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THE NECTAR GARDEN IN ST MARY'S CHURCHYARD

Text and photographs by A.Wright

ON THE SOUTH SIDE of St Mary's, the Saxon church in Quarry Street, is a churchyard which ceased to be a burial ground in 1856. It is looked after by Guildford Borough Council, who mow a broad strip at the side of the paths and cut the grass in spring and autumn. St Mary's remains a garden of remembrance where ashes are buried.

When I attended the church in 2007/8 I noticed that the soil contained chalk, and yet the plants differed from chalk grassland plants on the downs. I began to record the plants, and in 2009 a more complete list was made with assistance from Vanessa McClure.

In March 2010 the Diocese of Guildford stated that it would like to promote "any churches cherishing the natural, built and social heritage that is their churchyard". This fitted in well with the fact that on 5 February 2010 Pewley Down Volunteers had brought children from Holy Trinity School to plant wild flower seeds in the churchyard. It was an opportunity for the children to learn the value of wild flowers as nectar plants for bees, while re-establishing some of the chalk grassland plants which might have been there historically.

In April 2010 a meeting was held in the churchyard to carry the plan forward. Mary



Alexander, churchwarden, and Frances Halstead of Surrey Wildlife Trust attended. Objectives included treating the tombs and graves with respect and reducing damage where possible. The wild plants still growing there, such as Violet and Primrose, were to be conserved and plants which might have been there historically were to be seeded in the scrapes. Invasive plants, such as Canadian Fleabane, were to be removed without use of chemicals.

In 2011 St Mary's Nectar Garden was entered as a neighbourhood project for Guildford in Bloom and won a Silver Gilt prize. Already by then plants such as Knapweed *Centaurea nigra*, Greater Knapweed *Centaurea scabiosa*, Field Scabious *Knautia arvensis*, Kidney Vetch *Anthyllis vulneraria* and Wild Carrot

Daucus carota, had established themselves strongly. The children from Holy Trinity School can now plant seed in new scraped ground, which has been gathered from plants within the churchyard.

In sunshine during the summer the churchyard is alive with bumble bees collecting nectar. Although it is a small churchyard surrounded by roads, Grasshoppers are around and there are the mounds of Yellow Meadow Ants. In 2012 a Blackcap nested in the trees by the churchyard. St Mary's nectar garden is an essential link in the wildlife network for Guildford.



More on bonfires and other garden issues by Forum member Peter Smart

AS WELL EXPOUNDED by Athol Harley in the March edition of the Forum's newsletter – bonfires do cause a nuisance and discomfort to neighbours and the community and in my experience divide communities. Some people love them and some hate them, with all shades in between on the Responsibilities: Rights spectrum.

The toxic potential of the polluted air of a bonfire on the lungs of 'passive bystanders' still seems to be ignored or under-rated. If a tobacco leaf is known to be carcinogenic, why wouldn't any other mixture of burned leaves be carcinogenic?

Some years ago, with the help of Sue Webber at Surrey Wildlife Trust, we distilled some parameters for what to do if a bonfire becomes absolutely necessary:

- Only burn dry material usually that has been left to dry out for at least a month.
- Do not include household materials. Under the Waste Management (England & Wales) Regulations 2006 it is an offence to dispose of domestic waste in a way likely to cause pollution of the environment or harm to human health.
- Do not light it at the weekend when neighbours are more likely to be outdoors enjoying their gardens.
- Do not light it when the air is foggy, misty or damp. The smoke pollution will combine with the water particles and air quality will deteriorate even more.

Perhaps we should add to this list to be especially considerate of residents uphill of, as well as downwind of your fire.

Sadly these neighbourly courtesies and etiquettes are not known or are frequently forgotten in the rush to destroy the unwanted material. A little thought and consideration for wildlife, for the soil quality and for the neighbours will go a long way to maintaining harmony throughout the living community.

From an organic gardening viewpoint bonfires are a waste of valuable natural nutrients. Left on its own for a year or two the organic material will decompose and become soil, rather than particles floating around the deteriorating atmosphere. The enriched soil derived from the decomposition process is of great value to healthy wildlife food chains. Leaves especially are an excellent soil supplement.

But Mr. Harley's article also prompts me to wonder if some of the reason for the regular and frequent fires in the community is that in the wealthier environs of Guildford, it is often those who can afford to buy in gardening services and effectively outsource all their garden responsibilities who are devolving the responsibility for natural waste management to their paid service providers. In turn these small businesses may have no interest in the health of the soil and air in their clients' gardens or neighbourhoods and just want to cut, clear and make it disappear as quickly as possible. Week in, week out. And if that includes a bonfire then they may set it alight and leave it smouldering as they depart for the next job of the day.

I would suggest that Mr. Harley does let the regular bonfire households know of the discomfort they are causing. The residents may be out at work all day and have no idea of the impact their garden contractors' activities are having on the neighbourhood.

When I communicated like this to one neighbour who had a bonfire every single Wednesday morning, the response was on the lines that "Oh that's nothing to do with us, it's the gardeners", as if the payer of the piper could not possibly call the tune. However, in most cases the owner should be sympathetic, appreciate the information and communicate appropriately with the contractors.

