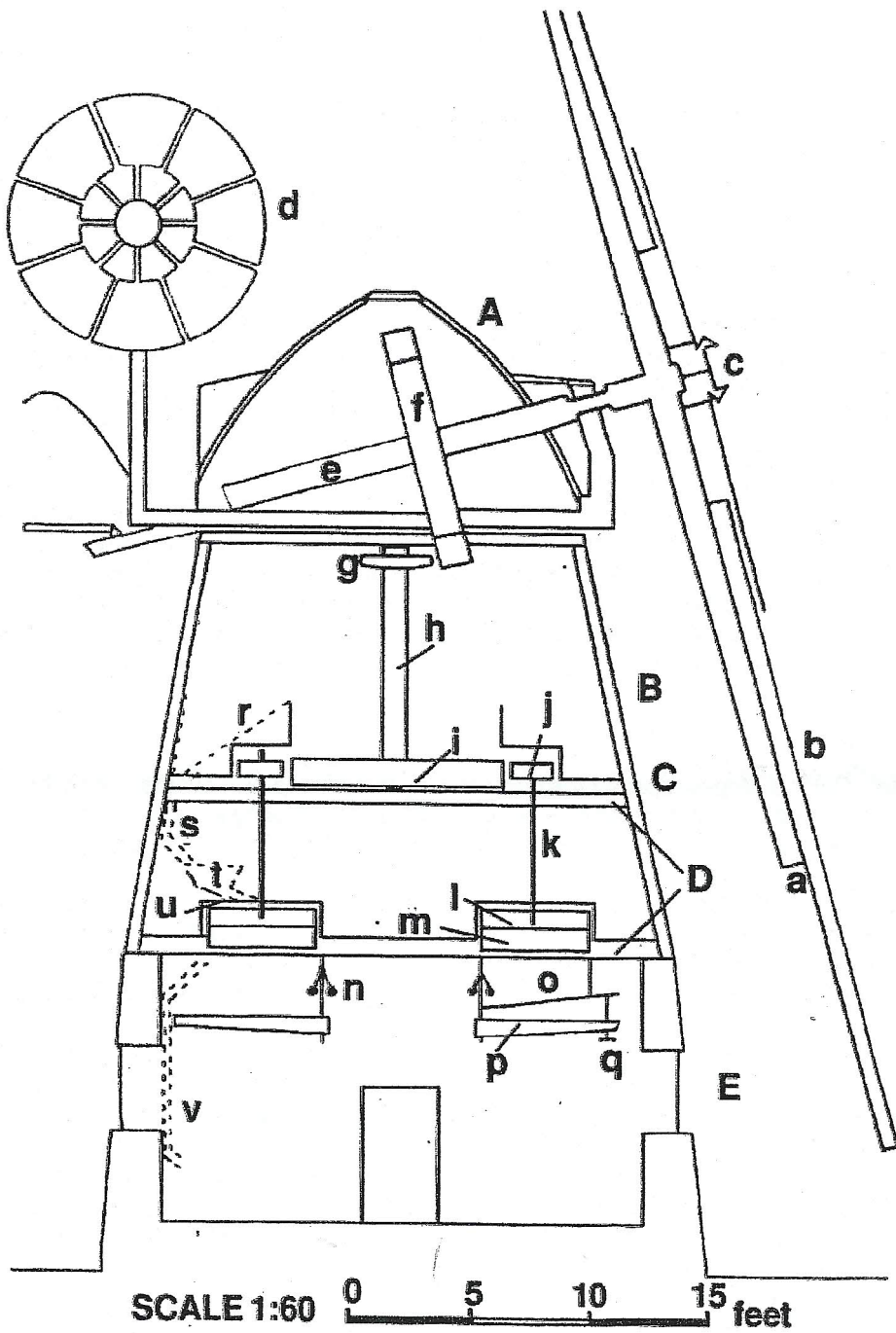
Ten years later the driving machinery, the stones and the sack hoist were still intact. The dressing machinery and the chaff cutter seem to have disappeared. In 1937, the mill body, cap and sails were painted white; but during the war the mill was tarred all over. In May 1952 the sails were again damaged by lightning. The windmill was left to decay for the next quarter of a century. By 1974, the mill was in imminent danger of collapse.

If you don't at first succeed

In 1951, Mrs Townley of Fulbourn Manor called a meeting of the villagers, with a view to restoring the mill, but no action followed the meeting. Ten years later, a second meeting, again called by Mrs Townley, was equally fruitless. In 1974, she called a third meeting and with the then owner's co-operation, the Windmill Restoration Committee was formed. Immediate weather proofing of the windmill was undertaken. A village Trust was subsequently established to lease the windmill for a peppercorn rent (3lb bag of stoneground flour) and a timetable of restoration was adopted. The first Open Day was held in 1979. The windmill qualified as a Grade II listed building.

