

Newsletter

Easter 2014

The **Bourne**
Conservation Group



Photo Feature: This 7mm long jewel of a micromoth, *Esperia sulphurella*, emerged from one of the birds nest removed from a nest box in the Middle Bourne Lane Garden last year

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Editorial

In 1972 I attended the International Oceanographic Congress in Edinburgh. The importance of the effects of the eccentricities of the Earth's orbit around the sun on our climate which has been driving the cycle of glaciations – the so-called Milankowitch cycles - had just been recognised. Then the climatologists were forecasting that we were on the verge of a new era of glaciation – things were going to get a lot colder. At the next Congress in 1976 this forecast had been totally reversed as the overriding impact of the effect of the increasing concentrations of 'Greenhouse gases' (e.g. carbon dioxide) in trapping heat within the atmosphere was recognised. The climatological forecasts were dramatically reversed and we were warned to expect unprecedented climatic warming. In the following four and a half decades the seriousness of this warming

became increasingly evident. The evidence that the climate change is indeed man-made is now irrefutable. The latest report by the UN Climate panel highlights the dangers - amongst which are sea level rise, leading to flooding and coastal erosion, and a global reduction in agricultural production. To date none of the developed nations have taken these threats seriously enough. Reduction in emissions has to be a global policy as any one nation going it alone will not only be ineffective but will also face economic disaster. Until both the developed nations such as the USA and EU, and developing nations such as China and India take joint action we face serious long-term problems. For example how are we to feed the ever-growing human population as more and more coastal land is inundated? If the World waits for the evidence to become even clearer, it will be far too late to reverse the trends. So what can we do as individuals? Well - every little helps. In the UK about 30% of our emissions come from industry, about 30% from transport and about 30% from domestic usage. So if we all drive less and walk more, turn the central heating down and insulate our houses better, we can reduce our emissions. Even if we cannot save the World, at least we can save some money.

Martin Angel

For your Diaries

Sunday 11 th May	MBL and OCY
Saturday 17 th May	Planting at the crossroads
2 nd -8 th June	Scout week
Sunday 8 th June	MBL
Sunday 6 th July	Balsam bashing
Saturday 19 th July	The Bourne Show
Sunday 10 th August	To be decided
Saturday 7 th September	AGM
Sunday 14 th September	Footpaths
Sunday 5 th October	To be decided
Sunday 2 nd November	Middle Bourne Lane
Sunday 7 th December	Old Churchyard
Mid week sessions are planned for 29 th April, 15 th , 21 st 30 th May; 12 th , 16 th 23 rd June	

Going for Gold (again)

We were very pleased last year to contribute once again to Farnham's entry in the South East in Bloom competition. The town did remarkably well, gaining Gold in both the Town Centre and Large Town categories, and was selected as Best Town. This means that Farnham will represent the whole of the South East region in the National Competition in 2014! This happens to be the 50th anniversary of Britain-in-Bloom., so there is everything to play for.



Judging in Middle Bourne Lane in 2011



Judging in the rain in 2012

will score heavily with the judges.

Two things are certain. The first is that we will have two presentations to prepare for, the first to the South East in Bloom judges in July and the second to the judges of the national competition in August. For the latter we can expect the marking to be even more stringent than in the past; the whole town needs to be neat and tidy and in an attractive condition – the judges were not entirely satisfied on that point last year. We would argue, of course, that things like uncut road verges and natural-looking hedges, provided they are litter-free, are perfectly acceptable because of the benefits to wildlife. While working hard towards more gold medals, we must not be distracted from our central aim of “maintaining and enhancing landscape and biodiversity” in our area. As we found in previous years, these competitions help us to achieve this aim by setting standards and giving us deadlines to work to.

Noel

B is for Beautification

Although our activities mainly concentrate on the landscape and wildlife of The Bourne we are a community group with an interest in other aspects of the area. So it is fully appropriate for us to have entered into a joint project with The Bourne Residents Association which is aimed at maintaining the identity and attraction of our village in the face of so much unwanted development, heavier traffic and other pressures. For want of a better name it has been designated ‘The Bourne Beautification Project’ or BBP. There is a small steering group consisting of Councillor Carole Cockburn and representatives of both organisations. Work is currently focussed along the A287 Frensham Road but in due course may be extended to other areas. We are maintaining close contact with the shopkeepers and other concerned residents who we regard as partners in the scheme.

