



SEPTEMBER 2006

FOOTPRINTING AND CARBON EMISSIONS

By David Harnett, Environmental Co-ordinator,
Guildford Borough Council

ECOLOGICAL FOOTPRINTING is a way of expressing environmental impact using land area as an indicator. It shows how much land is needed to provide all the goods and resources an area consumes, and this can also be expressed in planets. The 'Taking Stock' exercise showed that if everyone in the world lived like the people in the South East region then we would need 3.5 planets, or 29 times the land area available.

At the end of February, the WWF and the Stockholm Environment Institute jointly released ecological footprint 'accounts' for every local authority area in England. These were calculated by breaking down national figures and applying them at the level of consumption of each resident.

For instance, if a piece of clothing or an electrical item is made in the UK, this will involve resource use in its manufacture, including raw materials and energy. These are then transferred to the person purchasing that item. It is important to recognise that many goods are now manufactured abroad, and do not all show up in these accounts.

Guildford's footprint

The results for Guildford show that we would need 3.6 planets, one of the highest figures in the UK. Table 1 gives comparisons with an average world resident, the UK and the South East.

TABLE 1 – ECOLOGICAL FOOTPRINTS		
Area	Global hectares / person	Planets
Global	1.8 (2) ¹	1
UK	5.4 (4.9)	3
South East	6.3	3.5
Guildford	6.5	3.6



GUILDFORD BOROUGH COUNCIL

Buying locally produced food is more than just a tasty idea – it reduces our impact on the environment

The website holding the results can be seen at: <http://www.wwflearning.org.uk/ecobudget/> There is also a report, Ecological Budget UK, on how the figures were obtained, which can be accessed from the link above.

The accounts include a breakdown of global hectares (the unit chosen to represent productive usable land across the globe), by category. The categories are shown in Table 2 overleaf.

Food and drink is the biggest overall category, and reflects the continuing debate and awareness of consumers about food miles. (For more information, see our March 2006 newsletter.)

Second is the energy needed within a household to

¹ The figures in brackets are from the 'Taking Stock' exercise of 2003

TABLE 2 – GUILDFORD'S ECOLOGICAL FOOTPRINT = 6.5 GLOBAL HECTARES PER PERSON

Category	Description	Gha per person
Food and drink	Food and drink purchased for home consumption, alcoholic drinks purchased in a public house, restaurants or other eating out establishments including take-aways.	1.18
Energy	Domestic fuel including gas, electricity and other fuels such as oil or bio-fuels.	1.09
Consumables	Includes durable and non-durable items including newspapers, clothing, appliances, glassware, tools, medical products, audio-visual equipment, personal effects, etc.	0.94
Travel	Car fuel, the impact associated with purchasing and maintaining private vehicles and public transport (bus, train, coach, air travel, etc).	0.91
Capital investment	Investment in tangible fixed assets such as plant and machinery, transport equipment, dwellings and other buildings and structures.	0.76
Other	Government, universities, services, housing, holiday activities.	1.62

provide heating, hot water and power via electricity, gas and other fuels.

Third is a wide range of consumables.

Fourth is travel, principally the use of cars but also including emissions from public transport.

Fifth is capital investment, or infrastructure and capital plant needed to make our society function.

The final category comprises the remaining elements, of which the largest is holiday activities.

Direct and indirect carbon equivalent emissions

Guildford Borough is currently calculating the carbon emissions for the Borough, based on a nationally agreed methodology. These are referred to as direct emissions. They are still being finalised, and will form the basis for a carbon reduction strategy which will aim to reduce the Borough's carbon equivalent emissions over a period of time. The ability of the Council to influence these emissions varies, and account will be taken of this when agreeing on which areas to target. Some will require partnership working, as powers and duties are split between several organisations.

Examples of direct emissions are fuels used in households, and for transport purposes. The Council can encourage people to use less, and has responsibilities here through the Home Energy Conservation Act. For car use it has less control, but can encourage responsible car use and encourage the purchase of cleaner cars.

Many of the principal items of the ecological footprint are indirect, and are harder to tackle at the local level. For instance, supplying food and drink, which has the highest overall emissions, is a national issue and the supply chains are difficult to tackle at the local level. However, encouraging people to use local food such as through Farmers Markets, can obviously help.

The issue of indirect emissions and their influence on ecological footprints is included as a specific policy within the emerging South East Plan, policy CC3. This has a target of stabilizing the south east's footprint by 2016, then subsequently reducing it. An implementation plan is being devised to support this, and will be used by the Council to assist in devising policy.

PERSONAL CARBON ALLOWANCES

By Mayer Hillman, senior fellow emeritus, Policy Studies Institute. This article first appeared in the British Medical Journal, Vol 332, 10 June 2006, and is reproduced with permission from the BMJ Publishing Group.

IN THE PAST FEW YEARS, the scientific community has achieved a near-consensus that our energy profligate lifestyles are contributing to a process that threatens future life on earth. As Robin Stott describes,¹ the Global Commons Institute has put forward the only realistic framework to prevent this. Based on principles of precaution and equity, the policy of contraction and convergence is already commanding impressive national and international support.²

Given that scientists have calculated that the capacity of the planet to absorb greenhouse gases without serious destabilisation of the climate is finite,

could anyone reasonably support the proposition that the contraction should converge towards an unequal distribution? If that capacity is therefore divided by the world's population, each person's fair annual allocation of carbon dioxide emissions cannot be greater than about 1 tonne. At present, the UK's average emissions are about 10 tonnes, two and a half times the current world average.

