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*Village Clean-up Day*

**Saturday, 29th November, 10.00, Chapel**

*Blewbury Garden Market Extra*

**Saturday mornings, 9.30 – 11.30, Post Office**

### Editorial

Mike Edmunds

Our Newsletter 11 focused on climate change and renewable energy, and as climate change continues to be headline news the theme is continued here. We draw attention to the accelerating concern over climate change at the September UN Summit, which was preceded by a global day of action voicing public concerns.

Since then, this month saw the launch of a major report – the Synthesis Report summarising the conclusions of the three Working Groups of the Intergovernmental Panel on Climate Change (IPCC). Reactions to this will be included in our next Newsletter.

There is strong evidence that many of the extreme weather events of recent years are linked to climate change, and to bring that

home we have an article on Blewbury's unprecedented groundwater flooding in recent years.

Globally, there is also growing awareness of the insecurity and consequences of investment in fossil fuels – we report on some encouraging signs of disinvestment by major businesses and warnings of future insecurity.

Much is also happening locally. Sustainable Blewbury has decided to support COIN (Climate Outreach and Information Network), an Oxford-based organisation which focuses on communicating the climate message to a new audience. We believe the scientific evidence is unchallengeable and we now need to move on to this new agenda.

We are also involved in community energy with the Solar Schools programme. Blewbury primary school is involved and this offers the opportunity for participation through a new share offer.

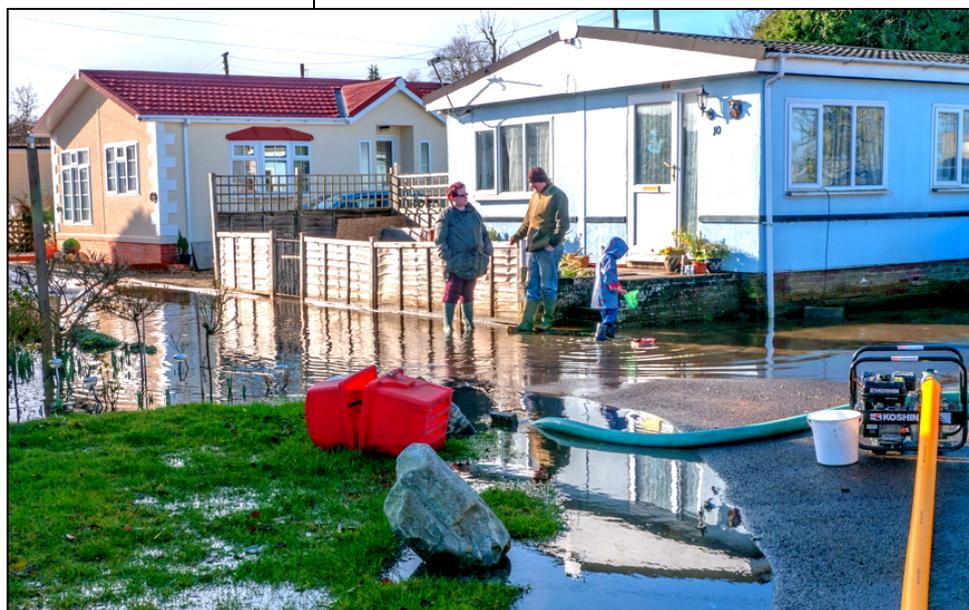
Progress with our Downland project is reported in this Newsletter. With the start of autumn we also reflect on the successful apple events, our community orchard garden (permaculture site), and this summer's Blewbury Garden Market.

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### Groundwater flooding

Mike Edmunds and Paul Whitehead

Twice in this millennium, in 2001 and again in 2014 (see photo), we have seen flooding in Blewbury, not only from surface water but also from rising groundwater. This has caused severe problems to households through flooded basements and by groundwater disrupting the sewerage network.



Springs have also emerged in areas of the village where none have previously been recorded.

Groundwater flooding is defined as the emergence of groundwater at the ground surface away from perennial river channels, under conditions where the 'normal' ranges of groundwater level and groundwater flow are exceeded.

This phenomenon is not unique to Blewbury, but is a feature especially of the chalk areas of England. It is observed in our downland area as the 'winterbournes': streams that only flow during winter when the water tables are seasonally high. It has been estimated that 380,000 properties located on the exposed chalk of southern England are vulnerable to this form of flooding.

