



GUILDFORD ENVIRONMENTAL FORUM

newsletter

JUNE 2006

There are between 300,000 and 400,000 badgers in Britain.

Up to 100,000 of them could be slaughtered if the cull proposed by Defra goes ahead.

PRO-CULL: The National Union of Farmers

ANTI-CULL: The Badger Trust, The Mammal Society, The National Trust, The Wildlife Trusts, The Woodland Trust and numerous other environmental organisations including Guildford Environmental Forum



Steve Jackson

OUR RESPONSE TO THE PROPOSED BADGER CULL

“Defra launched the consultation without any reference to the preliminary reports of the Krebs trial results. These clearly showed that the scientific evidence does not support any form of badger culling. Ministers must insist that action is based on sound science”

David Williams,
Chairman,
Badger Trust

GUILDFORD Environmental Forum commented briefly on the government consultation “Controlling the Spread of Bovine Tuberculosis in Cattle in High Incidence Areas in England: Badger Culling”. We supported the general position of the Badger Trust which has been widely publicised in the press. The Trust had advanced a number of sound reasons why the proposed cull would not only be ineffective but could also be counter-productive as well, of course, as being cruel.

The Forum felt that any response to the problem of bovine TB needs to address the welfare of wildlife as being at least as important as the protection of the farming industry. As the consultation acknowledges, the spread across the country is due to human activity rather than badgers. It is therefore obvious that human society rather than wildlife should ‘pay the price’ of addressing this problem, with pre-movement testing and continuing research on the vaccination of cattle and badgers.

The credibility of the culling proposals is undermined by, amongst other points, two comments in the consultation document. These are:

(1) *“It has not been determined to what extent cattle infected with bovine TB can infect badgers.”*

(2) *“At present, Defra does not propose to monitor the presence of disease in badgers. Post-mortem testing and culture of body parts does not justify the costs since, as the results of the RTA Survey showed, accurate determination of the local prevalence of disease in badgers is not straightforward.”*

This submission was sent early in March, and was acknowledged at the end of April. Defra says that it is taking much longer than expected to process the consultation as “47,474 responses were received during the consultation period” and it does not have a date for the publication of a report on the consultation responses.

Raymond Smith

WIND POWER: an essential part of the UK's future energy policy

PETER TAVNER, an electrical engineer and Professor of New & Renewable Energy at Durham University, addressed the Forum in April on the subject of "Wind Power – Is it practicable and how does it work?"

The audience was blown away by his enthusiasm for wind power being a part of the energy solution for the UK. "We are a windy country," Peter stated, "and that makes wind energy even more appropriate for the UK than for continental Europe, where it already makes a considerable contribution. Denmark has 3,000 turbines generating up to 30% of its electrical energy needs from wind, and in Germany 16,000 turbines generate up to 7% of its needs. We have the technology, it works; let's just get on and use it."

Professor Tavner showed us how the power output from wind turbines has increased alongside a growing understanding of the engineering factors involved. In particular, work in Denmark and Germany has led to significant improvements in reliability and performance. Current plans are for turbines which will have blade disc diameters larger than an A380 Airbus wingspan.

He acknowledged that wind power can only be a partial solution to the UK's electrical energy needs due to the variability in the prevailing wind, but pointed out that, in the UK, this was much less of a problem than people thought, due to the availability of an existing strong Electrical Grid. Capacity factors for offshore wind farms are proving to be similar to those of coal-fired power stations, and those for onshore not far behind.

For wind power generation to meet up to 15% of UK needs, what is needed are alternative power sources which are flexible enough to respond to times of low wind conditions, just as they do now to times of peak demand.



www.inl.gov

However, this is not seen as an insurmountable issue and plans are already in hand to double the current capacity of 1300MW from wind generation, requiring, in total, some 10,000 turbines.

Professor Tavner acknowledged that sensitivity was required in the placing of turbines. Offshore wind farms are more expensive to construct than onshore, but yield a higher output and do overcome such objections. However, he believed that the public would warm to wind energy generation when it considered alternatives such as more nuclear sites. He also believed that some concerns regarding wind energy, e.g. noise emissions and damage to bird life, were overstated.