This then raises a wider issue of the outsourcing of land management to landscape gardening services and their role in servicing the clients' property in environmentally and neighbourly considerate ways.

Ladybirds

The collective noun for a group of ladybirds is a 'loveliness'. (Source: BBC Wildlife, June '13)

The cost of babies

Each day in this country 8,000,000 disposable nappies are sent to landfill. (Source: Costing the Earth, BBC Radio 4, 16 Mar '13)



Spanish horticulture – 1

Farmland around Doñana National Park accounts for an estimated 60% of Spain's strawberry production, Half the strawberry farms are drawing water illegally out of aquifers using unauthorised boreholes. Watery areas in the park are disappearing, and the illegal farms, through their infrastructure and associated forest loss, are isolating the park's Iberian lynx from those further north, leading to inbreeding. (Source: BBC Wildlife.

Spanish horticulture – 2

A 10-metre long dead sperm whale stranded on Spain's Andalucian coast had ingested at least 59 plastic items associated with the horticultural industry: 30m2 of plastic sheeting, 12m of plastic rope, two lengths of plastic hosepipe, plastic bags, plastic plant pots and a spray canister. (Source: BBC Wildlife, June '13)

Pesticides – Europe acts

After determined campaigning by many groups including the Soil Association, 38 Degrees, Neal's Yard, RSPB, Friends of the Earth, Greenpeace, Butterfly Conservation and many others, the buck stopped with the European Commission who voted in April to suspend the use of three neonicotinoid pesticides across Europe on certain crops, such as oil seed rape, sweetcorn and sunflowers. The ban will be for the next two years with effect from 1st December 2013 in which time more evidence will be accumulated.

The EU chose to adopt the precautionary principle on the scientific evidence now available that these pesticides are harming insects, including honey bees, that pollinate 75% of all crops. Some EU countries had already instituted bans and most UK supermarkets and many garden centres had issued instructions before this decision requiring their suppliers to stop using these poisons. People are angry at the wanton killing of our countryside by global agrichemical companies such as Bayer (German) and Syngenta (Swiss) who produce neonicotinoids, and by the farmers who use these toxins.

Alongside the agrochemical industry the NFU raged about the decision, issuing dire warnings about the consequences for our food production. However, where is the evidence of adverse consequences from countries such as Germany, France and Italy where partial bans have existed for some time?

The Soil Association, that represents organic farming, welcomed the news and stated that their farming methods prove that systemic insecticides such as neonicotinoids are not needed to produce our food. Owen Paterson, MP for North Shropshire and Secretary of State for the Environment, opposed the ban on the grounds that neither he nor Defra were convinced by the evidence. Surely it is time that the Environment was given a department of its own and not spliced together with Farming. This relationship has been catastrophic for the Environment for years.

Much more research is needed on the combined effects on wildlife of the complex cocktail of multiple pesticides, herbicides and fungicides used in farming and urban "weed" control, e.g. by Surrey County Council in Guildford, not to mention all the other chemicals accumulated in living creatures – us included. We note that the University of Exeter is embarking on a project looking at the effects on pollinators of multiple pesticide use but much more needs to be done on the combined effects of chemicals in the environment. It can't be good news.

John Bannister

Peregrines stay in Guildford

After three years of successful breeding in central Guildford, peregrines are again raising young here in 2013. A glimpse of the youngsters being fed by the female falcon on 11th May indicated there are three young peregrines this year which, all being well, will have been ringed and be preparing to fledge by the time you read this.

The parent birds take it in turn to cover the eggs, but once the young arrive it is the female falcon which spends most of her time caring for the young eyesses while they are small and vulnerable, and it is she who tears tiny pieces of flesh from prey birds and places them delicately into eager beaks.

The male can be absent for up to two hours hunting and feeding himself before bringing prey to the female. He is less powerful than her so takes longer and brings back smaller prey.

Thank you

Guildford Borough has confirmed that it will make a grant to Guildford Environmental Forum for the current financial year, and at the same level as last year. This is especially helpful in enabling us to take the message of environmental responsibility to the wider public.

Volunteers wanted

Would anyone be willing to help us on one or more days in the autumn at the apple-pressing event at Wisley? Please contact John Bannister (details on page 12) if you think you can assist.

Guildford WalkFest

Saturday 13th July to Sunday 28th July

Guildford's Walking Festival offers a choice of 2 walks every weekday and 3 at weekends. Walks are from 1 mile to 15 miles but the most common is around 5 miles.

On Sunday 14 July, Guildford Environmental Forum is leading one of the walks, to see some of Guildford's 'green gems'. See details on page 12.

WalkFest is organised by Guildford Walking Forum with administrative and some financial support from Guildford Borough Council.