This has been an unprecedented series of years for flooding (both surface and groundwater), since in the same period we have also been experiencing both severe drought(s), as in 2011, and extreme floods and high groundwater in 2013 and 2014.

Last winter (2014) was also the wettest in England and Wales since such measurements began in 1766. Southern England received more than 170% of the average winter rainfall for 1981–2010. Recent analysis by scientists led from CEH Wallingford suggests that the cause of this unprecedented winter was a chain of events involving the Pacific Ocean and an unusual jet-stream configuration. However, we are all becoming aware of this more extreme weather that may be related to warming of the atmosphere and a changing climate.

Could these be the highest water levels and wettest series of events in our recorded history? It seems strange that the London Road, site of an ancient trackway, should be the site of recent flooding when the road and adjacent settlements would logically run above the springs. Alternatively, modern excavation near the springs may have altered the natural artesian flows and water table.



*Silbury Hill ring lake*

**PS:** At the invitation of English Heritage, we have recently been investigating the area near Silbury Hill to try and establish whether, in accord with the evidence of the settlement, the water table 4400 years ago could have been higher. Writing in 2012, we predicted that the water table would on average have been 5m higher. So it was to our amazement (and his excitement) that the local archaeologist, Steve Marshall, sent us a photograph in January 2013 of Silbury Hill ringed by a moat – never previously recorded.

For more information on groundwater flooding refer to [www.bgs.ac.uk/research/groundwater/flooding](http://www.bgs.ac.uk/research/groundwater/flooding)

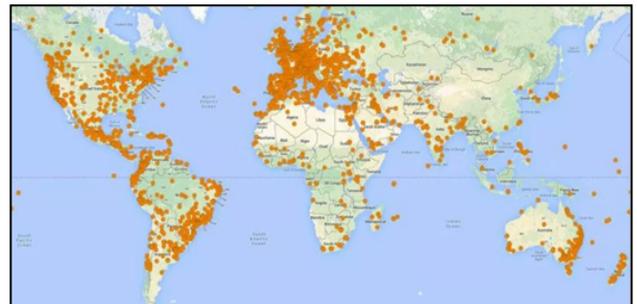
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## Climate change briefs

Mike Edmunds

### **Climate Change Global Day of Action – 21 September 2014**

Around the world 2646 events in 162 countries (see map) marked the Global Day of Action to draw attention to the need for action to combat climate change. 400,000 people took part in the largest march, through New York. The march was staged on the eve of the UN Climate Summit.



Take a look at two messages from the UN Climate Summit:

Leonardo DiCaprio's 2014 UN Climate Summit Speech: [www.youtube.com/watch?v=ka6\\_3TJcCkA](http://www.youtube.com/watch?v=ka6_3TJcCkA)

Louie Schwartzberg and Lyn Lear: 'A world of solutions – The UN climate sequel':

[www.youtube.com/watch?v=5F8Vv\\_vRjF8](http://www.youtube.com/watch?v=5F8Vv_vRjF8)

### **IPCC 5th Assessment Synthesis Report**

A very good, short summary of the IPCC Synthesis Report can be found here: <http://bit.ly/1sdqREF>

The report itself, a summary for policy-makers, and PowerPoint slides with some striking figures, can be downloaded from: [www.ipcc.ch/report/ar5/syr](http://www.ipcc.ch/report/ar5/syr)

### **Consensus**

10,883 out of 10,885 scientific articles published in 2013 agree – global warming is happening, and humans are to blame: [www.jamespowell.org](http://www.jamespowell.org)

## COIN

Please look at the website of COIN (Climate Outreach and Information Network), which aims to reach new audiences, and also has the video link to Naomi Klein's talk on climate change in Oxford last month: [www.climateoutreach.org.uk](http://www.climateoutreach.org.uk)

### **A challenge for Blewbury?**

Wildpoldsried, a Bavarian village of about 2,600 residents, is leading the way in Germany's extraordinary renewable energy transformation, the *Energiewende*. Over the past 17 years the village has invested in a wide range of renewable energy projects that include 4,983 kWp of photovoltaics, five biogas facilities, 11 wind turbines and a hydropower system. As a result, the village has gone beyond energy independence – it now produces 500% more energy than it needs, and profits from sales of the surplus power back to the grid. But it is a victim of its own success!