Professor Tavner is also working with tidal energy but is less optimistic that this could play a significant role in meeting UK needs in the near future because of the extreme difficulty of dealing with the significant environmental impact of a large Tidal Scheme such as the Severn Barrage. He concluded by encouraging the Forum to work for a rapid expansion in the harnessing of wind power to meet future UK energy needs in an environmentally friendly way.

Graham Hibbert (Forum member)

THE NUCLEAR DEBATE

THE UNIVERSITY OF SURREY kicked off the first of a series of public debates on 3rd May with "Nuclear versus renewable energy - do we have a choice?" An expert panel including Jeremy Leggett, Michael Meacher, Professor Roland Clift, Dr Adrian Ball and two other nuclear professionals was chaired by Professor Jim Al-Khalili from UniS and took questions from the floor.

Electronic polling before and after the debate

resulted in the following shifts in opinion (percentages before/after):

1. Nuclear is the way to go – 23.1/23.6
2. I'm open to persuasion on nuclear 24.8/10.0
3. In favour of renewable energy 23.9/33.6
4. In favour of energy conservation 24.8/30.1
5. Climate change is not real and spending money on Kyoto targets is a complete waste 3.4/2.7

The answer is blowin' in the wind

Researchers at Stanford University have mapped 1,000 locations worldwide where the wind could power a turbine. They say that at these sites the wind power could generate 72,000,000,000,000 watts of electricity, supplying more than five times the Earth's energy needs.

(Source: BBC Focus, Sept 05)

On standby

The British pay £163 million every year for the electricity used in keeping their appliances on standby.

(Source: Earthmatters, Spring 06)

FACTS & FIGURES

Monopoly money

£1 out of every £3 spent on groceries in this country goes through Tesco's tills.

(Source: Earthmatters, Autumn 05)

Crazy paving

Britain's front gardens are being paved or concreted over at an alarming rate.

Research by the London Assembly reveals that in London alone, 12 square miles of front gardens have been turned into car parking.

(Source: The Garden, Nov 05)

You'd never know

The earwig has tiny wing cases housing a pair of beautiful, fragile, fan-shaped wings folded about 40 times to fit. They're seldom used.

(Source: BBC Wildlife, Aug 05)

FEED THE WORLD SAVE THE PLANET

by Julie Roxburgh

Our March newsletter featured four of the six topics covering the effects on the planet of current methods of food production. Here are the final two: 'Poisoning the planet' and 'The cost to animals of factory farming'.

POISONING THE PLANET

through intensive livestock production

Water pollution

The huge increase in the global population of farm animals is not only putting a great strain upon water resources, it is also polluting water supplies. An estimated 13 billion tons of waste is produced by livestock every year, causing problems of how it is to be dealt with. A comment in the *UK Meat Trades Journal* states, "The list of companies which have been prosecuted by the National Rivers Authority for pollution offences reads like a *Who's Who of the meat and food industry*". Liquid slurry oozes into water-courses and waterways. The excess nitrogen and phosphorus levels it contains can ruin groundwater quality and damage aquatic and wetland ecosystems. Roughly 70 to 80% of dietary nitrogen fed to cattle, pigs and laying hens and 60% fed to broiler chickens is excreted.

Dairy farming produces silage effluent, slurry and dirty water from washing yards and parlours. UK government figures state that dairy cows produce an average of 57 litres of excreta every day and use 18 to 35 litres of cleaning water. Liquid waste from dairy farms is 100 times more polluting than human sewage.

Claims by the poultry industry that UK poultry house litter is an environmentally-friendly product ignore the fact that poultry litter is responsible for nitrate, phosphate and pathogen pollution of both ground and surface water.

In the US, North Carolina's intensive pig farming has resulted in massive fish deaths from oxygen depletion caused by pollution, and an increase in human illnesses. This is now being repeated on a smaller scale in other areas of the world. In the Netherlands the government had to reduce pig production by 25%.

In Brazil, 92% of surface water in the western part of Santa Catarina is said to be contaminated by intensive pig production. According to the World Bank, "A rough estimate indicates that 100,000 square kilometres in the developing world are threatened

by severe nutrient loading causing eutrophication (nutrition) of waterways and subsequent damage to ecosystems".