Clearly, it would be wholly impractical for us as individuals or for the economy to cope with an immediate reduction to the 1 tonne allowance, although it must be achieved as soon as possible. A

year-on-year reduction will be needed. But given due warning of each future annual allowance, people can make changes to their home, transport arrangements, and general lifestyle at the least cost and in the way that suits them best (see box). By including all personal transport and household energy use in the allowance, a large proportion of total emissions will be covered. Units of the allowance will be surrendered when gas and electricity bills are paid, petrol is purchased, and air tickets bought. The contribution made by the business, industry, commerce, and public sectors which

produce our goods and services can be included at a later date within a wider allowance system.

Trading allowances

A key feature of the proposal is buying and selling.³ Those who lead less energy intensive lives and who invest in energy efficiency and renewable energy are unlikely to use all their allowance. They will then not only be spending less on fuel but will also add to their income by selling their surplus units. The process will be a far more effective driver towards minimising the

HOW BIG IS YOUR CARBON FOOTPRINT?

The figures below are based on data from *How We Can Save the Planet*.⁴
If any of the questions below do not apply to you, move to the next question.

IN THE HOME

1. How many kilowatt hours (kWh) are shown on your four quarterly electricity bills combined?

Divide your total by 2 and then divide again by the number of people (adults and children) usually living in your home

Put your answer here ____ kg

2. How many kilowatt hours (kWh) are shown on your four quarterly gas bills combined?

Divide your total by 5 and then divide again by the number of people usually living in your home

Put your answer here ____ kg

3. How many litres of heating oil do you buy each year?

Multiply your total by 3 and then divide by the number of people usually living in your home

Put your answer here ____ kg

FOR TRAVEL

Private transport

Fuel consumption does not rise very much when passengers are carried. So estimate your annual mileage only if you were the driver of a car or rider of a motorbike, scooter, or moped.

4. About how many miles do you typically drive a car (or van) each year? A good source is the milometer reading since your vehicle was acquired, divided by the years (and parts of a year) that you have driven it. With an older vehicle, see the mileage shown on your last two MoT certificates.

Divide your total by 3 if your car (or van) runs on petrol

Divide your total by 4 if your car (or van) runs on diesel

Put your answer here ____ kg

5. About how many miles do you typically ride a motorbike, scooter, or moped each year?

Divide your total by 6 if you ride a motorbike

Divide your total by 8 if you ride a scooter or moped

Put your answer here ____ kg

6. About how many miles do you typically walk and cycle each year?

These forms of travel are emissions free

____ 0 kg

Public transport

The average number of passengers carried in peak and off-peak times has been used to determine emissions per person mile. Think about the number and length of your train, bus and coach journeys, especially the longer ones, including getting home.

7. About how many miles do you typically travel by rail each year?

Divide your total by 8 for underground or metro journeys

Divide your total by 6 for intercity train journeys

Divide your total by 4 for other train journeys

Put your answer here ____ kg

8. About how many miles do you typically travel by bus each year?

Divide your total by 7 for London buses

Divide your total by 4 for buses outside London

Put your answer here ____ kg

9. About how many miles do you travel by coach each year?

Divide your total by 8

Put your answer here ____ kg

Air travel

10. About how many miles did you fly last year? For example, a round flight from London to New York is about 7,000 miles and from Manchester to Athens about 3,000 miles.

Divide your total by 3

Put your answer here ____ kg

Now add up your answers to determine your total annual emissions.

Put your total here ____ kg

Divide by 1,000 to turn kg into tonnes.

Put your total here ____ tonnes

Average UK emission for personal use is about 5 tonnes.

This figure must be reduced to about 0.5 tonnes to stop contributing to climate change.

impact of climate change than attempting to encourage individuals to adopt green practices.

Carbon allowances will act as a parallel currency to real money as well as creating an ecologically virtuous circle. Individuals with low energy use – and therefore low emissions – will have a surplus to sell, while those maintaining high energy use will have to buy this surplus. But the cost of doing so will rise steadily in line with the reduction of the allowance because price will be determined by the availability of the surplus set against the demand for it. In effect, a 'conservers gains' principle will complement the conventional 'polluter pays' principle.⁵

Where does the prime responsibility for the adoption of such a radical but essential transformation of society lie? Of course, only government can ensure

that individuals are obliged to exercise their responsibilities in this way. Without action, we will be knowingly handing over a dying planet to the next generation.

Competing interests: None declared.

- 1 Stott R. Healthy response to climate change. *BMJ* 2006;332:1385-7.
- 2 Meyer A. *Contraction and convergence: the global solution to climate change*. Dartington: Green Books, 2000.
- 3 Starkey R, Anderson K. *Domestic tradable quotas. A policy instrument for reducing greenhouse gas emissions from energy use*. Tyndall Centre technical report No 39. www.tyndall.ac.uk/publications/tech_reports/tech_reports.shtml (accessed 23 May 2006).
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- 5 Carley M, Christie I, Hillman M. Towards the next environment white paper. *Policy Studies* 1991;12:36-51.

