



DECEMBER 2005

Here in the south-east we need 3½ Earths to support our lifestyle. How can we achieve living on the resources of

JUST ONE PLANET?

by John Bannister

TWO PIONEERS in the BedZED project, Bioregional and WWF, have jointly launched an initiative called One Planet Living (OPL). This aims to use the experience gained from BedZED in new projects around the world.

The principle objective is to create holistic communities with an ecological footprint that our planet is able to support, while keeping their quality of life and their way of life. The UK lifestyle in the south-east, for example, cannot be replicated because it requires the resources of three and a half planet Earths. The idea is to consider all the impacts that a community makes and design transport needs, food supply, resource and energy requirements such that overall demands equate to 'one planet living'.

OPL has linked up with partners in the UK, South Africa, Australia, China, Portugal and the USA to carry this idea forward. The project in Portugal is a 6,000 home community and is the furthest advanced, although it still has to get planning permission. In order to bring about the lifestyle changes necessary to achieve One Planet Living, the developer has bought two farms nearby which are being converted to organic – these will supply the community with local, organic food. Car clubs and other sustainable transport systems are also planned.

China of course is the key to all our futures. It is predicted that half the world's construction between now and 2015 will be in China. China's Minister of Construction,

Wang Guangto, visited BedZED in September.

WWF is also working with business 'conservation partners' such as Nokia, Lafarge (the world's largest cement manufacturer!), and Canon, who are apparently very proactive in reducing their eco-footprint.

As a director of OPL says, we have to stop thinking that humanity and environment are two different things. We as human beings are part of nature. A native American said recently that what Westerners call "natural resources" they call "relatives".

Our carbon footprint

Since BedZED was completed in 2002, Bioregional has been monitoring and analysing the average UK per capita carbon footprint. It seems that each one of us on average is responsible for creating about 12 tonnes per year of CO₂. This is made up of a combination of fossil fuels burned in the UK (8t/a) and, because we are a net importer of food and manufactured goods, from CO₂ released in other countries (4t/a). While Defra states we are on course to meet our Kyoto targets, in reality our carbon impact has been increasing as we have been exporting both our food production and manufacturing: this part of our CO₂ appears in other countries' direct emission figures.

The lessons drawn from BedZED by Bioregional suggest that to create low carbon communities there has to be a 'lifestyles and infrastructure' approach,

where food and waste are as important as energy-efficient buildings and transport in reducing our carbon impact.

Ecological footprinting allows us to relate our consumption of natural resources to the Earth's biological capacity, i.e. its ability to replenish resources and to absorb greenhouse gases such as carbon dioxide. Calculations of the Earth's biological capacity and the World Ecological Footprint suggests that, globally, we are currently consuming 20% more per annum than the planet can sustain in the long term. We are meeting this excess consumption by eating into the planet's natural capital, resulting in forest loss, soil degradation, depletion of fishing grounds and global warming. Analysis shows the world exceeded the planet's biological capacity in the 1970s, and things have got steadily worse since then.

We know that different countries consume at different rates. If all 6 billion of us consumed as much as the average American we would need six planets; if that of the average European then three planets. Such a division of a few rich and a vast number of poor is totally unjust and wholly unsustainable.

The breakdown of carbon impacts (below) indicates clearly where we have to focus our attention.

Bioregional's analysis of the carbon impacts arising from the average UK lifestyle, for a person living in a home built to 2002 Building Regulations

	% of total CO₂ impact
Domestic heating	4
Domestic hot water	4
Domestic appliances	3
Personal transport	18
Waste and consumer items	13
Food	23
Embodied energy in home infrastructure	3
Shared services (total energy to run schools, hospitals, financial services, etc)	12
Shared infrastructure (embodied energy in constructing schools, hospitals, roads, airports, etc, and making goods)	20
	100

The Forum is right to give a high priority to the energy used to construct and run our buildings. But we need to start highlighting much more the energy we use to grow and source our food.

Our personal transport is a big part of our footprint, so walking, cycling and the type of car we buy and its fuel system are all issues we have to keep pursuing (see *facing page*). Perhaps surprisingly, space heating and cooking in the home make up 7% of our CO₂ emissions. Living in a poorly insulated Victorian home, however, will change the profile considerably and space heating will become a bigger share (see *article on page 6*).

Guildford Environmental Forum is very grateful to Pooran Desai, Director of Bioregional, for permission to publish this information. Pooran has agreed to come to Guildford to give us a talk in February 2006, entitled "A Vision for One Planet Living in Surrey".

Aircraft and climate change

THE GREENHOUSE GASES belched out by aircraft are ignored in the Government's Climate Change Strategy. Just how glaring an omission this is has been graphically demonstrated by a recent report from the Tyndall Centre for Climate Change Research.

Their research shows that all householders, motorists and businesses will have to reduce their carbon dioxide pollution to zero if the growing aviation industry is to be incorporated into Government climate change targets for 2050. The report also concludes that even if aviation's current growth is halved from today's level, the rest of the economy will require carbon dioxide cuts far beyond the Government target of a 60% cut in carbon dioxide by 2050.