Last May things got off to a flying start with the setting up of colourful flower tubs and hanging baskets under the direction of Hilary Dickson. Despite a few problems, particularly with watering during the long hot summer, very favourable comments have been received on how much the shopping area has been brightened up. In October a new, innovative planting scheme was established which has added spots of winter and spring colour to extend the long-standing show of daffodils and other bulbs. This sequence will continue through May, with fresh plantings which will link into our contributions towards the town’s entry in Britain in Bloom.

We are as yet uncertain just what this will mean for BCG, because the judges’ itinerary for the day is still to be decided. It is almost certain that our garden in Middle Bourne Lane will once again be featured, because it ticks most of the boxes on the judges’ marking sheet. There is also an outside chance that aspects of The Bourne Beautification Project may also be included, since it is a community activity, and



Judging in 2013

A whole tranche of other measures are in hand and will become more apparent in the coming months. For these we have strong support not only from Farnham Town Council but also Surrey County Council who are providing much of the funding. The main items include:

- A new four way finger post at the crossroads to match those in the Surrey Hills AONB area, but with a finial on top saying "The Bourne."
- An uplift for our raised flower bed on the **corner** of Lodge Hill Road, replacing the wooden sleepers with a local stone wall.
- New matching litter bins including one at the bus stop south of the crossroads.
- A town notice board on the corner of Lodge Hill Road, one side of which will specifically be for local news and posters.
- Some improvements to the street scene at the junction of Old Frensham Road and the A287.
- Removal of unwanted road signs and other impedimenta.
- Colourful Lower Bourne village signs to replace those presently in place.

Members have already commented on an initial sketch for the

Lower Bourne sign and some new ideas were put forward. The Steering Group is clear that what is required is a design that is simple and uncluttered, and can be rapidly assimilated by passing motorists. A comprehensive Design Brief has now been sent to professional companies specialising in Village Sign work. It is hoped that they will soon come back to us with their ideas on how to implement the signs together with firm prices.

A National Strategy on Pollinators

DEFRA has issued a consultation document about how to establish a national strategy on pollinators. This is an



A hoverfly *Helophorus pendulus* on ragwort. Hoverflies are some of the most important of insect pollinators.



One of the winter tubs.

outcome of growing concern about the decline in honey bees, which has also been reflected in declines in both the abundances and diversity of bumblebees, butterflies, moths and other significant pollinators like hoverflies. The causes of these declines are not known with any certainty, although the miserable weather of 2012 did contribute to these declines. Despite a large body of research on honey bees, there is little agreement as to what factors are responsible for these declines. Is it the result of diseases such as the varroa mites, or our changing climate, or the use of new insecticides which upset the bees' navigational ability, or changes in hive management and land management

practices, or a complex interaction between these factors? However, whatever is true for hive bees also seems to be affecting many insect groups. Several of our bumblebee species have gone extinct in the last decade, the abundances of butterflies and moths have declined alarmingly (by 75% over the past two decades in some species), and hoverflies are no longer so abundant. Without pollinators we will lose at least £1 billion worth of food production, and both plant and animal biodiversity will be heavily impacted. It is far from clear as to how serious the situation is, and the consultation document emphasises the need for comprehensive monitoring. The level of monitoring required will necessitate a heavy reliance on 'citizen science' – which means groups like ours will be called upon to make routine observations, which will mean DEFRA making resources available.

However, it may take several years for robust evidence of the causes of the declines to be accumulated. Can we afford to wait that long before taking remedial action? Almost certainly not! In many ways BGC already has pre-empted this problem by managing our sites to enhance biodiversity and by battling for green infrastructure to be given greater prominence in the planning procedures. Individually we have been planting bee-friendly plants, but perhaps we should do more to broadcast the importance of planting not only the right species of plant but also the right varieties. There is a critical need for education at all levels of society.

In Farnham Cllr Jeremy Ricketts, the next Mayor, is setting up a most welcome initiative to establish 'wild corners' in our gardens, and the Scouts have responded by offering to establish wild flower areas. We are discussing where and how the Scouts can carry out their planting, one of our suggestions is that they plant the verges along Sturt Walk which are in a sad state of disarray after the work that had to be carried as a result of the landslip.

Helping our pollinators



A cuckoo bee *Melita albifrons* feeding on a garden *Lavendula*.



One of the commoner bumblebees *Bombus pascuorum* visiting a garden scabious.