'PLAYGROUND FOR WILDLIFE' COMPETITION, 2006



AS USUAL, MO USHER'S incredibly hard work paid off as four primary schools entered this exciting competition. On 6th July, a splendid morning was enjoyed by Mo, John Bannister, Julie Roxburgh and Councillors Andrew Hodges (Council Leader) and Vivienne Johnson, along with the schools who had taken part. The prizegiving ceremony took place in the grounds of the winning school, Boxgrove Junior.

During their assembly, the pupils heard speeches from Mrs. Bridge, their head teacher, and from John and Mo. Boxgrove had ably demonstrated that they were working together as a team, respecting nature, taking responsibility, developing practical skills, aware of the passage of the seasons, and caring, protecting and enhancing their environment.

The first prize of £100 and a certificate were presented by the Councillors and accepted by two pupils on the school's behalf. The judges from Surrey Wildlife Trust commented that the children were very enthusiastic about their environment, the school's Eco Club was great and the school grounds were well developed with superb facilities. They were particularly impressed by the pond and flower areas along with the quadrangle.

Second prize was won by Burpham Primary. Head teacher Mr Goddard and two pupils received their award of £30 and a certificate. The judges said that although there was not much space in the grounds, the whole area was very well used: the grounds had a positive feel with very good wildlife areas, the pond layout was impressive and the children were well informed, with marvellous involvement. They added that the pupils from

both schools should be very proud of their achievements, and that it had been a close-run decision between 1st and 2nd prizes.

Tormead Junior and Queen Eleanor's Church of England Junior schools were runners up and received cheques of £10 each.

The morning was completed with a tour of the winning school's grounds. The Boxgrove Eco Club is run by teacher Abi Everard with the help of Steve Kemp, their Buildings Manager, and 25 pupils. Divided into teams, they each have responsibility for part of the wildlife areas – the vegetable patch, the wildlife garden, the courtyard and the infant playground. The children showed us round the individual areas and we looked at the ponds, and at various interesting insects and frogs. By the end of the tour we were covered in teasels, and altogether had a wonderful time.

Julie Roxburgh

Eco Club pupils from the winning Boxgrove Primary School, with leader Abi Everard (foreground), head teacher Pip Bridge, buildings manager Steve Kemp, Councillor Andrew Hodges, Mo Usher and Councillor Vivienne Johnson.





BIODIVERSITY GROUP PRESENTATIONS



Reports by Raymond Smith

BUSINESS AND WILDLIFE

Vicky Flynn, Community Investment Officer, Allianz Cornhill

VICKY'S TALK in March centred on a project to create a wildlife garden at Allianz Cornhill's Training Centre at Ewhurst. The project grew out of calls from employees for the company to embrace environmental issues. The result was this biodiversity project to provide habitats for native wildlife, and encourage involvement of both employees and community partners.

Although the initial budget for the programme was only £5,000, it was viable because it could draw on the voluntary labour of employees at a series of work days. In addition, expert advice was supplied by Surrey County Council staff (particularly Leah Matthias while she was Urban Biodiversity Officer).

Work started in November 2003, when the site was cleared of non-native species. Some Norwegian spruces were donated to Cranleigh village and to a local school as Christmas trees. All the remaining trees were chipped on site to produce mulch for later use for plants and pathways.

The first planting day was in the following

month, with teams from Allianz Cornhill and Surrey County Council. More than 250 native trees and shrubs were planted, including hazel coppice. This was followed by the official launch.

Work continued during 2004, with log-pile homes for invertebrates and a new orchard. Subsequent tasks included creating a "fruit and nut trail", putting up bird boxes and planting wildflower plugs. At the end of the year ponds were installed. Schools were also involved in the project, for example providing young plants.

During 2005, more wildflower plugs were planted and more paths built. The final work day was in November 2005.

The participants enjoyed a sense of achievement and a change of routine. But the company itself also benefited, especially from the positive publicity when the project won the South East Sustainable Business Award. The project was held up as "an exemplar", and Vicky emphasised the extent to which other companies could benefit from following their example.

Two presentations in May

VISIT BY THE PEWLEY MUSEUM

Anne Wright and Vanessa McClure, of Pewley Downs Conservation Volunteers

ANNE AND VANESSA brought along a collection of natural history artefacts, many of which had been collected on Pewley Downs. They explained that these items (called "the museum") are used on trips that they make to schools as a way to stimulate

the childrens' interest.

They demonstrated one of their working methods, distributing quiz sheets to everyone present. This encouraged lively conversations as different items were identified.

NATURE CONSERVATION IN A GRAVEYARD

Case study by Raymond Smith: Holmbury St. Mary

THE CHAIR gave a presentation which he had made to the parish council training session earlier in the year, and briefly outlined the history of the site, the

evolution of planning policy relating to it and the church's management policy set out in response to public concerns. He illustrated some of the flora of the location.

Magic roundabout

British entrepreneur Trevor Field has designed special merry-go-rounds for hundreds of villages in South Africa. When children push the roundabout, they produce power that's used to draw water from a borehole deep underground. The water is stored in a tank, ready for collection whenever needed. The kids have fun, while their families are provided with fresh, clean drinking water on tap.
(Source: BBC Wildlife, July 05)

Country life

Every year, 21 square miles of rural Britain is built over.
(Source: The Independent, Apr 06)

FACTS & FIGURES

A case of renaming?