The Government's Aviation White Paper predicts that UK passenger numbers will more than double from 180 million to 475 million over the next 25 years. This rapid growth they see as stemming from falling ticket prices and increasing passenger demand.

The Tyndall Centre does however, raise a more worrying spectre. They note that the Government's target of a 60% cut in carbon dioxide by 2050 is based upon the amount of carbon dioxide in the atmosphere that scientists say is safe to avoid dangerous climate change. More recent research suggests that the global 60% target may have to be increased to 90%.

Before we all give up in despair, though, it is worth taking a whistle-stop tour of some of their other main conclusions. These include:

- Improvements in energy efficiency can dramatically decarbonise many sectors
- Policies for reducing energy demand are a more flexible tool than implementing low-carbon supplies
- Supplying low-carbon energy is both technically and economically viable
- A society with high energy demand will face future infrastructural challenges in providing secure energy
- A low-carbon society does not necessarily preclude increases in personal travel
- Government must implement and enforce minimum energy standards
- Allocating carbon fairly between the rich and poor needs innovative policies and mechanisms
- All sectors must be included in any carbon-reduction strategy
- International aviation and marine emissions must be included in carbon reduction targets, now!

The Tyndall Centre's report *Decarbonising the UK* can be found at: http://www.tyndall.ac.uk/media/news/tyndall_decarbonising_the_uk.pdf

Car emissions label

Royal power

The Queen has approved a hydroelectric power station at Windsor Castle. Four turbines will be built on the River Thames to generate 200kW of power, about a third of the castle's electricity requirements. Construction of the £1m plant will begin next year.

(Source: BBC Wildlife, Nov 05)

GM soya

Well over a million tonnes of GM soya for animal feed is entering the UK annually.

(Source: Living Earth, Winter 04)

FACTS & FIGURES

On the brink

The Iberian lynx is down to a population of just 135 wild animals, including only 28 breeding females. Despite an ongoing breeding programme at Jerez Zoo in Spain, conservationists fear that the species could be extinct within three years – the first feline to be lost since the demise of the sabre-toothed tiger.

(Source: BBC Wildlife, June 04)

Going for Green

Thanks to an initiative called "One Planet Olympics" all the new infrastructure for the Games in 2012, such as the Olympic village, stadium and transport, will be designed to ensure a low-carbon, zero-waste event.

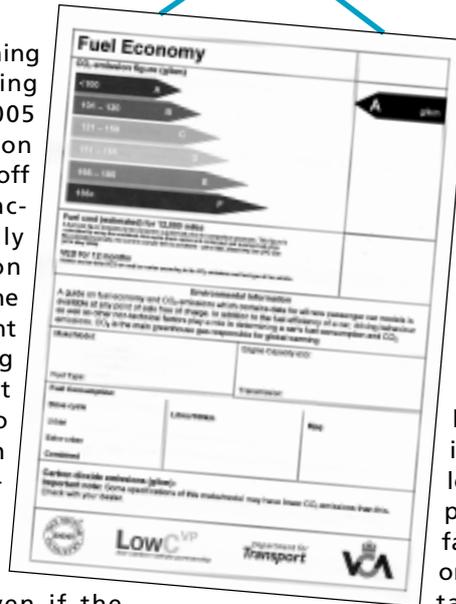
(Source: WWF Action, Oct 05)

READERS WILL recall learning about the new car labelling scheme in our June 2005 newsletter. The impression given was of a slackening off in progress, but manufacturers have been steadily reducing average carbon emissions from new cars. The problem is that more affluent customers are still choosing to buy bigger, faster cars. It is therefore necessary to encourage them to switch towards smaller, fuel-efficient vehicles.

The new label should over time lead to more informed purchasers. Even if the environmental aspects do not concern them, they can compare running costs, and this may be more effective. While low-carbon cars can be produced and placed in showrooms, there is no certainty the public will buy them. The lowest carbon car in the UK, the Honda Insight, officially sold one car last year!

The Borough recognised this, and having no powers to influence consumer spending patterns in other ways, it chose to launch the label early. The official UK launch was 1st September, whereas in Guildford the label was in showrooms from 1st July. This was carried out in partnership with the Society of Motor Manufacturers and Traders (SMMT) and the Low Carbon Vehicle Partnership. While the announcement of the label was at an event in February, the launch, along with examples of cars and the actual label, was in Guildford on 1st July at the Spectrum. Some manufacturers took the trouble to launch nationally from this date, predictably Toyota, Honda and Peugeot.

All car manufacturers were represented at the launch and a training day had previously



been held at the Council offices in May aimed at the dealers, to explain the system and to ask for their support. Representatives of 12 car brands attended the training event, and they are now talking to customers in their showrooms and displaying the labels at point of sale.

Alongside publicity for the launch, the Borough organised a survey (with prizes) looking at attitudes towards purchasing cars and the factors involved in deciding on the purchase. The results tallied with an earlier

national poll by MORI, showing that 87% of consumers were concerned about pollution at the local or global level. Of these, 12% said they already took into account emissions when choosing a car. Following knowledge of the label, 81% said they would now take account of it.

There is strong evidence that safety is a real issue, and the introduction of the NCAP testing regime has helped to provide information and a standard in this area. The emissions label may well have a similar effect on purchasing decisions, although only time will tell.