For this year's full programme please contact Keith Chesterton – 01483 563392 or strider100@ntlworld.com

Guildford's Economic Strategy

Guildford Borough Council are currently reviewing their Economic Strategy which was produced in 2011. The abolition of regional economic development agencies after the last election and the creation of smaller, business dominated, local enterprise partnerships is one reason for this review. Most of their consultation has been with business organisations, and our membership of the Guildford Business Forum, in which John Bannister is a sector chairman, means they also contacted us. They came along to one of GEF's Executive meetings and Executive members put forward their own thoughts.

It was a stimulating session and it seems valuable to merge some of these contributions into an article.

TAKING A FUNDAMENTAL LOOK at the question, it was suggested that environmental strategy is not a section of economic strategy – economic strategy is a section of environmental strategy, for without an "environment" there would be no "economy".

Being a bit more specific, it would be helpful to clarify where we are going anyway – the parameters of what we can reasonably expect will happen whatever our strategies. We must assume that there will be greater competition for dwindling resources. We need to think about where our energy and water are coming from. Energy provision is changing very rapidly. We have to decarbonise our energy supply chain. How is Guildford going to help in this, and for the range of energy uses: electricity, heating and transport? With water availability problems, we need to see that water is used effectively. We will also need to recognise that climate change is significant and its impacts are now expected to be at the worst extreme of the last predictions of the IPCC in 2007.

One way to look at the future is to say, what do we need to achieve in the next 15 – 20 years to be "sustainable" in environmental terms. Then we should look back to now, and ask how we can get to this sustainable future. Globally many places are aiming for a "modern, sustainable economy", but we need a clear vision of where we are going, and the steps needed to get there, and to succeed in getting there.

We need to acknowledge the potential dichotomies in an economic strategy. An obvious one is that attracting shoppers, generating new jobs that rely more on commuters and boosting tourism will produce even worse traffic congestion. This has impacts on residents. They will see that much of the envisaged growth would be

for the global economy, but will ask how they benefit. Congestion problems are not iust about inconvenience but also about air quality, which is on the edge of becoming unacceptable. Many cities are now seeing poor air quality as a limit on growth. There is a fear that the current strategy does not see that there is a limit to growth, and that it fails to see the difficulties for residents, and their voices are not being heard. Addressing the transport question, it is not clear that people are asking the right questions. It is not simply a question of dealing with the gyratory, but rather it is one of understanding how people are moving around, both in terms of the places that they are going to or coming from, and how they are making those journeys. The fundamental question to be addressed is how we get places better connected.

In terms of employment we must acknowledge that whilst attracting high-level jobs we must have sufficient jobs for all society. We need the right mix of "research and design" businesses, and to be clear whether we have room for them to grow.

Two linked contradictions are that attracting high earners to the area leads to high house prices, and thus affordability problems. Another is that people are attracted to the area for its pleasant setting, but building to accommodate them damages the area. This has to be seen in the context that the state of the environment is bad, the quality of wildlife is appalling, not just in Guildford, but in the UK and the world, for example through damage by pollution. Collectively we are exterminating wildlife in practice - most statistics show how bad it is. This is also bad for the economy, for example in terms of food production. Food is a vital element and Guildford should be growing more of its own food.

Raymond Smith

(Wild)cats

Scottish wildcats will be extinct in the wild within months, conservationists warn, as numbers of pure-bred cats have fallen to about 35 individuals. Disease and interbreeding with domestic and feral cats are the main threats.

(Source:Population Matters, Oct '12)

Tern concern

For the first time in the UK, a major offshore windfarm development was turned down last year because of its projected impact on wildlife. The 177 turbines planned for the north Norfolk coast would have killed hundreds of Sandwich terns every year that nest at Blakeney Point and Scolt Head Island, said the RSPB. Two other windfarms will go ahead in the area, but these will have little impact on the terns (Source: BBC Wildlife. Autumn '12)

Great names!

Among insects, there's Agra cadabra (a beetle) and Heerz lukenatcha (a parasitic wasp). (Source: The Etymology of Entomology, BBC Radio 4, 16 Mar '13)



Windy woods

Many of the world's biggest trees are dying off because they are vulnerable to the extra wind turbulence associated with being on the edge of a wooded area – an increasingly common occurrence due to widespread forest fragmentation.

(Source: BBC Focus, Apr '12)





Despite the cold and the rain, on 8th March children and adults turned out to get the planting under way.

GUILDFORD'S FIRST COMMUNITY ORCHARD – HANGING BY A THREAD

John Bannister

IT HAS BEEN an ambition of the Transition Guildford/ GEF Food Group for several years to plant a community orchard in Guildford. We believe that our food security in an increasingly uncertain world is in real and present danger owing to our extreme dependence on imported food. Some of us can remember the drivers' strike when supermarket shelves were emptied in three days. Also, land grabbing is happening on a vast scale in Africa and other countries by nations wanting to secure their future food supply: part of the scramble for the world's limited resources. As Mark Twain said, "Buy land they're not making it any more".

Our government has yet to wake up to the threat this poses for the UK. So while a small community orchard is largely a symbolic act it is intended to reinforce the message that we are capable of growing more of our own food locally and to do so would result in fresher food, greater self-reliance, reduced risk of going hungry and a stronger local economy.