Restored, Used and Valued

Since then, restoration work has continued apace and the windmill has become a source of interest for the people of Fulbourn and the surrounding area. Visits have been made by numerous local groups and schools. The windmill has become a symbol of the village: the parish magazine bears its title; the Ida Darwin School changed its name to the Windmill School; Fulbourn Scout Group has the mill as its symbol. The mill, expected to collapse in 1974, once again crowns the landscape of chalk hills and fens.



Fulbourn Windmill Society has monthly work parties.
If you are interested in helping to restore the mill, contact Colin Wood on 01223 880067

Next Work Party Date

Sunday 12th September

Fulbourn Windmill - the machinery

The windmill is 42ft high and divided into three parts:

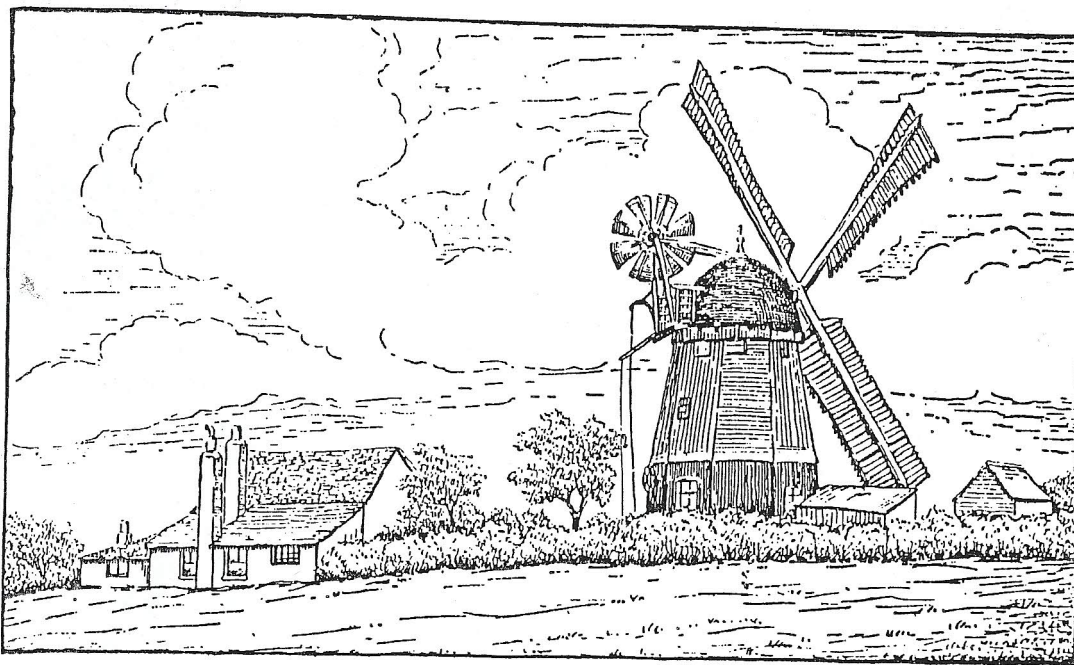
- The octagonal round house (E)
- The smock (B) framed with oak cant posts and binders (C) and (D), and carrying the sails (a) and (b) and the fantail (d)
- The cone-shaped cap (A), re-coppered some 5 years ago, is fitted with a wooden petticoat.

The sails are double-shuttered clockwise patent sails. They open and close according to the strength of the wind, through the spider, (c) on the hub of the sails. The fantail (d) turned the cap so that the sails faced the wind.

Internally there are three floors. The uppermost is the bin floor; the middle is the stone floor; and the round house contains the sack meal floor. Power was transmitted from the cap downwards. The cap houses the wooden wind shaft (9) which turns the wooden brakewheel (f). This engages with the cast iron wallower (g) which transmits the motion to the wooden driving shaft (h) and the great spur wheel (i). This wheel is connected to the stones through the stone nuts (j) and the spindle (k) to the runner stone (l), revolving on the bedstones.

A system of governors (n), acting through a steelyard (o) and brayer (p), with manual adjustment possible using the tentering screw (q), controlled the steadiness of the stones and the fineness of the flour.

Sacks of grain were hauled to the bin floor and the grain tipped into a hopper (r). It ran down square wooden chutes (s) to a hopper above the stones (t) where an open funnel (u) led the grain into the centre of the stones. The flour was conveyed by further chutes (v) to fill sacks on the sack floor.