The Borough is meeting with the SMMT in early November to discuss the findings and to consider possible follow ups. One possibility is for secondhand cars to have labels on them, although there are no plans for this nationally.

Any suggestions for ways of raising awareness here are welcomed. Marketing is the key, and we can always find new ways of delivering the message.

David Harnett, Environmental Co-ordinator, Guildford Borough Council

THIS YEAR, Guildford in Bloom's 'Best Wildlife Garden' category, sponsored by Guildford Environmental Forum, attracted the usual high standard of entries. We regret no photographs are available, but congratulate the winners who were:

- | | |
|--------------------|--|
| Gold | David and Pat Smith
Rosamund Raymond
Roberta Winfrow |
| Silver Gilt | Heather Bromham
Linda Mendes |
| Silver | Lynda Herrington
Adam and Jackie Johnson |

Guildford
IN
BLOOM
Greening the Borough



FELICITY INGRAM, who has kindly given up her time to judge the Wildlife Garden Class in Guildford in Bloom's competition over the

last four years, has said that she is unable to continue. Throughout that time the Forum has sponsored this Class and at their July meeting the Biodiversity Group formally expressed their thanks to Felicity for all the effort she has put in, and subsequently agreed to donate £100 to Surrey Wildlife Trust as an appreciation of her work on the Group's behalf. Her very capable and helpful approach to this task will be much missed.

Raymond Smith

SURREY OVERALL WASTE FIGURES

How much is there?

Household waste 2003/04 – 587,147 tonnes

What amount is recycled?

Recycled 2003/04 – 121,438 tonnes

What is the rate of growth?

2003/4 over 2002/3 1.5% increase in household waste. Although, because this rate of increase has been observed for one year only it should not be taken as the true trend for the years to come.

What does this mean for landfill space?

Given all the factors that influence the amount of household waste produced it is likely that there is only 2 to 5 years of landfill space left in Surrey.

Surrey recycling rates

Local Authority	Recycling rate 2003/04	Target for 2005/06
Elmbridge	15.1	24
Epsom & Ewell	12.1	18
Guildford	19.1	21
Mole Valley	16.4	36
Reigate & Banstead	23.0	40
Runnymede	14.3	18
Spelthorne	13.4	33
Surrey Heath	23.6	40
Tandridge	20.8	40
Waverley	16.5	36
Woking	19.5	36
Average	17.6	31
Surrey CC Community Recycling Centres	27.7	52

How much do the councils recycle?

WCA	Tonnes recycled in 2003/04
Elmbridge	7994
Epsom	3422
Guildford	8692
Mole Valley	5483
Reigate	10743
Runnymede	4568
Spelthorne	4978
Surrey Heath	6872
Tandridge	6345
Waverley	8056
Woking	6446
Total WCAs	73599

Source: <http://www.surreywaste.info>

BATTERY RECYCLING

BATTERY RECYCLING is a relatively new field for the UK. While we recycle more than 90% of our lead acid batteries – those used in vehicles – only 4% of the waste non-lead acid batteries produced each year in the UK are recycled.

This means that of about 25,000 tonnes of waste household and industrial batteries generated in the UK each year, just 1,000 tonnes is recycled. Other European countries have more impressive recycling rates and their own battery re-processing facilities (which do not exist here), but these are often subsidised by the state.

In the UK, some councils are beginning to offer battery recycling services, mostly at the request of residents. There are no obligations on local authorities to do so, although recycling batteries does count towards councils' recycling targets. But obligations on councils and on industry to recycle batteries could be brought in eventually.

December 2004 saw a new **Battery Directive** agreed by European environment ministers. This includes the setting of binding collection and recycling targets, and a partial ban on using cadmium in portable (consumer) batteries. All industrial

and automotive batteries are to be collected for recycling under the Directive. It sets collection targets for portable batteries of 25% and 45% of the average annual sales over the past three years. These targets are to be achieved respectively four and eight years after the transposition of the Directive.

The Directive now requires a further reading by the European Parliament and is expected to be formally adopted by mid-2006. The UK government will then have about two years to transpose the Directive into domestic law.

Source: www.letsrecycle.com

In-store battery collections at Dixons, Curry's and PC World

Battery recycler G&P Batteries has been awarded a contract to collect batteries from the Dixons Group.



www.letsrecycle.com

Waste battery collection banks are being installed in 750 Dixons, Curry's and PC World outlets across the UK. The battery banks will only be used for batteries generated in store. Vivien Williams, Environmental Manager for the Dixons Group, said: "This is an initial step by the company in recognising the need for environmental responsibility concerning the safe disposal of its own batteries. Many of the products sold in our stores contain batteries and we are pleased that there is a

route for recycling within the UK."

Dixons Group is the first major retail company to sign up to G&P collections. It is not yet known what level of waste batteries may be generated by the Dixons Group. The majority of batteries collected will be alkaline and zinc carbon waste batteries, the most common type of household batteries, but G&P can also collect batteries of other chemistries including those used in laptops, mobile phones and television sets.