America's Glacier National Park is becoming a misnomer. In 1850 the park had 150 glaciers; now there are only 26, also melting. Researchers believe that the park will be completely devoid of glaciers by the year 2030.
(Source: Focus, June 06)

The killing fields

Statistics released by the Scottish Executive show that more than 200 licences were granted to Scottish gamekeepers and farmers between 2000 and 2005, to control badgers, otters and bats. The culling also extended to pine martens, mountain hares, herons and newts.
(Source: BBC Wildlife, Sept 05)

A TRANSPORT USER GROUP FOR GUILDFORD WOULD YOU BE INTERESTED?

There are moves afoot, instigated by our Guildford MP, Anne Milton, to set up a rail user or public transport user group for Guildford. Trevor Jones (of Railfuture and Guildford Environmental Forum) would welcome any comments in writing before the end of October. Please write to H Trevor Jones, 67 Guildford Park Avenue, Guildford GU2 7NH, or e-mail htjones@raildev.fsnet.co.uk

MINERALS EXTRACTION –

one area of Guildford is on the cards

OF THE SITE options being considered for minerals extraction in Surrey, one is Eashing Farm where there are potentially thousands of tonnes of sand and Bargate stone. Guildford Environmental Forum is urging Surrey County Council not to include this site, on the grounds that extraction work would cause lasting damage to the area's biodiversity.

The gist of the Biodiversity Group's response is that Eashing Farm lies next to the Charterhouse-to-Eashing Site of Special Scientific Interest (SSSI). This supports "a series of wetland communities, ranging from damp grassland to fen and alder swamp, as well as ancient semi-natural woodland" with "nationally important invertebrate fauna". It also adjoins Osborn's Wood, a Site of Nature Conservation Importance (SNCI).

As a wetland habitat the SSSI is highly sensitive to changes in the hydrological regime. The suggestion in the restoration strategy that the springs fed from the proposed excavation site into the river valley should be protected in the restoration programme demonstrates that water from this site is significant for the wetlands. This undermines any argument that the wetlands could be supported by the river flows.

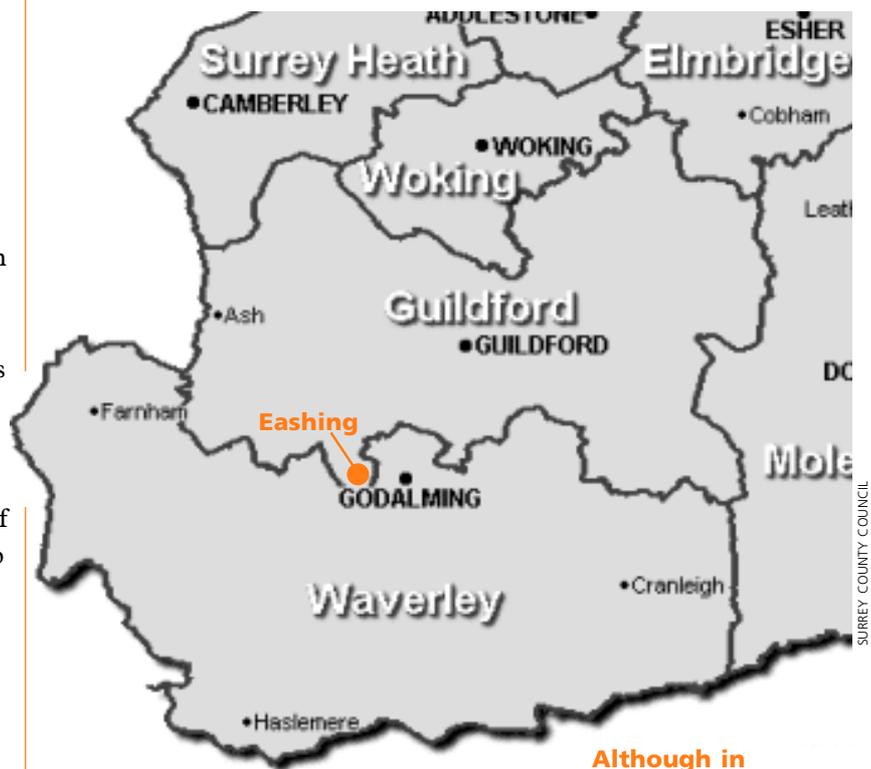
Although the proposed excavation area is of the order of 20m above the valley floor, the SSSI extends up the steep bank of the valley to the edge of the fields at the top of this slope which it is proposed to excavate. These slopes would suffer from drainage due to the excavations behind them, and of course the water needs of the vegetation on the valley sides would not be supported by the river flow. Simply to protect the springs in the future as proposed in the restoration strategy is not a viable option since irreparable damage could have been done by the drying out of the SSSI in the meanwhile.

In addition to the hydrological impacts, there is the significance of disturbance to the SSSI's fauna. Noise is an obvious problem, but the impacts may also include

the destruction of migration routes of amphibians. Other likely problems include dust from the site, which would be harmful both to the flora and fauna. We do not accept that a buffer strip would be sufficient protection for the SSSI.