In part due to the ecological ardour of villages like Wildpoldsried, renewable energy has been expanding more rapidly than envisaged. 'I think people were surprised that the *Energiewende* is happening so fast', said Günter Mögele, deputy mayor. 'All this is outstripping the ability to develop the necessary electricity grid and storage infrastructure to support it.'

### **Disinvestment in fossil fuels**

In our last Newsletter we highlighted the rapidly growing campaigns around the world to disinvest in fossil fuels. Since then, Glasgow University has become the first academic institution in UK (and Europe) to stop investing in the fossil fuel industry. Additionally, the philanthropic Rockefeller Brothers Fund, founded on the huge Rockefeller oil fortune, has just dumped all of its fossil fuel investments.



**"Yes, the planet got destroyed. But for a beautiful moment in time we created a lot of value for shareholders."**

Speaking at Harvard Law School in September, Bevis Longstreth (former head of the United States Securities and Exchange Commission and former

member of the Board of Governors of the American Stock Exchange), and an increasing chorus of analysts at major financial institutions like Goldman Sachs, Citibank, HSBC and Standard & Poor's, have warned that long-term investment in the fossil fuel industry is moving into a high-risk zone, and pension fund management, in particular, should be sounding the alarm. To read more, see a summary of his talk at [www.ttwnb.ca/2014/10/](http://www.ttwnb.ca/2014/10/)

### **While Didcot B burned ...**

At the time of the fire, Sunday evening 19 October, Didcot B power station was running at full capacity. So the cooling tower fire, which forced half of Didcot B to close, led to the instantaneous loss of 700 MW of electricity, supplying about half a million homes. The first lesson to draw from the Didcot fire relates to energy security. Due to their size, problems at centralised power plants pose a greater risk to keeping the lights on than the loss of, say, one turbine in a wind farm, or a few solar panels in an array. Yet on that same day, wind power provided its greatest ever share of UK electricity, 24%, greatly exceeding the output of all the UK's nuclear power stations. And the lights stayed on. Read more at <http://bit.ly/1utMLDR>

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## **Invest in community energy in Oxfordshire**

Mike Edmunds and Jo Lakeland

The last few months have seen a series of milestones for community energy schemes in Oxfordshire via the Oxford-based Low Carbon Hub (LCH). Osney Lock Hydro is nearing completion in Oxford and should be generating later this year, and the shares launch of Abingdon Hydro was earlier this month. These hydro-electricity schemes, together with other community energy projects, were featured in Radio 4's 'Costing the Earth' on 24 September: [www.bbc.co.uk/programmes/b04hyz3g](http://www.bbc.co.uk/programmes/b04hyz3g)

The programme also discussed the problems of small schemes such as these in relation to the present electricity-generating culture dominated by the 'Big Six'. It showed that we are well behind other countries, such as Denmark and Germany, in following this path.

One of the projects featured was the LCH community-owned solar schools and businesses project. This share offer was launched in September to raise a £1.5M investment for 21 photo-voltaic arrays on Oxfordshire schools, with a total generating capacity of 1 MWp. The sale of shares in these local renewable energy projects will mean that they will be 100% community owned, putting local power into the hands of local people.

Eight solar school projects have already been completed, and Blewbury School is one of the 13 projects in development. Blewbury School will have a 30 kWp array predicted to generate nearly 28,000 kWh of electricity every year. The school will benefit from cheap green electricity and reduce its CO<sub>2</sub> emissions. The systems are built on 20-year leases from the schools: when the lease ends the school will be offered its system, which should still be performing at 80% of its initial capacity.



*Commissioning of Larkrise School's solar PV roof*

This is a real chance for us to be part of an energy generating revolution, which the present government hopes will support a 50-fold increase in generation from the present national 60 MWp figure by 2020.

Information on the project is available at: [www.lowcarbonhub.org/invest](http://www.lowcarbonhub.org/invest). The downloadable share offer document includes answers to many of the questions you may have. It is comprehensive, but rather impenetrable if you do not usually consider this type of investment. If you have further questions contact Ethex, who are handling the share offer, on 01865 403304. Do remember that the most important thing to consider is: can you afford to be without the money you would pay for these shares? If not, do not buy them.