Bluebells

In Britain we have nearly half the world population of the bluebell *Hyacinthoides non-scripta*, and it is designated as of international importance. This plant is not to be confused with the Spanish bluebell, *Hyacinthoides hispanica*, an aggressive species which has escaped into the wild and is beginning to hybridise with our native bluebell.

(Source: *Surrey Nature, Spring 05*)

Getting nowhere

Greenhouse gas emissions in the EU went up by 1.5% in 2004.

(Source: *BBC Radio 4 News, 21 June 05*)

FACTS & FIGURES

Diminishing rainforest

In the 12 months prior to August 2004, 26,000 square km of Amazon rainforest were chopped down. Almost a fifth of the entire Amazon has now been felled.

(Source: *BBC Focus, Aug 05*)

Mighty wooden ships

At the time of Trafalgar it took 3,700 oak trees, each 100 years old, to build a single 72-gun warship. Nelson had 27 ships, and our oak woodlands all but disappeared. Now, 200 years after the battle, the Trafalgar Woods Project is creating 33 new woodlands and planting 250,000 trees.

(Source: *BBC Wildlife, Oct 05*)



Biodiversity Group presentation, July 2005

by Helen Stanley, Woodland Heritage Project Officer, Surrey Wildlife Trust

THE ANCIENT WOODLANDS OF SURREY: THEIR HISTORY, IMPORTANCE AND PROTECTION

HELEN EXPLAINED that the Woodland Heritage Project is still in the development phase, prior to a decision on funding for the main phase.

There are a variety of terms used when dealing with old trees and woodland. 'Ancient woodland', as distinct from secondary woodland, is a term defined by English Nature referring to land that has been continuously wooded for at least the last 400 years. It is nearest to the "wild wood" that once covered Britain and the rest of Europe. There is no "wild wood" left in Britain and very little in mainland Europe.

Veteran trees are biologically, aesthetically or culturally important due to, for example, their shape or their symbolism. They might be very old, or just old and either healthy or with some dead wood that supports fungi populations. They need not even be very old – being 'veteran' relates to what they have been through. **Heritage** trees are not necessarily old or beautiful but are significant to people, for example the "King Charles Oak", or recent memorial planting.

Why are trees important? Helen gave a variety of answers. People are attracted to Surrey because it is the most wooded county, although it is also the most urban. Ancient woodland is important for biodiversity as it supports various plants that are Biodiversity Action Plan species: significant among these are wood anemone, ramsons, and Herb Paris. It also supports rare invertebrates, including the Wood White butterfly and the Pearl-bordered Fritillary which now only survives at one location in the county. Certain mammals rely on ancient woodland, such as dormice (which have suffered from decline due to the cessation of coppicing) and 14 out of the 16 bat species that occur in this country including the rarest, the Bechsteins (most bats depend on old trees).

Birds supported by ancient woodland include the nightingale, the spotted flycatcher, hawfinches and redstarts. Owls of course

depend on holes in old trees. Dead wood, which many people are tempted to remove, is an important resource for other species – an essential part of the regeneration process.

Helen emphasised the length of time that people have been interacting with trees, at least since the Mesolithic era around 12,000 years ago, with woodland crafts such as coppicing and pollarding appearing about 4,000 years ago. The Romans, as an urbanised society, relied on timber for building and for fuel (charcoal and faggots) and developed orchards and ornamental gardens. These uses, of course, continued through the Middle Ages and early modern period.

Much woodland was felled during the First World War to provide timber, and the Forestry Commission was subsequently formed to provide timber resources. Now woodlands are seen as contributing hundreds of millions of pounds to the economy by providing health and well-being through recreational use.

Helen illustrated a variety of significant trees from around the county. These ranged from the long-famous Crowhurst Yew, to a generally ignored tree in Woking, between 300 and 350 years old, that had Oriental Road built around it in the mid 20th century!

The Woodland Heritage Project (if its bid is successful) has several aims. The first is to record fragments of ancient woodland that are smaller than the 2 hectare limit of previous mapping, and to record veteran trees.

Community involvement is central to this and other phases, and the intention is to work with Surrey Community Action and a range of other community projects to engage people who are socially excluded, particularly in poorer localities. Finally, a book is planned that will show Surrey's 50 favourite trees and woodlands.

Helen can be contacted at Surrey Wildlife Trust, e-mail helen.stanley@surreywt.org.uk

It was agreed that the Group would write in support of the Project's funding bid.

Raymond Smith

KEEPING THE HEAT IN

A challenge to architects and builders

by Alwyn Marriage

THE CONSTRUCTION INDUSTRY is a very major contributor to the UK's energy use, and therefore to the production of greenhouse gases. About half of all our energy is accounted for just by servicing buildings, and this is still rising. **The average UK home is responsible for more CO₂ emissions per year than an average car.** Taking a broader picture, buildings world-wide are probably responsible for around a third of total CO₂ emissions.

Over the last couple of decades many architects have risen to the challenge of designing more sustainable buildings, both in the form of homes and of commercial buildings. The advent of developments such as BedZed and the Hockerton Housing Project have already contributed significantly to our chances of lowering CO₂ emissions. It is now up to developers, planning departments, builders' merchants and the general public to start demanding these new, more stringent standards in all new buildings. With over a million new homes being built in the next few years, high standards of energy efficiency will make a significant impact.