Regarding the viability of long-term restoration, it would be expected that such a site would be restored with uncontaminated, inert fill. However, with the increasing recycling of construction waste there may well be a deficiency of such material to meet existing restoration requirements nationally. There may therefore be a temptation to use the site for putrescible waste, which would be unacceptable. On the one hand the leachate from the site could pollute the adjoining

Eashing Farm adjoins an SSSI that is highly sensitive to any change



SSSI and SNCI and the River Wey, and on the other hand, if the waste were to be contained within an impermeable cell, this would severely disrupt groundwater flows within the area with permanent damage at least to the upper sections of the SSSI and SNCI. Similar hydrogeological damage would result if the excavated zone were left as a void.

Although in Guildford Borough, Eashing Farm's possible use for minerals extraction has provoked fervent opposition from its neighbours in Waverley.

FREIBURG

An incinerator in Guildford's green twin city

Guildford's twin city of Freiburg in south west Germany has long been noted for its enlightened environmental policies and achievements and has become known as the "green capital of Germany". In more recent years its espousal of solar technology has also made it the "solar capital of Germany". One manifestation of its environmental record is the achievement of a recycling rate of about 60%, a rate which Guildford hopes to reach in 2010.

In spite of this impressive record, Freiburg City Council has collaborated with neighbouring districts in the construction and operation of an incinerator. I thought that this would be of interest to Guildfordians and so I asked a Freiburg City Councillor, from the Green Party, to contribute an article on the subject for inclusion in the recent Guildford-Freiburg Association newsletter. It is reprinted below.

The author is Councillor Coinneach McCabe, a Glaswegian who now lives in Freiburg and is working for a PhD at the University there. He was elected to Freiburg City Council in 2004.

Peter Slade, Chairman, Guildford-Freiburg Association

UNTIL RECENTLY Freiburg has used a landfill site at Eichelbuck, situated in woods to the north side of the city, for domestic waste which has not been, or cannot be, recycled. Changes in federal law have made landfill illegal, so the site could no longer be used.

It was therefore decided to construct an energy-from-waste plant or incinerator. This deals with residual waste from Freiburg (population 213,998), the rural district of Breisgau-Hochschwarzwald (population 247,002) and the rural districts of Emmendingen and Ortenau. The capacity of the plant is 150,000 tonnes of refuse per annum, and it cost 83 million euros to build.

The site is a business park on a former military airfield 18km south west of Freiburg. A railway line has been built to link the incinerator and the business park to the rail network.

The plant is producing 15 MW of electricity and will soon also be producing 20 MW of energy for heating. Some estimates suggest that it is currently

only running at 25% of its possible energy (electricity) potential, and that the plant could produce 60 MW instead of 15. It is also claimed that the heating energy could be 50 MW instead of its currently planned 20. An interesting problem, not realised at the time of planning, is that the actual amount of rubbish being produced has reduced and so the amount which needs to be incinerated is now less than planned.

When the project was first announced there was some opposition from environmentalists, mainly because of concern about fumes from the plant. This has resulted in a better purification system to guarantee air quality. The type of waste to be burned is mainly domestic refuse, and contains no hazardous substances.

All in all, in my opinion, if it is designed and operated properly there is no environmental argument against such an incinerator, as long as there is control over the substances being burned, a good fume purification system and a good energy plan.

FREIBURG

A Guildfordian's experience

by John Bannister

FROM WHAT I SAW during two weeks cycle-camping in the Black Forest, that region at least is streets ahead of us in so many respects. In 1,000 km of cycling everything we saw was clean, modern and well cared for. The roads nearly everywhere were good, not to mention the cycleways, which are the envy of any British cyclist. Freiburg alone has 400 km of cycle paths and a third of journeys there are done on bicycles (London hopes to create a mere 900 km by 2025). You really have to watch out though, as cyclists and roller bladers travel fast, they are all so fit! Come to think of it, we didn't see much obesity on our trip.

Germany is the world's biggest exporter and every community of any size has its modest-scale industrial units. So many things are much cheaper than here, including food, camp sites and most manufactured goods. This surprised me as I thought Germany had the highest labour costs in Europe. It can't be denied that unemployment in what was East Germany is a serious problem, but that is structural and will take decades to sort out.

Waste management in Germany is incredibly good and everyone appears totally committed. Every sort of household container is recycled. I didn't once see



In Freiburg, it's not so much a case of Park & Ride as Ride & Park!

As a result, both EfW and MBT plants are being built.

Guildford Environmental Forum has long campaigned for any thermal treatment of waste in Surrey to be combined heat and power, but we think incineration is inappropriate with our very low recycling rates. We are very encouraged that the EU Commission is

a plastic bag in any supermarket! People arrive with their own shopping bag usually bearing plastic and glass bottles for recycling. German supermarkets have automatic machines for drinks bottles, generating a receipt valuing each bottle at 5 to 15 cents. Supermarkets collect household batteries and every sort of plastic container along with other packaging. In the car park there was often a cage into which people put packaging after off-loading stuff into their car or bicycle panniers.

In Freiburg the household waste recycling rate is over 60%. It doesn't matter where you buy a drink, you can return the bottle to any outlet and get a refund. Bottles are crated by brand, including plastic ones, with a significant proportion reused rather than recycled.

Large amounts of renewable energy are spread across the region. Black Forest houses have enormous roofs and many have photovoltaic panels, some with 5 kWp (kilowatt peak) or more. All appeared to be over-tile polycrystalline. There is obviously no requirement in the National Park for "invisible" PV. On our trip we must have seen at least 2 MW of PV.