***The share offer closes on 28 November.***



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## **Sustainable connections in our area**

Jo Lakeland

Members of Sustainable Blewbury join other nearby CAGs (Community Action Groups) for regular informal meetings to find out what other groups are doing, publicise our own events, compare notes, and

have an enjoyable evening in a local pub without an agenda to limit the discussion. You could call them 'green drinks' evenings; we call them CAG Chats. We get to know people from sustainability groups similar to ours in the Vale of White Horse and further afield – members of Abingdon Carbon Cutters and Sustainable Wantage, Didcot, Wallingford and Wheatley usually come.

It is both interesting and useful to find out what ideas are catching on elsewhere and to discuss larger actions. For example, our recent successful Green May Fair was prompted by going to Abingdon Carbon Cutters' Eco Fair, and it is interesting as a village group to hear about larger communities' activities, which are often different to ours.

For our next CAG Chat we hope to join Sustainable Wantage for their Green Drinks evening at 7.30pm on Wednesday, November 26th in The Mix at 15 Mill Street, Wantage, OX12 9AB. (The Mix is the community space run by Sustainable Wantage in the town centre.) Do join us.

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## **Downland project**

Peter Cockrell

Now in its fourth year, both successes and failures have been recorded this summer. The weather has been good and the wild areas have done well. However, the propagation of flowers on Ticklers Folly has been a struggle.

### ***The Chalk Pit***

The wildflowers in and around the Chalk Pit were a delight as usual, with all the common species such as cowslip, pyramidal orchid, field scabious, ladies bedstraw and greater knapweed being exceptionally prolific in almost ideal conditions. The more unusual species like autumn gentian, squinancywort, small scabious, spotted orchid and broomrape were also numerous and easy to find. Clustered bellflowers were unaccountably scarce this year.



Butterflies responded to the good weather and the abundance of flowers: downland varieties like marbled white, little skipper, speckled wood,

meadow brown and gatekeeper were very numerous over a long period. The beautiful peacock (above) made the top of the butterfly count both here and across the country.

Ragwort, which is poisonous to grazing animals, was also more abundant than last year, but some was removed by hand before seeding. However, ragwort was allowed to remain where caterpillars of the cinnabar moth (below) were found.



### ***Rubble Pit Lane and Cow Lane***

The work by SODC to open up Rubble Pit Lane for horses and Cow Lane for walking seemed drastic at the start. But now the effect of a summer's growth is apparent and the benefits can be seen clearly. The paths are indeed wider for walkers, dogs and horses. The hedges, cut back hard, are now thickening to give a much better habitat for birds and insects.

Levelling the paths exposed the soil and created a mud bath last winter, but opportunist plants are now taking advantage and establishing a greener pathway. We may well see some more mud before it recovers completely. Bath asparagus was spotted in three places.



### ***Tickers Folly Field***

Attempts to establish wildflowers have not, on the whole, been a great success but a few species have done better, notably cowslips. Even though success with plants was limited, there were significant

increases in numbers of common chalkland butterflies like common blue and meadow brown.

Nearly 2700 mixed wildflower plants have been grown from seed, pricked out and then planted as strong young plants during 2013–14. However, the success rate was only about 10–15%, except for cowslips with perhaps 70% surviving.

Twenty patches of grass of about 1 m<sup>2</sup> each were trimmed short and then scarified hard before sowing yellow rattle (to weaken the grass) and a cocktail of wildflower seeds. The yellow rattle did well but the space between was quickly covered by white clover and other weeds, with few of the intended plants appearing.

The entire new area of 500 m<sup>2</sup> was scarified hard in the autumn of 2013. A mix of wildflower seed and yellow rattle were then sown and tramped in. The success rate was virtually zero, although they may yet germinate given the right conditions.

The new mixed hedge on the south side of Tickers Folly has now had two summer's growth and is a success. A good number of plants had to be replaced after the first year but almost all are now thriving – some have even flowered and produced a few berries. Scarifyings, wood chippings and grass cuttings have provided a heavy mulch to suppress a dense growth of coarse grasses, bindweed and goose grass around the young hedging plants. The coarse grass areas have been cut in the autumn to a height of about 10 cm. An 'Austrian scythe' was used for this job – fairly easy to use and very good exercise!