We're falling behind

However, despite initial interest in sustainable housing, and a good deal of trumpeting about being world leaders on climate change, the UK is getting left behind in raising standards for new buildings. For example, while we are planning to bring in a rather weak and ill-defined 'Code of Sustainable Building', thorough-going zero energy developments are being planned in Portugal, Shanghai, Canberra and Johannesburg.

Even if we were to bring in a far-reaching scheme for raising sustainable building standards, however, our propensity for damaging the environment would be far from over; for however many new low energy

buildings are created in the next few years, we have a persistent and serious problem in heating our existing housing stock. In view of the fact that space heating accounts for 58% of our domestic energy use and 50% of carbon dioxide emissions, how can we prevent heat from seeping out into the atmosphere? Double glazing can be added to windows, ever thicker insulation piled into the roof space, and houses with cavity walls can pump insulation between the walls. But cavity walls have been in existence only since the early twentieth century, and by far the greater proportion of our domestic housing was built before their use became standard. Obviously, it is not possible to put cavity wall insulation into non-cavity walls.

This is disappointing for two reasons. First and foremost because huge amounts of energy are seeping out through the walls of our houses; and



ALWYN MARRIAGE

secondly because if it were possible to use older buildings rather than creating new ones we would make significant carbon savings through avoiding the embodied energy of new houses. Research into the efficiency of various walls has produced the surprising result that it would, in fact, be better for the

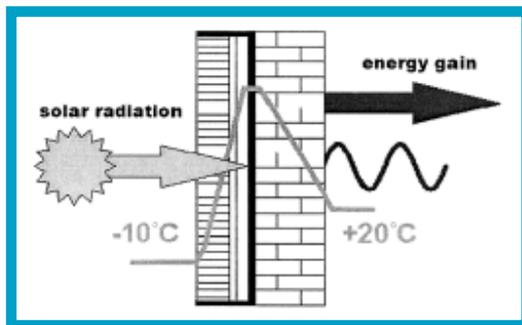
The BedZed development has set the standard for sustainable new-build housing.

environment if we were to pull down most of our old houses and build new, energy-efficient ones. No one is seriously considering implementing this policy, which would destroy many beautiful buildings, play havoc with planning and have an unacceptable financial cost; but it is necessary to face facts: our Victorian housing stock is at present damaging the planet.

Victorian walls

There are various ways in which this harm can be mitigated, at least to some degree. Internal insulating wall-coverings have been around for some time, and have improved in recent years.

The trombe wall concept – an additional glass wall just outside the bricks creates a warm air gap, like a mini-conservatory.



Taking this idea a little further, it is possible, as long as the room is not too small, to batten a false wall inside the existing walls and fill that with insulation, though obviously this leads to the loss of a few inches of space in the room. There are also some external renders that claim to add to the insulation of the walls. Compared to the huge thermal mass or fully insulated deep cavity in more modern buildings, however, these solutions are fairly inconsequential. How are we going to

retain our varied historical housing, but halt the squandering of energy for which they are responsible?

The trombe wall

One possibility is the development of the idea of the trombe wall, named after the French inventor, Felix Trombe, who developed the technology in the 1950s. This is, in effect, the creation of a warm air gap between the external wall and a further glass wall a few millimetres to the outside. In other words, it is an extension of the lean-to conservatory technology.

Direct sun can provide as much as one and a half kilowatts of power per square metre, though most of this is not harnessed. The glass increases the amount by which the sun's radiant heat warms the wall during the day, and this warmth is stored in the masonry wall to be released slowly into the house during the evening and night. In addition, cool air is vented out of the room and into the bottom of the glazed area and the warm air that rises is vented back into the room, at the top.

It is unlikely that trombe walls will be fitted to many buildings, and the technology is in any case not yet perfect. What other solutions can architects and builders come up with to tackle this problem? If a solution could be found, it would be worth the Government investing millions of pounds in grants to have the technology fitted to all old houses, as the saving, both in environmental and financial terms would be huge.

Strangers in Winter

Michael Tanner



Out of a sky framed by winter
with urgent calls
they drop to the frosted ground.

Redwings!

Moving, freezing,
moving
probing an alien land
at the edge
of an east wind
cruel as falcon's claw.

The wine-pale sun
catches their brief stillness
pencils their delicate beauty.



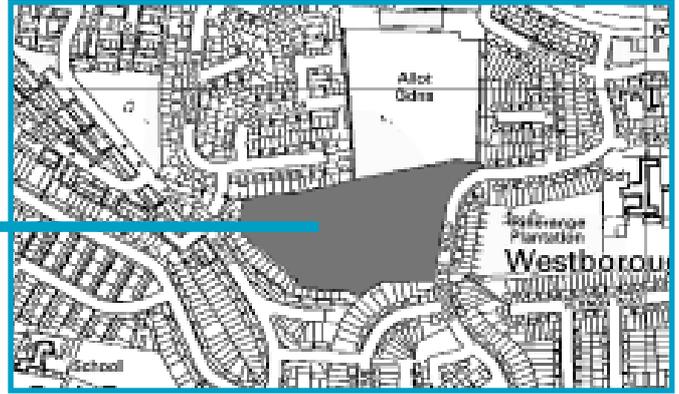
Bushism:

*“It's time for
the human
race to join
the solar
system.”*

Westborough Woods

Open Space Project

by Mark Havler, Countryside Ranger



THE PARK BARN and Westborough Open Space Project has been set up to manage a 4-acre site next to the allotments on Westborough Hill. The site had been sadly neglected since the 1960s, becoming a centre for fly-tipping, drug use and anti-social behaviour. But it is a potentially thriving oak woodland, an educational and recreational space, and a green lung in the centre of our two growing estates. It's also a beautiful viewpoint, from the Hogs Back over the Cathedral and up the Tillingbourne valley.