Solar hot water panels are also common and we came across about 10 large wind turbines. Freiburg, probably the best example in the region, produces 50% of its own energy, but not all this is from renewable energy. Twelve per cent of Germany's energy needs are met from renewables, so Freiburg probably does better than this. The new energy from waste (EfW) plant is very efficient, with heat recovered for buildings as well as generating electricity. On 1st June 2005, Germany's implementation of the 1999 EU Landfill Directive came into effect and prohibited the landfilling of biodegradable waste, allowing only incinerated waste or waste pretreated by mechanical biological treatment (MBT) to be landfilled. Approximately 200 municipal solid waste landfills and an equal number of industrial waste landfills were closed.

working towards an energy efficiency standard for household waste incinerators which will require over 65% thermal efficiency for installations permitted after 31.12.08, and 60% for installations permitted and in operation before 01.01.09 (WFD COM 2005/667 – Annex II).

Blair and Brown like to lecture the Europeans, Germany in particular, protesting that they need to sort out their economy while boasting that ours is so wonderful. But we have much to learn from countries like Germany, Denmark and Sweden on how to run an economy sustainably and efficiently. The UK is all rhetoric and still ranks as the dirtiest man of Europe.

GUILDFORD'S LOCAL DEVELOPMENT FRAMEWORK

Early in August, Guildford Environmental Forum submitted detailed comments and suggestions in response to Guildford Council's consultation on their draft plans for the Core Strategy and the Town Centre Area Action Plan, which will form part of the Local Development Framework (LDF). The LDF will replace the current local plan and will set out the policies and long term plan for land use and buildings in the Borough to 2018.

It lays down important rules about housing, transport, biodiversity, energy, the economy, shopping, green space, etc. Planners will refer to the LDF when deciding planning applications in the future.

Please contact me if you would like to see our submission.

John Bannister

A 'global' presentation at the AGM

That's some worm!

The bootlace worm, *Lineus longissimus*, can be found under rocks at low tide on the seashore. At rest it's a mass of tight coils, but at full stretch it's often 10 metres long

(Source: BBC Wildlife, July 05)

FACTS & FIGURES

British apples

Cheap foreign imports of apples, and the cost of producing British varieties, are threatening to make our orchards a thing of the past. In 1987 we grew 12,885 hectares of dessert apples; by 2004 that figure had dropped to 5,300 hectares. The area given over for cooking apples halved in the same period. So, help our apple growers by forgoing the imports and sticking to home-grown fruit.

(Source: Radio Times, 18-24 Feb 06)

Getting around

A US study has found that the more green space there is in an urban area, the likelier people are to walk or cycle for daily transportation. Interestingly, there was no such link between green space and the number of people cycling or walking for pleasure.

(Source: Focus, May 05)

More otters

Numbers of introduced American mink are declining in England. Researchers from Oxford University attribute this to an increase in the native otter population.

(Source: BBC Wildlife, June 06)

GUILDFORD ENVIRONMENTAL FORUM'S AGM at the Guildford Institute was attended by an enthusiastic audience, despite the clammy conditions of a hot June evening.

Chairman John Bannister reported that the membership was steadily growing, now standing at 125. More than 20 public meetings had been held during the previous 12 months, with expertise drawn not only from outside the Forum but also from within its own ranks. He thanked the many contributors to the newsletter, which he described as "a beacon of our success", and praised the working groups for their activities throughout the year, which included several major projects. Special thanks went to Richard Stephens, one of the Forum's longest-serving members, who had finally relinquished his roles as Membership Secretary and Chair of the Waste and Pollution Working Group.

Howard Allison, the Treasurer, reported a surplus of expenditure over income of £1,347 for the financial year 2005-06. For the first time in the Forum's history it had received no grant from Guildford Borough Council, although he understood that, subject to completion of the Service Level Agreement, there should be a grant this year of about £3,000. The healthy state of our current reserves meant that we could continue to part-fund worthwhile projects.

Prior to the official business, the Forum's guest Maria Adebowale gave a lively talk entitled 'Environmental Justice' about her work with the organisation Capacity Global.

She emphasised the legal and moral imperative to improve environmental justice, for individuals and families, both in the UK and in third world countries. Because they are on low incomes, in many cases they can only afford to live in the poorest areas, often in the proximity of dirty industries. The resulting environmental pollution leads to a much reduced quality of life. The Aarhus convention gives a legal duty to countries to provide information on such issues to populations, and overlaps with the Freedom of Information Act.

Sponsored by Defra, Capacity Global has been working with focus groups to look at the issues for people living in such areas. Whereas society generally is aware of the greater concerns such as climate change or the ozone layer, residents of poor areas are more concerned with local issues such as dog mess, litter and lack of service provision. Many problems were felt in the UK just as strongly as in third world countries.

The lack of good quality green space was a major issue for most people. What green space is available is often affected by

pollution and other aspects of environmental quality. Friends of the Earth have recognised this and have started referring to themselves as an environmental justice organisation. Greenpeace is also increasingly recognising its importance.

The research is intended to improve understanding of local peoples' concerns. Unless their own agendas are understood and addressed, they will not help you to address yours.

Capacity Global also has links with the Environmental Law Foundation, which offers a service to individuals or organisations who need help with fighting environmental injustice. The current focus for Capacity Global is environmental advocacy, which encourages local communities to build their own capacity by educating themselves or creating jobs for representatives to pursue these aims locally.