Let's have English apples

Apples are a focus for us, following our hugely successful apple pressing at public events in the autumn using apples grown in Guildford. Most

of the year English apples are available, but only 25% of apples consumed in the UK are grown here. Ninety per cent of the apples sold in our supermarkets are grown in France.

A few years ago we were directed by Guildford Borough Council to a potential orchard site in Bushy Hill, but for a number of reasons this did not materialise. Our view was that a more central site would be easier for our members to care for and would benefit more people. We liked the look of Racks Close, a steep but beautiful site in an old chalk quarry running between Quarry Street and Warwick's Bench barely 300 metres from the High Street. It took a year of planning, preparation, public consultation and fundraising to bring the project to successful fruition.

The planting

Planting day was fixed for Friday 8th March and many local groups and organisations were lined up to help plant the 15 half-standard apple, plum and pear trees and celebrate the event. Final approval from the local ward councillors arrived only the day before. The selected trees were duly delivered by our supplier, Peter Barwick, in the morning and Surrey Wildlife Trust (what great people) set up their

gazebo with hot tea. It was about 7°C and rained steadily, but over 30 people came. Best of all for me were the children from Pewley Down/Holy Trinity School. The sound of their happy voices coming down Racks Close in the rain were what it was all about and made all the effort worthwhile. The Surrey Advertiser gave us tremendous coverage for which we are extremely grateful.

The Community Foundation for Surrey generously supported us with funding that included wheelbarrows and tools. Other funding came from the Forum, a private donor and Transition Guildford.

It only remained for nature to take its course with the immediate prospect of blossom and the promise of fruit in due course for everyone to enjoy.

But . . .

... it is sad to have to report that, on the evening of 17th April, 13 of the 15 trees were badly vandalised,

with the heads carrying the branches broken off and left hanging by a thread. This was devastating and totally inexplicable. The police were supportive but there were no witnesses and no CCTV. The Surrey Advertiser covered the sad news and a great many people contacted us to express their feelings, which was all part of a necessary healing process.

One unforeseen bit of good news was that we had planned for 30 trees to go into Racks Close, but this was scaled back during the final consultations to 15 trees. So the other 15 trees were diverted to Transition Guildford's vegetable-growing site and they are all in excellent shape in full blossom. The damaged trees in Racks Close have been pruned back to the next growth bud in the hope that new branches will grow.

If you are in Guildford please pop along to Racks Close and discover what a lovely green space it is and while you are there please keep an eye on the trees.

CHASING ICE powerful evidence of global warming

by Forum member Rob Palgrave

FORUM MEMBERS were treated – if that's the right word for a film illustrating climate change - to a screening of the documentary 'CHASING ICE' in April. Renowned nature photographer James Balog has spent years setting up time-lapse cameras in Greenland, Iceland, Canada, and the Rocky Mountains to record what is happening to their glaciers and ice sheets, calling his project the Extreme Ice Survey (EIS).

CHASING ICE is the first mainstream public presentation of EIS. Balog said in a 2009 TED presentation that, "Most of the time, art and science stare at each other across a gulf of mutual incomprehension. Art, of course, looks at the world through the psyche, the emotions – the unconscious at times – and of course the aesthetic. Science tends to look at the world through the rational, the quantitative – things that can be measured and described – but it gives art a terrific context of understanding.

In the Extreme Ice Survey, we're dedicated to bringing those two parts of human understanding together, to merging the art and science to the end of helping us understand nature and humanity's relationship with nature better. Specifically, I am firmly of the belief that photography, video, film have tremendous powers for helping us understand and shape the way we think about nature and about ourselves in relationship to nature."

I believe Balog has succeeded in this - CHASING ICE shows more effectively than any number of charts, tables of figures, or a wordy briefing that what we assumed was permanent ice is disappearing, almost literally in front of our eyes.

As he said, "Ninety-five percent of the glaciers in the world outside Antarctica are retreating or shrinking, because precipitation patterns and temperature patterns are changing. There is no significant scientific dispute about that. It's been observed, it's measurable... the great irony and tragedy of our time is that a lot of the general public thinks that science is still arguing about that. Science is not arguing about that. In these images we see ice from enormous glaciers, ice sheets that are hundreds of thousands of years old breaking up into chunks, and chunk by chunk by chunk, iceberg by iceberg, turning into global sea level rise."

Conversion of a sceptic

Balog admits to once being a climate-change sceptic, and his film shows what led to his 'conversion'. He presents the classic chart of CO₂ levels and global temperatures over the past few hundred thousand years that has appeared in many other places but always shocks and is worth repeating. In his TED presentation he called this "Earth Fever" - a reference to the very sudden heating that has occurred since the industrial revolution.

In the space available here, I cannot cover more than the bare bones of his work. I encourage you to get the DVD when it comes out later in 2013, and view his 20-minute presentation on TED.