The project is run as a local community organisation, with more than 40 members having joined in the last six months. We also have agency partners who include Guildford Borough Council (GBC), Three Valleys Water PLC, Surrey Wildlife Trust, University of Surrey, RHS Wisley, local schools, allotments groups, churches, and Safer Guildford Partnership. Whilst we will soon have a co-management licence with GBC, the organisation aims to develop into a Trust which will take full responsibility for the site's management.

The housing estates of Park Barn and Westborough themselves are amongst the poorest in Surrey with large and complex social needs. We have no other good open spaces on the estates and the project is beginning to act as a catalyst for change within these communities. We are seeing a range of people working to better their own community as it serves to build social capital and raise expectations in a way that few other investments could.

The site is directly adjacent to a proposed housing development on part of the allotments, which will be slicing the overall open green area in two. There is a lot of scope for creativity, but any investment in this area would help offset the environmental, social and aesthetic cost and would be a great example of joined-up thinking from the council and its developers. The project is 'bottom up' and you can be sure it is what local people want. The woodland stretches from Park Barn through to Broadacres as well as

Westborough Woods, joining these communities and creating a link not just with nature but with people too.

The significance of the allotments should not be ignored: self-sufficiency is at the heart of the project, and coppice products from the woodland will in time be used at the allotments for holding beans up, protecting beds and providing mulching material.

We have four schools in close proximity, and our project is proving a valuable educational resource for them. Given more time, we could be even more productive in this area. The university has worked enthusiastically with the project, ensuring a steady supply of volunteers, and one of our big successes was when volunteers from Lloyds/TSB Bank came along for a day, under the 'Business in the Community' scheme – they created a path, removed rubbish and cut back vegetation.



Now we are making even greater progress with the help of Surrey Wildlife Trust, which achieved funding for a Community Reserves Assistant to work two days a week with us. This post is funded until next April, and the results are showing already, with well co-ordinated work parties, work plans and up-to-date databases.

All in all, with local people and other volunteers helping, the area is looking better and better.

Deep within the communities of Park Barn and Westborough, to the north-west of Guildford, there lies a green heart that has been receiving much-needed TLC over the past two years.

A Community Reserves Assistant ensures that volunteers on work parties such as this, clearing rubbish and unwanted vegetation, are well organised and have had thorough training.

'Byways' finally gets planning permission

GUILDFORD Environmental Forum has worked hard to support the application to build a Bill Dunster ZED (zero fossil fuels development) private house in the borough, which has finally succeeded at the fourth attempt. Council officers recommended approval at the third application, but the committee turned it down on the grounds of size because it was in the Green Belt. If a house in the Green Belt (in this case a rundown bungalow) is being replaced by another one, there are unwritten rules about how much bigger the new house can be – if you start with a small house you can end up with a smallish house.

In the end, Dunster's design was modified to reduce the increase in floor area from 53% to 44%. Even so, members of the committee prevaricated for some time before giving it the green light. It is extraordinary that sustainability is not a criterion that the committee takes into account. This house will help preserve the Green Belt by reducing carbon emissions over its lifetime, which in turn will reduce climate change – a bigger threat to our Green Belt than a small house with a slightly bigger footprint. Also, visually no-one will be able to detect the reduction in size, so it's not applicable as far as the appearance of the Green Belt is concerned.

Tackling climate change not a priority here

BRITAIN HAS failed to comply with three separate European laws on global warming, states a report compiled for Green MEPs by the Association for the Conservation of Energy. The Government has flouted an EC directive on cutting pollution from buildings, watered down another setting standards for energy use in electrical appliances, and failed to honour promises to promote clean technology.

Further award for Stoughton School

FOLLOWING ITS achievement in Guildford's 'Playground for Wildlife' Competition, Stoughton Infants School has now won the national teaching award for healthy schools. In just over two years, the school has been transformed from a building site to a haven for five-year-olds, with the emphasis on healthy learning, healthy eating and healthy attitudes. The children love it. Congratulations to joint head teacher Belinda William, to her staff and to the parents and volunteers who made it all happen.

UK rail passenger growth fastest in Europe

A REPORT published in September shows that the growth in passenger-kilometres on our trains grew 40% over the decade since 2004 considerably faster than the next best countries Belgium and France where the growth was just under 30%. There is a similar good story for freight tonne-kilometres in Britain with a growth over the same period of about 44%. This compares with 47 and 45% respectively for Austria and Netherlands. Interestingly Ireland, Poland and the Czech Republic contracted quite significantly over this period. Could this be Beeching short term economics?