### ***Plan for 2014–2015***

Due to the lack of success of current experiments, another recommended method of propagating flowers is being tried on Tickers Folly. Normally carried out on a field scale, the method starts by spraying the area with a systemic weed killer (glyphosate) to provide bare soil after raking off the dead vegetation. This has been done experimentally on a number of patches. The top inch or two of soil

will be disturbed and left for a while to allow dormant seeds to germinate. These will then be hoed out and the step repeated. A wildflower seed mix will then be sprinkled on the loose surface, rolled in and allowed to grow.

For more information please contact [peter@cockrell.plus.com](mailto:peter@cockrell.plus.com)

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## Apple juicing events 2014

Angela Hoy



This year we planned nine apple-juicing events based on the success of last year, when we were overwhelmed with apples. However, the peculiar weather this year has resulted in a very mixed apple crop, starting with several nights of frost, which killed the apple blossom of some varieties but not others. The prolonged spell of rain in early summer seemed to result in rot setting in, which caused a lot of fruit to drop prematurely and even rot on the trees, again resulting in less produce.



*'Apples', by children of Blewbury Pre-school Playgroup*

The session on 11 October was a special one to celebrate Apple Day. In addition to making apple juice, we had the Blewbury Garden Market and a VPA plant and cake stall, as well as colourful artwork by the Playgroup children (above) and Q Gardens' apple-flavoured local ice-cream.

Next year we may cut back on the number of events but could extend the duration of each. Less wearing on our excellent team of volunteers!

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## Our orchard garden comes of age

Eric Eisenhandler

Our Woodway Road community orchard garden, based largely on permaculture principles, is doing well. Over the past four years we have planted a wide variety of fruit trees, soft-fruit bushes and perennial ground cover, much of it edible.

In December 2013 we added to our wide and interesting variety of fruit trees (two cherries, a cooking apple, a plum, a greengage and a flowering lime), and to our soft fruit bushes (blackberries, tayberries, jostaberries, boysenberries and kiwi berries).

There is full information on our [permaculture web page](#), including a diagram of what we have planted, a description of our trees and photos showing our progress.

The 2014 season was quite successful. Many of the trees and bushes started to produce reasonable quantities of fruit, and the ground cover on some of the more established plots started to replace some of the weeds. We sold a variety of produce at the Blewbury Garden Market: globe artichokes, autumn raspberries, French beans, gages, pears, and several kinds of jam. Crops with smaller yields were shared among people working on the project: redcurrants, Japanese wineberries, wild strawberries, plums and medlars. Some of these were from trees in their first year on the plot.

In early September we had a very enjoyable and successful open day (photo on next page), to explain to visitors what we are doing and show them how it is going. A good number of people, including several families with children, turned out and were interested in the wide variety of plants. The children who came had a wonderful time looking at everything and playing in the long grass and willow shelter.

We welcome anyone who is interested and would like to spend the odd hour or two helping out; please contact Eric Eisenhandler:

[e.eisenhandler@qmul.ac.uk](mailto:e.eisenhandler@qmul.ac.uk)

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*Orchard Garden open day*

## **Blewbury Garden Market**

Angela Hoy

The year started off very slowly because, despite the mild winter, spring was very overcast and wet and the lack of light caused a delay in the growing season. For the first few weeks we had hardly anything to sell (thank goodness for our hard-working bread and cake makers!). Things eventually started to improve in July, and the long hot spell that followed brought forth produce in abundance – especially runner beans and courgettes! This was followed by a very mild autumn which extended the growing season, but we were not able to beat the last two year's figures. Still, our primary aim is to provide somewhere for local growers to find good homes for their surpluses, not to make a huge profit, so we must expect some ups and downs as we are totally reliant on the weather to produce the goods.

As in previous years, we hope to hold a social gathering for producers and helpers later in the year (or maybe in the New Year), when we will ruminate about the season over a glass of wine and hope for better things in 2015.

In the meantime, BGM Extra is again running at the Post Office (thanks Karen) on Saturday mornings, when bread, cakes, preserves, eggs and honey will be on sale from 9.30 – 11.30.

Huge thanks to all who have contributed to this year's BGM.

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**We welcome new members. If you are interested in getting involved please contact our chairman, Mike Edmunds: [wme@btopenworld.com](mailto:wme@btopenworld.com)**