The future for bees, butterflies and hoverflies may sound bleak but everyone with a garden can do their own bit to help support these vital insects right now. Careful plant choice can make a huge difference to how well our gardens provide for pollinators but until recently there hasn't been much scientific work carried out to investigate exactly which plants really are best.

Now, however, there are an increasing number of studies looking into which garden plants are most useful to

pollinators and last month Martin Angel and I attended a meeting at RHS Garden Wisley where the findings of some of these projects were presented. One project, run by the Laboratory of Apiculture and Social Insects (LASI) at the University of Sussex, looked at the variation among garden plants in attractiveness to bees and other flower-visiting insects. They chose 32 summer flowering ornamental varieties and found that some plants were 100 times more attractive than others to insects. **Marjoram** was, perhaps surprisingly, found to be the best all round plant attracting bees of many kinds as well as hoverflies and butterflies. **Hybrid lavenders** of any colour were especially good for bumble bees as was **borage** for honey bees. Pompom and cactus varieties of dahlia (where the pollen and nectar bearing centres are not accessible) were largely ignored by insects but **open-centred dahlia** varieties were popular. The pelargoniums planted by many of us in summer bedding schemes were the most unpopular of all the flowers tested! It's interesting that many of the most popular plants were not British natives.



This list is not exclusive, thus *Echium* species are tender attract many bumble and honey bees.

Plants this study could recommend were:

- *Dahlia* 'Bishop of Llandaff'
- *Dahlia* 'Bishop of Oxford'
- *Erysimum* 'Bowles Mauve', a perennial wallflower
- *Origanum vulgare* 'Hirtum', marjoram
- *Borago officinalis*, borage

Other good plants studied were:

- *Agastache foeniculum* 'Blue Fortune'
- *Echium vulgare*, viper's bugloss
- *Nepeta × faassenii* 'Six Hills Giant', catmint
- *Hyssopus*, hyssop
- *Salvia*
- *Lythrum salicaria*, purple loosestrife
- *Stachys byzantina*, Lamb's ears (this attracted wool

carder bees which used the plant for food and the hair on the leaves to build nests: the males defended the plant from other varieties of bee)

Another LASI study investigated which insects visited *Buddleja*, a shrub frequently recommended for pollinators. Interestingly, it found *Buddleja* to be popular with only a small number of species of butterfly and it was rarely visited by bees and hoverflies.

LASI acknowledges the impossibility of quantifying the

attractiveness of even a fraction of all the garden plants available. However it recommends one simple technique you can use: visit your local garden centre on a sunny day, sit among the plants for a while and just watch. It soon becomes apparent which the most popular varieties are.

<http://www.youtube.com/watch?v=4u2LeTPGo9w> A description of the LASI project on YouTube

<http://www.foxleas.com/> 'The Pollinator Garden', a useful website on helping pollinators

Hilary

Editor's note: Lisa has just pointed out that there is some advice on the web about making your garden more bat-friendly which includes a list of night scented plants that attract more night flying insects at http://www.bats.org.uk/pages/encouraging_bats.html

Sable wood: An Introduction.

Editor's note: I have invited Bruce Callender, the owner (and Friend of BCG) to give an account of it; it is on the slope below Bourne Woods. As a complete newcomer to owning and managing woodland I had a lot to learn. My 6 acres had been unmanaged for years. I needed all the help I could get to assess what needed to be done and to work out an achievable management plan.

For the first year I did nothing but watch the woodland change through the seasons; getting to know the vegetation, the soil and the landscape, talking to users of the wood and trying to find out as much as I could about its history.

Reading books was helpful up to a point, but books tended to add to the list of things I could potentially do and the number of things to worry about, without helping me to generate a prioritized set of actions. Advice from experts turned out to be the key. Noel Moss, BCG chairman, proved to be an excellent broker, arranging visits to the wood by experts from Surrey Wildlife Trust and Surrey County Council and pointing me in the direction of relevant special interest groups.

In the end it took almost exactly two years



BCG members help Bruce (on left) to clear the line of the hedge



Planting the rooted saplings and protecting them with the Tubex tubes on 21st March.

planted the young bare root plants, protecting them from being browsed by deer with Tubex tubes. Three weeks on and a few rain showers later, they are all in leaf and looking good.

(There is a brief video of the frenetic activity on 21st March at <http://youtu.be/x-3igI93Ca0>)

Bruce Callender

of listening, learning, observing and thinking to arrive at a first Management Plan, which I published in January 2014 ([see http://bacwood.com](http://bacwood.com)).