THIS YEAR

JULY

July 2006 was the hottest month on record in the UK since records began in 1914. The average day and night temperature over the month was 17.8°C. Wisley recorded a UK record July temperature when 36.5°C was reached on Wednesday 19th. By 2040, according to the Meteorological Office, these temperatures will be the rule rather than the exception.

During the same period California experienced repeated temperatures over 37°C for several weeks and reached 43°C over four consecutive days in the Bay Area. Two million people suffered blackouts. Overall, the US experienced its hottest first-half year since records there began in 1895. The White House had no comment. (Perhaps the President was busy praying with Tony Blair.)

AUGUST

As we go to press, oil prices have increased to a near record \$78 per barrel. This followed the shutdown by BP of the North Slope of Alaska Prudoe Bay oil field, America's largest, because of repeated oil leaks from corroded pipelines.

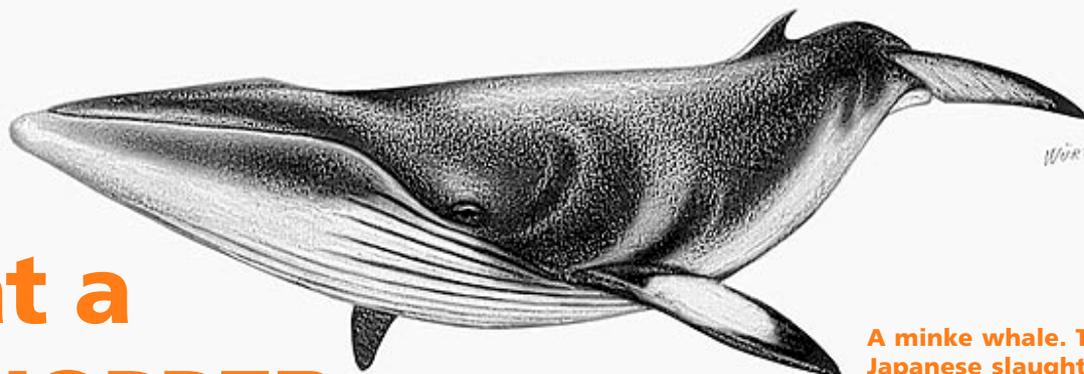
Prudoe Bay is declining rapidly, but at 400,000 barrels per day provides 8% of US consumption and equates to 25% of the world's spare oil capacity.

Cassandras are talking of \$100 oil before long, so don't put off that solar panel much longer.

John Bannister

What a WHOPPER

by Alwyn Marriage



A minke whale. The Japanese slaughter 935 minkes each year for "scientific research".

WHEN AN unfortunate whale ventured into the Thames earlier this year, its sad progress and demise aroused more than mere curiosity. Crowds came to watch the mighty cetacean, and every moment of the attempted rescue effort was recorded and beamed across the media networks of the world. It was, perhaps, not surprising that people were genuinely upset when this gentle giant of the seas lost its battle for life, for there is something almost awe-inspiring about such an immense creature living hidden in the ocean and posing no threat to human life.

While this little tragedy was being played out in the Thames, I was in New Zealand, where such occurrences are not quite so rare. On Farewell Spit, at the top of South Island, at least a hundred and twenty whales have been swept ashore and caught by the tide. Every time this happens, local people and tourists turn out in force to mount a rescue operation, with the result that only thirteen of the stranded whales have died. The animals are turned the right way up and copious wet towels and blankets are applied to help keep them damp until the tide returns. Sometimes whale pups can be heard crying for their mother while she is trapped on land. In the most recent rescue, a whale was re-floated twenty four hours after becoming stranded, and volunteers then swam out to sea with the whale for a while to make sure it was unharmed.

This story may, perhaps, illustrate why New Zealanders are so unhappy about the whaling operations being undertaken by Japan's Institute of Cetacean Research. The institute insists that it is hunting whales in order to examine their organs, stomachs and ear

plugs for research purposes, so that they can determine the age, breeding patterns, diet and toxin levels of the mammals. Hideki Morunuki, from Japan's Far Seas Fisheries Division, claims that Japan is acting within the terms of the International Whaling Commission (IWC), which allows the gathering of scientific information on the Southern



Ocean whale population. Greenpeace in New Zealand and, indeed, most of the public there, insist that research is possible without such slaughter, and they have been urging their Government to send a frigate to monitor the operation. The Government has so far declined to do this, and emotions have been running high.

The operation involves the slaughter of 935 minke and 10 fin whales, which are chased down and harpooned. It can then take twenty minutes or so of suffering before the whale finally stops breathing or drowns. The hunting takes place not only far outside Japan's territorial waters, but also within the IWC-approved Southern Ocean Whale Sanctuary, which was set up to allow scientific study of the recovery of whale

Greenpeace and other conservation organisations are working to achieve freedom for all the ocean's whales. Sensitively controlled whale-watching must replace whale-killing as man's only exploitation of these superb animals.

Organic milk

It takes more than three times as much energy to produce a litre of non-organic milk than a litre of organic milk. Much of the extra energy is used in the production of the fertiliser.

(Source: *Earthmatters*, Spring 06)

The birds and the bees

Bee-eaters must catch about 225 bees or similar-sized insects every day to feed themselves and their young. Before eating a bee, they must squeeze out the venom on a perch and scratch off its poison sacs.