Land pollution and livestock farming

Similar pollution problems are affecting soil conditions. High quantities of nutrient-rich manure (because of high protein feed) cannot be safely absorbed in limited areas. Leaching of the effluent is also damaging the soil.

A further problem of animal waste is air pollution; the high ammonia content is a significant cause of acid rain and the destruction of habitats. Greenhouse gases produced by animals are a major contributor to global warming. These include nitrous oxide, carbon dioxide and methane. Although all food production which uses energy from fossil fuels releases some CO₂ into the atmosphere, the amounts released differ significantly. To produce one calorie of protein from soyabeans takes an estimated two calories of fossil fuel, compared with three to produce a calorie of corn or wheat. Beef takes 54 calories of fuel to make 1 calorie of protein. Worldwide, animal manure is responsible for 15-20% of annual methane emission, 7% of nitrous oxide and 10% of total greenhouse gases.

The effects of overgrazing

Once the limits of even environmentally sustainable production are exceeded, the effects are severely detrimental. Between 1947 and 1980 some 20% of the UK's natural heather was destroyed by sheep, along with much of the natural oak and alder in the upper reaches of rivers. This caused banks to collapse, streams to widen and gravel to be washed down by floods, destroying the spawning ground of salmon and trout.

Increasing numbers of sheep have also resulted in the ploughing and draining of large tracts of what was unspoiled land and hedgerows. Intense dairy farming has added to this. At one of the Three Peaks in Yorkshire, Friends of the Earth have described the heavily subsidised overstocking of sheep as an “*ecological disaster*” that has resulted in the loss of several rare plant species.

Severe problems of soil compaction, erosion and decreased soil fertility are being experienced in many cattle-ranching areas, including the American West, Central and South America, Australia and sub-Saharan Africa. The UN Environmental Programme has estimated that 20% of the world’s grazing lands have been significantly degraded since 1945, and the pace of destruction is increasing.



because of pollution and destruction of estuaries, mangroves, wetlands and other fish habitats. Diminishing of fish reserves is happening in many oceans of the world and intensive fish farming causes pollution from wastes, excess feed and chemicals.

Soluble wastes can raise levels of nitrates, phosphates and other nitrogenous chemicals, which can lead to toxic algae blooms and deaths of marine life.

Impact on biodiversity

Due to the attempt to increase food production, habitats rich in wildlife are being eroded. According to the Campaign to Protect Rural England, between 1992 and 1999 England lost an area of grassland the size of Bedfordshire. The main causes are

intensive dairy farming and crops grown for animal feed. Since the second World War the UK has lost most of its wildlife-rich meadows, one half of heathland, lowland fens and valley and basin mires and one third to one half of ancient woodlands and hedgerows.

Increased use of fertilisers and drainage have contributed to losses of species diversity. In the American West, species being put on the endangered list include fish, songbirds, ducks, deer, insects, molluscs and crustaceans. Worldwide, about 200 million hectares of tropical forest have been lost since the 1960s, much cleared for cropland and grazing. The Brazilian soya crop grown for animal feed has caused devastation of the ecosystem of the Cerrados plateau. Vast areas of forest containing valuable species have disappeared, soil eroded and intensive chemical farming has led to the growth of pests and disease.

In the period 1981 to 1994, soya beans took over immense tracts of Brazilian land, but consumption by the local population almost halved. Whitefly pest has seriously undermined traditional areas which once grew beans for human consumption. The epidemic has been blamed on the huge soyabean feed cultivation. According to Brazil’s National Institute for Space Research, in the year up to August 2002, 25,500 square kilometres of rainforest – roughly the size of Belgium – was destroyed. This is a 40% increase over the previous year. The main reason is soyabean feed, mostly for export.

Deforestation and degradation will be the inevitable outcome of any further significant increases in the number of grazing animals, leading to habitat loss, a rise in carbon emissions and a growing threat of drought, since the forests play a crucial role in regulating rainfall.