GM maize approved

MINISTERS HAVE agreed to go ahead with the use of GM maize without waiting for Parliament to discuss it, despite assurances that MPs would debate the issue

first. Caroline Flint, the junior health minister, said it was authorised owing to a technicality in the EU and the summer recess of Parliament.

Meanwhile, new government research published by the Royal Society has shown that GM crops contaminate the countryside for up to 15 years after they have been harvested.

Examining fields where modified oilseed rape had been cultivated for just one season, researchers found that nine years later an average of two GM rape plants still grew in every square metre. After 15 years, this reduced to one plant per square metre – still enough to break the EC limits on permissible GM contamination.

Parliament fails green audit abysmally

THE INDEPENDENT reported in October on the results of a green audit of the Palace of Westminster. It found MPs' performance on recycling, waste disposal and cutting electricity use falls far short of their rhetoric on the environment. Lights are left blazing, computers and radiators remain on, and free underground parking and petrol subsidies encourage MPs to drive. Carbon dioxide emissions show no reduction, and 2,000 tons of waste are produced a year. Electricity use has risen by 50% since 1997, due to the proliferation of computers and photocopiers.

"The only green thing about Parliament is the mould growing on unfulfilled promises," said Alan Simpson, Labour MP for Nottingham South. "Nothing much seems to have been done to make Parliament greener, such as installing low-energy light bulbs."





BIOMASS UPDATE

OUR MARCH 2005 newsletter focussed on biomass as a renewable energy resource. We reported then that a consortium including local councils, Surrey Wildlife Trust, tree surgeons in the area, Chambers the waste company and Guildford Environmental Forum had submitted a bid through the Energy Conservation and Solar Centre in London to Defra, for funding to establish the Surrey Hills Wood Fuel Group. (Surrey is Britain's most wooded county, with 22% woodland cover, 43% of which lies within the Surrey Hills area.)

We are happy to report this bid has been successful and the funds will enable us to co-ordinate the diversion of Surrey Hills woodland wood waste away from landfill and create new supplies for use as a renewable alternative to fossil fuels.

Initially the main end-use of the wood fuel will be the power station run by Slough Heat and Power (SHP). But one of the deliverables of the Defra grant money is to identify local biomass heating projects in schools, businesses and community buildings. This fits precisely with Guildford Borough Council's Climate Change Strategy and the South East Region's goal to generate 6.6% of our electricity from renewable sources by 2010 and 10% by 2015. Haulage of wood chips to SHP will generate only a tiny fraction of the carbon dioxide that can be saved by displacing fuel oil with biomass.

We can also report that the Forum has succeeded in persuading GBC to look into

district heating (see our March 2005 newsletter) for the town centre, and biomass heating could be a part of this. In Finland, biomass supplies 20% of their total energy needs and in Sweden 15%. In the UK biomass provides less than 1% of our electricity. The difference is largely due to the fact that the UK has enjoyed cheap indigenous fossil fuels. That has now changed forever and we have to close the gap fast.



BIOMASS AND BIODIVERSITY

EO.N, THE GERMAN UTILITY, is planning a £90 million 44 MW biomass power station, with all the biomass coming from woodlands in Galloway and Dumfries. As here in Surrey, there are many estates and county-owned woodlands that are not being managed. Our woodlands and the animal life in them would benefit greatly if good management could be made economically viable, and biomass as a renewable fuel offers this win-win possibility.

Surrey Wildlife Trust is in exactly this situation, with a high proportion of the woodlands under their care rated average or poor quality. Biomass offers a way out for them to meet their target to increase the proportion that is good quality.

John Bannister

Is anyone listening? Sometimes.

IT IS EASY to wonder whether responses to consultation documents ever make any difference. There are times, however, when an impact can be seen. Last December the Forum's Biodiversity Group commented on the consultation document for Planning Policy Statement 9, "Biodiversity and Geological Conservation". Amongst the points made was (chief comment in blue):

"Key Principle (v) states, *Local planning authorities should consider whether proposed developments can be accommodated without causing harm to biodiversity and geological conservation interests. Where there may be significant harmful effects, local planning authorities will need to be satisfied that any reasonable alternative sites that would result in less or no harm have been fully considered.*' **It should be clear that developments that would be detrimental to biodiversity could be refused.**" [emphasis added]

No doubt there were others who felt similarly, for example the Commission for Architecture and the Built Environment said:

"We strongly suggest that an additional Key Principle is added along the following lines: *Where it can be demonstrated that a development will cause significant and irreversible damage to, or loss of biodiversity and/or geological conservation interests and cannot otherwise be effectively mitigated for, then permission should be refused...*" [emphasis added]

The final version has now been published. The replacement Key Principle concludes: "If that significant harm cannot be prevented, adequately mitigated against, or compensated for, then planning permission **should be refused.**" [emphasis added]

The acknowledgement that biodiversity issues can be sufficient to refuse a proposal is a potentially valuable improvement.

Raymond Smith

Green belt is fraying

Between 1997 and 2004, John Prescott has rubber-stamped 162 planning applications for development in Green Belt areas. Despite northern locations increasing their Green Belt land by 19,000 ha, further south at least 1,000 ha are lost every year to houses, airports, roads and car parks.