FULBOURN MILL, CAMBRIDGESHIRE
Circa 1925

Roman Road Bird Survey 13th May 2004

surveyed by Dave Barr, Rebecca Burt, Naomi Brookes and Iain Webb. The records are divided into two halves: North = from the Gog Magog Hills to Worsted Lodge
South = from Worsted Lodge to Mark's Grave

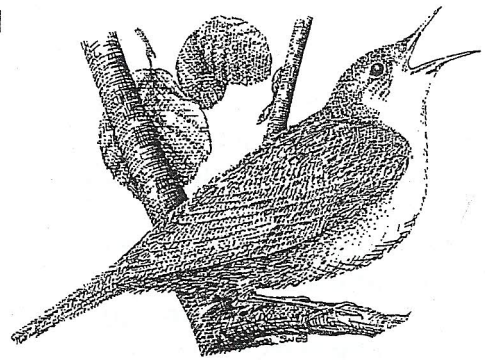
Species Number of singing males

	North	South	Total
<i>Lapwing</i>	0	1	1
Turtle Dove*	1	0	1
Skylark	0	18	18
<i>Swallow*</i>	0	1	1
Wren	6	6	12
<i>Dunnock</i>	1	3	4
Robin	7	6	13
Blackbird	2	5	7
Song Thrush	3	0	3
Lesser Whitethroat*	1	2	3
Whitethroat*	6	15	21
Garden Warbler*	2	3	5
Blackcap*	8	9	17
Chiffchaff*	2	0	2
<i>Willow Warbler*</i>	3	0	3
Blue Tit	0	3	3
Great Tit	2	0	2
Chaffinch	9	14	23
Greenfinch	0	1	1
Linnet	0	1	1
Bullfinch	0	3	3
Yellow hammer	2	7	9
Corn Bunting	1	3	4
Total	56	101	157
Total Species	16	18	23

* = Summer Migrants

Bold lettering - Population decline over 50%
Italic Lettering - Population decline between 25 - 50%
Ordinary Lettering - Population stable or increasing

The Skylark and Lapwing recorded were heard singing, but they were not nesting on Roman Road.



Whitethroat by Sarah Wroot



Bullfinch by Sarah Wroot



The Mid-Week Conservation Programme/Green Gym

The Mid-Week Conservation Volunteers will be working on the Fleam Dyke and the Roman Road this winter, as well as on other areas managed by the Green Belt Project. Good exercise in the fresh air/rain, and pleasant company over a picnic lunch.

Please ring 01954 713500 if you intend to come, in order to check the meeting place.

Wednesday	1st Sept	Roman Road	- mowing and raking to encourage flora
Wednesday	20th Oct	Roman Road	“ “ “
Wednesday	10th Nov	Fleam Dyke	“ “ “

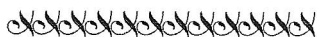
Work Parties and Events of interest to Friends

Sunday 3rd October Helpers Wanted for work on Fulbourn Nature Reserve

Can you find an hour or two to help keep this beautiful reserve in good condition? The flowers were lovely from spring onwards. There were lots of butterflies, including previously unrecorded White Letter Hairstreaks, which were seen in late July nectaring on Creeping Thistle in Ox Meadow. Work Parties last from 10.0 am to 12.30 or so. Meet at Stonebridge Lane. Contact: Nigel Copeman, e-mail: ncopeman@tinyworld.co.uk or phone Julia Napier.

Sunday 10th October Friends' Work party on the Roman Road

Meet at Worsted Lodge on the A11 at 10.0 am. Come for an hour or two, or bring lunch and stay a bit longer. The clearance work done under our Lottery grant has produced a significant increase in chalk grassland flora, but we need to maintain the improvement with mowing and raking.



Talks Organised by the Cambridge City Group of the Wildlife Trust

These talks are held in the Gilmour Building of Cambridge University Botanic Garden. Please note that the entrance is via the drive beside 47 Bateman Street, **NOT** at the Bateman Street gate of the Botanic Garden. All talks are at 7.30pm. Entry: £1.50 for members of the Wildlife Trust, £2.50 for non-members

Thurs 23rd Sept Bees, wasps and bumblebees by Bill Clark, former Head Warden of Wandlebury Country Park and Nature Reserve, and well known naturalist

Wed 27th Oct Water for Wildlife, Anglian Water's approach to biodiversity by Andy Brown, Strategic Biodiversity Planner for Anglian Water

Thurs 25th Nov Local Nature Reserves in Cambridge by Ellis Selway, the Cambridge City Wildspace Officer. There are more and better LNR's than you may think.



LOST! Roger and Stella Wolfe found a Ladies' wrist watch on Fleam Dyke. Contact Julia for details

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