World Glacier **Monitoring Service**

But of course, others have been studying the changes to glaciers for many years and raising concerns within scientific circles. The authority is the World Glacier Monitoring Service (WGMS). Their website has a mass of data recording the ebb and flow of glaciers, in some cases for over a century. They highlight another problem with glacier retreat not touched on by Balog – the consequence for communities and eco-systems away from the frozen

north, for example in the Himalayas and the Andes, which depend on reliable supplies of glacier melt water. Balog focuses on the impacts on coastal communities through sea level rise.

WGMS' preliminary findings are that for the 33 glaciers they observe in detail, approximately one metre water equivalent (mwe) in thickness was lost overall in the year 2010/11. Those glaciers overall have lost 15 mwe in total since 1980, and one of these reduced in thickness by over 4 mwe in 2010-11. Only three grew in thickness.

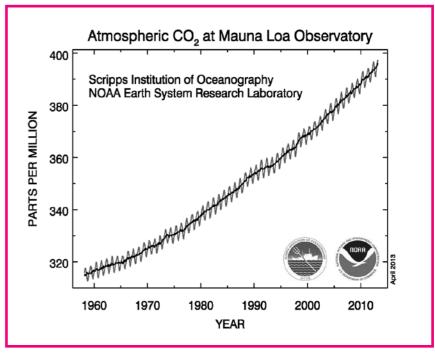
Expansion of a few glaciers is frequently cited by climate change sceptics as evidence that global warming is not happening, but scientists explain this through increased precipitation in very specific regions, e.g. the interior of East Antarctica.

In contrast, it was reported last December that the temperature record from Byrd Station, in the centre of the West Antarctic Ice Sheet, shows an increase of 2.4 degrees Celsius in average annual temperature since 1958. The rate of increase is three times faster than the average

temperature rise around the globe for the same period.

Melting ice caps and glaciers and rising water temperatures are both causes of sea level rise. National Geographic has reported that the Global Mean Sea Level has risen by 10 to 20 centimetres over the past century. However, the annual rate of rise over the past 20 years has been 3.2 millimetres a year, roughly twice the average speed of the preceding 80 years.

And what is driving this is



Graph illustrating the rise in atmospheric carbon dioxide over the last 50 years. The pre-industrial level was 280 parts per million.

almost universally accepted to be the increase in atmospheric greenhouse gas levels. At the Mauna Loa observatory in Hawaii, scientists maintain a continuous record of atmospheric carbon dioxide concentrations. At the time of writing, the weekly average stands at 399.59 parts per million (ppm). By the time you read this it may well have topped 400 ppm, which is 120 ppm higher than the level of 280 ppm prior to the industrial revolution.

The challenge

Given all these indicators showing that climate change is proceeding at pace, how concerned are Britons? A recent attitude survey by DECC of more than 2,000 people found that only 5% saw climate change as the top challenge, while 6% cited security of energy supply as Britain's main challenge today. We can only hope that valiant and creative attempts like CHASING ICE to get the message across start to make headway. And soon.

See http://extremeicesurvey.org/about-eis/



The Solheim glacier in Iceland. Above: in 2006. Below: in 2009 - the sketched line shows its previous height.



Butser Ancient Farm, near Chalton, in Hampshire, is an internationally recognised experimental archaeology site. It has a number of replica Iron Age roundhouses and a simple Roman villa, period animal breeds and crop versions. Although the site has attracted large numbers of visitors including schools, lack of money and good facilities, especially modern toilet accommodation, have always been a problem. This, coupled with an extremely cold and cramped office hut, convinced Butser Ancient Farm of the need to raise grant funding for a Visitor Centre, with adequate facilities for staff and visitors.



NEW VISITOR CENTRE



The nature of the site and the idyllic rural setting, made the right choice of design and construction materials essential. So, taking the brief that the building should be constructed as sustainably as possible, and with low running costs, design work began in 2009.

High quality sustainable building

To reduce capital cost the 2-storey building is of simple rectangular shape, but this saving allowed for better quality materials, a number of small scale renewables, and energy saving products. Site-fabricated timber frame construction was chosen, with prefabricated attic truss rafters. The walls, raised ground floor, and roof were all packed with sheep's wool, and all lined internally with an airtight barrier and with a wood fibre board. The external walls had a further layer of moisture-resistant wood fibre board and were clad in open joint cedar boarding, and the roof in cedar shingles. High quality wood windows and doors were used, apart from the two main doors to the entrance area which were aluminium.

To help reduce operational costs, and the need for mains supplies, a biomass boiler was installed fired by locally sourced logs, an east/west solar thermal system, a 2kWp solar pv array, and natural daylight and ventilation tubes. Also installed were a rainwater harvesting system, and a small foul sewage package treatment plant connected to a reed bed, with polished water going to a balancing pond that has created a wildlife habitat.

The thought however of having such a building erected on traditional concrete and brick foundations did not sit well. So an idea was hatched to use timber piles. Fortunately the site is good load-bearing chalk with a low winter water table level. Research was undertaken but very little information could be gained about timber piling in the UK, although this does appear more common in the US. Numerous meetings were held with the structural engineer, specialist groundworker, and lead site carpenter to come up with a practical method statement and risk assessment.