The Plan launched me into action over the winter. Between October and March, when trees are dormant and no nesting is taking place, is the time to give energy to major interventions. I removed self-seeded pine and cut down or uprooting invasive species of *Rhododendron ponticum* and *Gaultheria shallon*.

With spring comes the joy of new growth. Planting young shrubs or trees that will take years to mature is a powerful symbol of investment in the future. My passion is to create a well balanced habitat for wildlife.

So, in early March, I put into action the first planting phase of the Management Plan. I ordered one hundred mixed plants of hawthorn, blackthorn, hazel and field maple from the Royal Horticultural Society. Planted as a hedge they will provide a natural habitat for wildlife that stretches into the heart of the woodland.

Noel Moss and The Bourne Conservation Group kindly offered help with planting. I chose to follow the approximate course of an existing ditch and dyke. Local opinion is that this feature is the old boundary marker between the parishes of Tilford and Frensham. It felt right to make a very direct connection between a historical feature and a new planting. We cleared an area of trees and

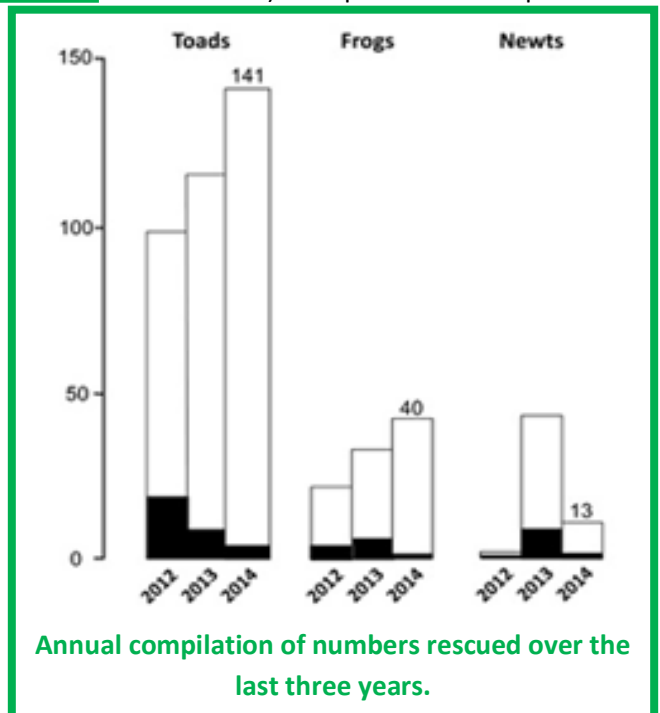
Toad watches - 2014



Toad watches were run along Boundary Road throughout a three week period from 19th February to 12th March with ten participants. Our efforts were concentrated during the 1 - 1½ hours after sunset, when the toad rush-hour coincides with the human rush hour. The weather this year was warmer than in 2013, and the occasional evening of monsoonal downpours meant numbers of amphibians being saved from being saved from a swift demise were up by 30% (although the numbers of newts were down). Despite more amphibians

being on the move, the numbers of fatalities were also substantially reduced and were far fewer than in 2012 when we first started the watches. Generally the numbers of spawners seemed to be substantially up this year. For example, in the Pond in the Old Churchyard 1½ square metres of the north end was eventually completely covered with spawn and now there is a myriad of writhing tadpoles. In the deeper reaches of the pond there is a dense network of toad spawn and the newts are extremely common. The amphibian populations have re-bounded from their declines at the beginning of the decade. While I do not suppose we can claim full responsibility for these recoveries, I am sure that our efforts have played a significant role in the speed of the recoveries. Each frog and toad eats a large number of garden pests during its lifetime, and so helps to reduce the need some people see to use pesticides.

Lisa Malcolm



The RSPB's Big Garden Bird Watch 2014



Rather surprisingly to me the robin ranks 10th

The results of the Big Garden Bird Watch in early 2014 have just been published. Nearly half a million people participated, including 92,000 in the south-east of England. This sort of citizen-science is the only practical way of gaining a large-scale overview of the status of our environment, and monitoring the changes that are afoot. While the data may include some errors of identification, these errors become trivial when swamped by the sheer volume of useful information. The table shows the order of abundance expressed as the number of gardens in which each species was reported and the average number per garden. Many of the species, despite being common, have declined in abundance. For example, the house sparrow remains both the most commonly seen and the most abundant bird, even so its overall numbers have

declined by 62%. Starlings have declined by 81% and Song Thrushes by 81%.