(Source: BBC Wildlife, Autumn 05)

Lots of creepy-crawlies

For every human there are 200 million invertebrates.

(Source: Radio Times, 3-9 Sept 05)

FACTS & FIGURES

US travel

Only 1% of American travel is on public transport, an eighth of that in the UK and an eighteenth of that in Japan. 32 of the 50 busiest US airports currently have plans to expand operations.

(Source: The Independent, 13 June 05)

Gone for ever

More than a third of the planet's biodiversity has been annihilated in the last 30 years.

(Source: WWF News, Summer 05)

Happy New Year

New Year celebrations will be extended in 2005. To make up for a slowing in the Earth's rotation, a 'leap second' will be tagged on to the end of the year for the first time since 1998.

(Source: BBC Focus, Sept 05)



A computer-generated image of how the Little Cheyne Court Wind Farm could look from the A259. Approximate distance to the nearest turbine is 1.6km.

Romney Marsh wind farm gets the go-ahead

PLANNING CONSENT for a £50 million, 26 turbine, 55+ MW wind farm at Little Cheyne Court in the Romney Marsh area was granted in mid-October. It will be the biggest onshore wind farm yet built in the south-east region.

It was strongly contested by wildlife groups as Romney Marsh has renowned wetlands and is an important nature reserve. English Nature and the RSPB, who are very supportive of wind energy when it poses no threat to birds, objected because the area is used by a large number of wintering birds including Bewick swans. They were concerned that the turbines might be a collision hazard and possible disturbance, which would deter birds feeding there.

The RSPB has no evidence to support these adverse effects but nor could the developer show they wouldn't happen. The only UK data on the relationship between birds and wind turbines is from the wind

farm at Blyth Harbour, where problems have not resulted. But the bird species and geography there are totally different from Romney Marsh. Every case is site- and species- specific. Evidence of significant bird fatalities comes from locations where large numbers of wind turbines are concentrated in narrow mountain passes, mainly in Spain and California.

The partial compromise reached at Romney Marsh, and a condition of the planning permission, is to set up a monitoring group including the landowner, the local authorities, English Nature and the RSPB. The group will closely follow the effect these turbines have and can recommend, for example, that they be shut off at certain times, or even moved.

This will be an interesting test case for the UK. The RSPB remains implacably opposed to the 200 or so wind turbines proposed for the Isle of Lewis in the Outer Hebrides.

John Bannister



HAWK & OWL TRUST

It's been a bumper year for barn owls

BARN OWLS in many parts of the country began nesting earlier than usual this year and reared above average numbers of young. Some were nesting for a second time in late September.

Four owlets were ringed by The Hawk & Owl Trust on the edge of Salisbury Plain on 9 April, about two months earlier than is normal in the UK. The eggs would have been laid in the first week of February. These early youngsters were well fed, and had a larder of five wood mice yet to be eaten. Short-tailed vole is the commonest prey for barn owls, but they will take any small rodents.

The abundance of wood mice is due to the excellent beech mast crop in local woodlands last autumn, followed by a mild winter. Overall, the 2004 bounty of seed and fruit and favourable weather caused an eruption in the food chain.

The pattern was reflected in several other regions, although in some cases successful breeding was put down to improved habitat, e.g rough grassland field margins being left by farmers. The Hawk & Owl Trust puts a lot of effort into improving habitats for raptors.

John Bannister

A YEAR AGO

Act of God?

Tsunami (26/12/04)

Beware the proximity of Giants, though they mean no harm.

Earth hiccups, merest jerk of the diaphragm.

How many times have you, walking in this garden, trodden on life?

Michael Tanner



CALENDAR



Monday 16 January

GEF Executive Committee. 1830. Millmead Offices.

Tuesday 17 January

GEF Sustainable Energy Group. Dr Bill Kyte OBE, Chairman of UK Emissions Trading Group and Chairman of Environment and Sustainable Development Eurelectric:

"Climate Change – What Happens Post-Kyoto?".

1930. Millmead Offices. (Refreshments from 1900.)

Wednesday 18 January

GEF Biodiversity Group. Sue Todd, Head of Rights of Way and Countryside Access, Surrey County Council: **"Green Arc – Transforming Landscapes and Lives"**. 1920. Millmead Offices. (Coffee from 1900.)

Wednesday 15 February

GEF Transport Group. George Burnett, Manager LTP Group, Surrey County Council:

"The Vision Underlying Surrey's Local Transport Plans".

1900. Millmead Offices. (Refreshments from 1830.)

Monday 27 February

GEF Sustainable Energy Group. Pooran Desai, Director of Bioregional:

"One Planet Living – a Vision for Surrey".

1930. Millmead Offices. (Refreshments from 1900.)

Wednesday 22 March (to be confirmed)

GEF Biodiversity Group. 1920. Millmead Offices. (Coffee from 1900.)

Wednesday 31 May (to be confirmed)

GEF Biodiversity Group. 1920. Millmead Offices. (Coffee from 1900.)

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Please send contributions for the next issue to Clare Windsor by Monday 6 February 2006.

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