Wood foundations

The final specification called for a number of 175mm square by 2.7m long oak piles, generally located at around 2.4m centres, and set in a lime and small (non-marine) stone mix. The pile holes were augured at a diameter of 300mm and to a depth of 2.4m by a small digger. Occasionally, and just to make life interesting, a small clump of flint was hit which ended up making the holes slightly larger.

The oak piles had the long edges well chamfered for easier and safer lifting, and a 20mm diameter hole was drilled through within 50mm of the top of the pile. Each pile was then lowered in to the augered hole and manually positioned using a steel bar placed through the 20mm hole that had been used to support webbing straps for lifting and placing the pile. The pile was then backfilled in tamped layers using the lime stone mix. The lime stone mix not only helped to hold the position of

the pile but acts as a steriliser against insect attack.

Once the piles were in and the lime allowed to set for two weeks, the heads of the piles were levelled and cut so the least height was 150mm above ground level. The cut heads were liberally coated with a preservative. A final check was made for accuracy at this point and to the great relief of the groundworker and to the amazement of the rest of the team the 18m by 8m building was found to be no more than 3mm out of square.

A slip tenon was then cut in to the head of each pile and a ring beam and internal beams bolted to the heads of the piles. A further measurement check was made at this point and no discernible difference in diagonals could be measured. Because the base of the ground floor was raised 150mm above ground level it was necessary to design floor cassettes to drop in between the ring and internal beams to allow the base to be pre-fixed.

The final stages

Work progressed despite the appalling wet weather during the initial superstructure stage and the

building quickly dried out with the beneficial effects of sun and wind.

The specialist groundworker has said that even though this was the first time he had installed timber piles, he still thought the foundation cost was equal to, or less than, the cost of concrete and brick footings. The moisture content of the oak piles is being monitored and is currently heading in the right direction.

This was certainly an interesting build, not least because of the timber piles, and hopefully shows that a reasonable level of 'sustainable' (perhaps better to say less damaging) construction is possible without being too costly or overly complicated.

The opening

The building was officially opened by Phil Harding of *Time Team* fame in March 2013. It is named the Janus Visitor Centre after the Roman god of gateways, who is depicted with two faces – one facing the future, the other the past. It's the building through which visitors are transported from the 21st century into Iron Age Britain.



Above: Augering the post holes used to support the structure. Previously-cut holes are temporarily protected by cover plates.

Left: The top of one of the support posts, secured with lime and stone mix. The slip tenon is fitted to secure the long beam in position.

DOGS, CATS

and the Surrey habitat

by Forum member Michael Tanner

AS I WRITE THIS, the sky is blue, the sun bright, blackbirds are fluting for the sheer joy of it; apple blossom, tulips, daffodils grace the back gardens – a quintessentially English scene in the month of May and, of course, part of the Surrey lived in by fortunate humans, by their cats and dogs and by quite a few of the smaller creatures whose more natural habitat has been usurped.

Yesterday, a Bank Holiday, I walked through a more rural part of this county's habitats, Frensham Little Pond area, where the National Trust oversees an Area of Outstanding Natural Beauty (AONB) and a Site of Special Scientific Interest (SSSI). I was not alone: the car parks and the road sides were crammed with cars and about a thousand people shared the beautiful site with me. I gave up counting the dogs but my conservative estimate in the space of an hour would be over 200, comprising at least 20 breeds, from sleek mid-European hounds, huskies and German Shepherds, through Labradors, Springer Spaniels to a variety of small terriers. As you might expect, I did not see a single cat.

Within 15 miles or so of Guildford there are a dozen or so similar areas, some very extensive (vide Chobham Common), most open to the public, which are dedicated to the encouragement and protection of wildlife for its own sake and for the enjoyment of the visiting public – not always compatible aims. There are about as many official bodies such as the National Trust, Surrey Wildlife Trust, English Nature, The Forestry Commission, the RSPB, local Borough Councils, etc., who employ devoted, knowledgeable but quite small teams of specialists to sustain and monitor these areas on overstretched budgets. Volunteer assistance is invaluable. As the whole of the UK becomes increasingly and alarmingly urbanised, more and more of the visitors tend to know less and less about the countryside they are so happy to visit. Not surprisingly, many tend to take it for granted that the habitats they like to visit, often with their dogs, will survive willy-nilly.

The ancient heathland areas (though partly created by men) are ecologically precious. Supporting some mixed or coniferous woodland, their soil is often a mixture of sand, some peaty loam and pebbles, with the more open spaces being clothed with heather. This has to compete with gorse, dwarf birch and pine which require

controlling. Such spaces, as on Blackheath,
Crooksbury Common and Hindhead Commons
offer the illusion of going on forever – an illusion
sustained with considerable effort by staff and
volunteers who discreetly reduce the ubiquitous
birch and gorse and enable a diversity of plants,
invertebrates, amphibians, reptiles, small mammals
and birds to continue to use their age-old habitat.
A similar effort is made closer to home by the small
band who sustain the richly various woodland of the
Chantries.