Rank	Species	Number per garden	Rank	Species	Number per garden
1	House Sparrow	3.5	8	Great tit	1.4
2	Blue tit	2.6	9	Collared dove	1.3
3	Starling	2.5	10	Robin	1.3
4	Blackbird	2.8	11	Magpie	0.9
5	Wood Pigeon	2.2	12	Dunnock	0.9
6	Long-tailed tit	1.6	13	Long-tailed tit	1.2
7	Gold Finch	1.4	14	Feral pigeon	0.7

Greenfinches have also declined sharply dropping to 15th in the order of abundance. This decline that is attributed largely to Trichomonas disease (so do regularly clean and disinfect your feeders and bird baths). Ring-necked parakeets are creeping up the list and are now 27th in frequency of occurrence. Has anyone seen one of these new invaders in Farnham?

Martin Angel

Industrial melanism in moths

In the late 19th century, very dark or melanistic specimens of several species of moth became common. The classic example is the peppered moth *Biston betularia* in which the majority of the population in many of our cities became almost entirely black instead of the normal black and white pattern. The hypothesis proposed to explain the change was that in sooty areas the black melanic individuals survived better because they were less conspicuous to bird predators. This hypothesis became accepted as being 'one of the clearest and most easily understood examples of Darwinian evolution in action' (i.e. of natural selection leading to the survival of the fittest). Unfortunately many of the facts do not fit this hypothesis. For example, during the day the moths never sit out in full view on tree trunks; instead they hide away out of sight where it does not matter what colour they are. The experiments designed to test the hypothesis were flawed, because the moths were artificially exposed to the predators. Furthermore, the melanic forms spread out into countryside regions, where according to



Top: A normal peppered moth, Bottom: A melanic specimen.

the theory they would have been at a strong selective disadvantage - being highly visible to the predatory birds. Furthermore the rate at which the populations changed was far too rapid, both when the melanics increased in frequency and when subsequently they declined in abundance following the smoke abatement act. Hence another mechanism must have been responsible for the melanism. The alternative mechanism that has been proposed is that some mutagenic substance in the air pollution was causing these changes in colour to occur synchronously in

about 20 species of moth within a period of some 20 years. In addition not all moth species became darker, some became much lighter. In the absence of air pollution the frequency of such mutations falls to within 1 in 10,000 to over ten million specimens. Hence in normal unpolluted environments melanism is extremely rare. Over the last five years I have caught 201 peppered moths in and around The Bourne; of which only one has been a melanic, but even this rare event is about 500 times more frequent than the odds of natural mutations would suggest!

Martin Angel

Publicity

Our last Newsletter received favourable coverage in the monthly Farnham Diary, who picked out some of the items we covered. The article had the sub heading: 'Farnham's natural habitats well monitored by the BCG'. Over the winter we have managed to update several pages of our website thanks to the efforts of several members of the Committee. It is important to keep the website up-to-date, if people are going to look at it regularly. In particular we draw your attention to the History Project page, which thanks to Richard Sanders contains much of his research material about George Sturt, as well as the history of the Old Churchyard. We have given two lectures, one to the Friends of the Farnham Museum (16th January) and one to the University of the Third Age (27th March), and Martin gave a report to the Surrey Wildlife Recorders meeting on the results of the garden survey. We also feature in a video on Farnham TV, which is one of the Farnham Town Council's best kept secrets. You can view it by clicking on the link on the FTC website and watching the Farnham-in Bloom video. It features Abigail talking about Middle Bourne Lane, Noel cleaning our bird boxes and Sheila working indefatigably at the crossroads. John Collins, who produces these videos was again filming in MBL and OCY during our work session on 6th April for this year's Farnham-in-Bloom competition (see Going for Gold). It will feature an interview with Hilary, as well as slow worms and toad and frog spawn in the OCY pond. Finally the April issue of The Bourne Parish magazine includes an article by Noel about the Bourne Beautification Project.

David Todd



Hilary being interviewed by Farnham TV

Your Committee

Chairman	Noel Moss
Secretary	Richard Sanders
Treasurer	Fiona Warburton
Membership	Karen Redman
Footpath co-ord ⁿ	Martin Wisdom
Publicity	David Todd
Planning	Charles Fearnley
Horticulture	Hilary Dickson
Newsletter	Martin Angel
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