(Source: *BBC Wildlife*, July 05)

GNP or GNH

The king of Bhutan has decreed that the success of his country should be measured not by wealth but by "Gross National Happiness".

(Source: *WWF Action*, June 06)

FACTS & FIGURES

A stressed planet

The UN's Millennium Ecosystem Assessment of 2005 concludes that more than half the world's ecosystems have disappeared because of human actions such as land conversion and deforestation. It warns that natural resources can only be saved if they are given a value, e.g. airlines should pay for the CO₂ they release and the price of food should reflect the cost of cleaning waterways polluted by agro-chemicals from the land.

(Source: *Focus*, June 05)

stocks without the need for whaling.

Both Greenpeace and the more militant Canadian Sea Shepherd Conservation Society have been engaged in trying to monitor and disrupt the operation by the Japanese. Each time the whalers set out to hunt, Greenpeace sends two inflatables from each of its ships. Some of them try to position themselves between the whales and the harpoons, while the others surf the Japanese boat's bow waves and hose down their decks so that the whalers cannot see to hunt. It is intense, time-consuming and dangerous work, and could very easily end in tragedy. On one occasion the Greenpeace inflatable got caught under the whaler's bow wave and was tipped over; on another occasion there was a collision between Greenpeace's ship, *Arctic Sunrise* and the Japanese ship, *Nisshin Maru*, while Greenpeace protestors in inflatable boats were attempting to paint 'WHALE MEAT' on the side of a Japanese supply ship.

Green protestors are not alone in the struggle to persuade Japan to desist from whaling, as the Government is also, in principle, against the carnage. Allegations have been made that Japan

has given aid to small countries in return for their support over the whaling issue. New Zealand abhors such a practice and is, instead, engaged in diplomatic efforts to persuade other anti-whaling countries to attend this summer's meeting of the IWC, in order to outnumber Japan's representatives and help prevent Japan's control of the IWC.

Whether the slaughter of whales is finally arrested by protest action or diplomacy, it is to be hoped that the day will soon dawn when these noble beasts will be free to move through the oceans of the world in peace and safety.

While I was in New Zealand, I took the opportunity to go out to sea on a peaceful whale-hunting expedition. Despite conditions that would have made the hardest sailor sea-sick, we were fortunate enough to approach to within 20 metres of two different whales, and to watch them for several minutes. The heart-lifting spout of water, the huge bulk moving just below the surface of the water, and the tail display that accompanied the final graceful dive, will remain with me for years and inspire me to support any means by which these wonderful creatures can be saved.

Blackheath to remain intact

AFTER WEEKS of rumour it has now been confirmed that Star Energy has withdrawn its application to drill for gas on Blackheath. The proposals (which we featured in our March newsletter) would have trashed an ancient sunken lane, cut through two Sites of Nature Conservation Importance and clung to the edge of a Site of Special

Scientific Interest. The Forum was strongly opposed, and helped to raise the profile of the application around the county.

Instead Star is intending to use geo-directional drilling (often called horizontal drilling) from their existing site in a plantation in Albury Park, as suggested by us from the outset.

Raymond Smith



RAYMOND SMITH

Heathland has been disappearing at a rapid rate in the UK, yet it supports a unique ecosystem and every area is worth saving. Here at Blackheath, the impact from Star's drilling proposals would have seriously compromised the heathland habitat.



CALENDAR



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

Wednesday 13 September

GEF Sustainable Energy Group. Sean Rendell, Principal Policy Officer (Project Management), Woking Borough Council: **"Development in a Changing Climate"**. 1900. Committee Room 2, Millmead Offices. (Liquid refreshments from 1830.)

Wednesday 20 September

GEF Biodiversity Group. Jonathan Loh, WWF International and Institute of Zoology: **"Biodiversity Indicators and the 2010 Target: Measuring Conservation Success, or Failure"**. 1900. Committee Room 1, Millmead Offices. (Liquid refreshments from 1845.)

Wednesday 27 September

Guildford & District RSPB Group AGM. Adrian Thomas, RSPB South-East Regional Office: **"Climate Change"**. 1945. Onslow Village Hall, Wilderness Road, Guildford.

Wednesday 11 October

GEF Transport Group. Speaker to be arranged. 1900. Committee Room 1, Millmead Offices. (Liquid refreshments from 1830.)

Thursday 2 November

GEF Biodiversity/Waste/Energy Groups. Andy Marshall, Chairman, Surrey County Agricultural Society: **"Farming in Surrey – The Truth"**. 1900. Committee Room 2, Millmead Offices. (Liquid refreshments from 1830.)

Wednesday 22 November

Guildford Institute Wednesday Talks. John Bannister, Guildford Environmental Forum: **"Renewable Energy in Guildford"**. 1445 to 1545.

Wednesday 22 November

GEF Biodiversity Group. Simon Nobes, English Nature: **"Thursley Common. Its Importance and Future"**. 1900. Committee Room 2, Millmead Offices. (Liquid refreshments from 1845.)

Wednesday 24 January 2007

GEF Biodiversity Group. Adrian Bird, River Wey Trust: **"Wildlife and the Work of the River Wey Trust"**. 1900. Committee Room 1, Millmead Offices. (Liquid refreshments from 1845.)

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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 8 May 2006.

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