Year by year, as the city and adjacent small towns and villages have expanded, so has the pressure on the heaths, commons, woodlands and the interconnecting footpaths and bridleways. Many of the footpaths are narrow and may skirt golf courses or run along river banks. Visitors, who usually arrive in the vicinity by car, need always to be aware that they are sharing these places with others: what to some may well seem a kind of playground (rather



Sightings in Frensham Small Pond. There were about a dozen large dogs in the same stretch of water at the dam end of the Pond.

like the seaside) is home to a diminishing number of animals and plants which were there long before the advent of the motorcar and the walker, often with his/her dog, not infrequently several dogs, or a horse, or bike rider. As often as not the dog is not under the close control of the owner. It is not unusual to see a dog long before its owner appears, almost as startling to the solitary walker as it is to a deer or pheasant, when it bounds into view, eagerly pursuing an irresistible scent.

Sometimes one sees notices, such as on Thursley Common, reminding dog owners to keep their charges under close control. In other places there are no specific notices to this effect, merely polite reminders to visitors of a duty to look after the environment and pay due regard to the presence of other visitors. It is probably a compliment to the indigenous visitor that there are relatively few incidents involving a conflict of interests, as for example between owners of dogs who are interfering with other dogs. Those who have no dog(s) with them frequently stand aside to allow dogs to pass and receive assurances that "He",

"She", "They" are "really very friendly", something clearly illustrated at times by the placing of muddy paws on dresses or coats, soliciting anticipated submission to the canine tongue.

Indeed, most of the visitors, with or without dogs, are courteous towards other human visitors, but how many are sufficiently aware of the likely effect of their dog(s) on ground-nesting species such as nightjar, woodlark, woodcock, skylark, either through the dog's/dogs' uncontrolled rampaging or the ubiquitous depositing of its/their faeces which is deleterious to a number of wild species and, on footpaths, a disgusting nuisance to pedestrians.

I have left the one 'who walks alone' to the end of this article but not because it is less of a danger to the wildlife of our unique heathland/common areas; it is of course, as an efficient hunter, simply less visible as well as more nocturnal. I have no wish to see cats on leads in country areas, but as virtually all the wildlife reserves of the kind I am writing of are surrounded by houses and gardens and a cat is no respecter of boundaries – well you take my point. Cats by nature and by their sheer number alone are as great a threat to a range of bird species (which includes the ground nesters as well as stonechats, Dartford warblers, blackbirds and song thrushes) as that other alien introduction, the grey squirrel. This is one reason why I included town gardens in the Surrey habitat I am writing of.

I do not have figures handy but, if you make a simple calculation based on Guildford's population (over 65.000) and the number of likely cat owners, you arrive at an alarming figure. Even a brief considering of the effects of the peripheral pet cat on the vole and shrew population of local heaths and commons will make it evident that the normal food supply of quite a few species, including kestrels, barn and other owls is constantly depleted by cats.

By inference it is clear that the owners of gardens in town and suburb can have considerable influence one way or another regarding threatened wildlife. In particular they can have a benign influence by providing pond habitats for our seven surviving amphibian species, or small areas which encourage insects, bats, and a whole range of birds which seem to put up with humans more and more successfully. Let us hope that at least we won't be using neonicotinoids in our gardens or indeed any 'cide which can possibly be avoided. If bees are indeed disappearing, we need to look after other pollinators and their nectar/pollen sources.

Ultimately, the solutions to the problems I have outlined must start with a heightened awareness of the urban strangulation which is happening all around us, and a resolve to shoulder our own bit of responsibility, however trivial and hopeless that might seem in the face of the entire picture. We are, despite our apparently unique abilities, just one of countless organisms in a world where biodiversity is under huge threat. One cannot point the finger at any dog or cat: all dogs from Chihuahuas to huskies equally share the genes of their ancestor, the grey wolf – something to remember, if your dog was bred specifically as a hound or a retriever and is allowed to prowl and bound about a conservation area, even chase after sticks into waters which are properly the preserve of water fowl. It is less easy to pinpoint the ancestor of the domestic cat or of Homo Sapiens (all too often not so Sapiens).

The staff who bravely sustain these marvellous vestigial habitats do not wish to impose notices and fences everywhere, or exercise a restrictive presence, but they know that without a growing active awareness on the part of the public, their work will ultimately be in vain. One cannot wait until government does something effective, as politicians have no wish to precipitate lobbies which might withdraw their vote. It remains up to us, the ordinary man or ordinary woman lucky enough to possess a dog or cat and realistic enough to know he or she, the owner, is the leader of the Pack, or might it be the Pride? One sometimes wonders who really is in charge.

SARG gets a mention in the Wall Street Journal!

The April 13th edition of the Wall Street Journal carried a feature about a contentious toad crossing in Philadelphia. It describes the efforts of hundreds of volunteers using buckets to transport amorous toads across a normally very busy street. The toads annually migrate from the woods on one side of the street to their mating area, an abandoned reservoir, on the other side.

The venture, involving the closure of some roads and providing a detour, isn't popular with all motorists.

The article cites as a comparison the activities of SARG (Surrey Amphibian and Reptile Group) in Surrey, where volunteers man around 35 different sites each spring. However, SARG closes no roads.



Guildford Environmental Forum aims to improve the environment in and around Guildford for wildlife and for people and to build a sustainable future.

Join us in our work for the town and have this newsletter posted to your door four times a year. Forum membership costs only £10 per year or £15 for a couple, and new members are warmly welcomed.

Please contact Adrian Thompson on 01483 222687 or e-mail adrianthompson46@talktalk.net



CALENDAR

All the Forum's Group meetings are open to the public



Saturday 22 June

Transition Guildford in association with Surrey Wildlife Trust.

The First of Transition Guildford's 2013 Scything Courses.

Our trainer Mark Allery will follow his very popular 2011 and 2012 courses with another course for beginners and improvers. The location is up on the Downs near Longdown Road at our community begetable growing site. The cost is £10 for the day's course. Contact John Bannister, 01483 570468, for more information and to register.

Wednesday 3 July

GEF Sustainable Energy Group, Alastair Atkinson, Technical Director, WSP UK, and GEF's Chair of Transport: "Modern Water Treatment - the Process and the Issues". 1900. Committee Room 1, GBC Millmead Offices.

Sunday 14 July

Guildford Walkfest - GEF 'Green Gems' Walk. A 5-6 mile walk to take in some projects we're associated with: the Town Mill hydro project, Racks Close Community Orchard, our community vegetable growing site, and more. Not suitable for wheelchairs or pushchairs, but dogs are OK. Meet at the Town Bridge by the GEF sign at 1400. Contact John Bannister, 01483 570468.

Sunday 21 July

Guildford Walkfest - Guildford, Waverley and Woking FOE and GEF 'Bee Walk'.

A walk of about 4 miles designed to look at flowers and insects. We will explore a section of the river Wey, the sandy valley near Littleton and the chalk of the Hog's Back. Contact Hilary Griffiths, 01483 831179.

Wednesday 31 July
GEF Biodiversity Group. Raymond Smith, Group Chair: "What on Earth is Environmental History?". 1900. Committee Room 1, GBC Millmead Offices.

Thursday 5 September

The Second of Transition Guildford's Scything Courses. Details as Saturday 22 June above.

Sunday 8 September

Transition Guildford/GEF Food Group. We will be **Apple Pressing** at National Trust Winkworth Arboretum's event "Live Local Love Winkworth". We need volunteers to staff our stall, or just bring your apples and plastic bottles to take away juice. 1000 to 1600. Contact John Bannister, 01483 570468.

Pewley Down Volunteers' Annual Survey Days are as follows:

Saturday 6 July Pyramidal Orchids, Saturday 3 August Chalkhill Blues, Saturday 7 September Grasshoppers. Meet at top of Pewley Hill at 1000.

Guildford Environmental Forum

Chair / Biodiversity - Raymond Smith

7 Felday, Holmbury St Mary, Dorking, RH5 6NJ

E-mail: raysmith.biodiversity@envirohistory.waitrose.com

Vice Chair - Damien Short

Institute of Commonwealth Studies, School of Advanced Study, University of London, 2nd Floor, South Block, Senate House, Malet Street, London WC1E 7HU

Tel: 020 7862 8836 E-mail: damien.short@sas.ac.uk

Transport - Alastair Atkinson

7 Elles Avenue, Guildford, GU1 2QH

Tel: 07929 138650 E-mail: bags@btinternet.com

Waste and Recycling - Lucy McSherry

E-mail: lucy.mcsherry@hotmail.com

Renewable Energy – John Bannister 2 Littleholme, Upper Guildown Road, Guildford, GU2 4EZ

Tel: 01483 570468 E-mail: johnw.bannister@virgin.net

Schools - John Bannister

2 Littleholme, Upper Guildown Road, Guildford, GU2 4EZ Tel: 01483 570468 E-mail: johnw.bannister@virgin.net

Community Projects – John Bannister

2 Littleholme, Upper Guildown Road, Guildford, GU2 4EZ Tel: 01483 570468 E-mail: johnw.bannister@virgin.net

Sustainable Construction – Position vacant

(John Bannister pro tem)

Food Group for Transition Guildford and GEF -

Position vacant

(Raymond Smith pro tem)

Treasurer - Adrian Thompson

Lamp Cottage, The Street, East Clandon, Nr Guildford, GU4 7RY Tel: 01483 222687 E-mail: adrianthompson46@talktalk.net

Membership - Position vacant

(Adrian Thompson pro tem)

Newsletter – Clare Windsor

15 Tuesley Corner, Godalming, GU7 1TB

Tel: 01483 418048 E-mail: clare.windsor@waitrose.com

Guildford Environmental Forum's newsletter is published in March, June, September and December. Please send contributions for the next issue to Clare Windsor by Monday 12 August.

The views expressed in this newsletter are strictly those of its contributors and Guildford Environmental Forum.