Overgrazing, particularly of beef cattle, is a leading cause of desertification, where the land is no longer capable of sustaining food production. This affects about 50 million acres of the world’s available agricultural land annually. In 17 Western US states, 3.2 million cattle are grazed on public lands covering 254 million acres. A local newspaper investigation in 1999 said “*The lifeblood of the arid West, streams, make up only 1% of the acreage in the 11 Westernmost states. Yet scientists say at least 70% of wildlife there depends on them for survival . . . Largely because of cattle, only 36% of streams surveyed by the Bureau of Land Management on its public lands in the Lower 48 states are classified as ‘proper functioning’ or healthy . . . Severely overgrazed streams have trampled banks and little vegetation. Murky, warm water is choked with sediment, algae and manure.*”

Comparable desertification is also occurring in many poor areas of the world. The larger numbers of livestock – subsidised by feed concentrates from the richer countries – are degrading grazing in many areas including “*the semi-arid Sahel, West Asia and North Africa and the Southern Cone of the Americas.*”

The pattern of drought caused by the failure of rainy seasons and other natural disasters is likely to accelerate. The Australian drought of 2002 threatened to reduce the annual grain harvest by 40%. Global warming and overgrazing simply add to the extremes of human famine.

Pollution of overfishing

Although fish is the main source of animal protein for approximately 1 million people (WHO, 2003) the capacity for increased food production from the seas is limited, not only through depleted stocks, but also

due to factory farming

Animal welfare can no longer be ignored

Under the original Treaty of Rome, farm animals were classified as 'agricultural products.' They had no more legal protection than cabbages or cauliflowers. In 1988, Compassion In World Farming (CIWF) launched a campaign to win greater protection for live animals by improving their status. By 1997, the EU's 15 heads of government had agreed to the main principle of CIWF's demands. Following a petition signed by more than one million citizens, a protocol was introduced which recognised animals as 'sentient beings'.

Sadly, industrialised farming, on the present scale, rules out any possibility of care or respect for individuality.

The poultry industry

The total number of broiler chickens (meat chickens) killed in the UK in 2002 was over 800 million, with 99% factory farmed. Worldwide, the figure is rising above 46 billion per annum. A broiler shed can contain up to 40,000 birds, bred to grow at a rate faster than their legs can support them, and lameness and other health problems are common. Birds often squat in litter to relieve the pressure on their limbs, causing hock burns through contact with excrement high in levels of ammonia.

Fed on high-energy cereal grains, they reach slaughter weight of 2-2.5 kg in only 41 days. In the early 1960s, it took more than twice as long – 84 days – for them to reach the same weight. Mortality rates (those who die before six weeks old) stand at about 6% (48 million pa in the UK alone). At slaughter, they are grabbed by the legs and suffer injury and death in transport. Neither stunning, as they move upside down on a conveyer belt, nor throat-cutting is efficient and the birds often enter the scalding tank alive.

A typical battery cage shed (egg-laying birds) can



www.ciwf.org.uk

hold as many as 70,000 caged birds. Broken bones through lack of exercise, aggression due to the confined space where they are unable to follow their natural instincts, painful debeaking and the killing

of male chicks, often by mechanical destruction in a mincing machine – all these are part of the system. In the US the chicks are mainly killed by a vacuum system, making it *"impossible to assess exactly when the chicks were killed"*.

The hens are kept in a narrow wire cage and confined from the time they begin to lay eggs regularly, at about five months of age, to the time after one or two years that their productivity drops to the point that they are no longer considered economic. They are then taken away for slaughter.

Pigs

More than half of the 13 million breeding sows in the EU are still kept in confinement stalls, unable to turn round or lie down properly during pregnancy. Although banned in the UK, these stalls are becoming the norm in the rest of the world. Pigs suffer injury and stress, and the bare concrete and slatted floors in the stalls cause lameness. Lack of social contact or the ability to fulfil natural instincts cause stereotypical behaviour: biting the bars of their crate, weaving their heads or rolling their tongues because the need for exercise and stimulation is not granted to them.

Piglets are taken from the mother at 3-4 weeks old. Sows produce 5 litters in two years and are then slaughtered for meat. Because the piglets are weaned early, failure to receive the sow's colostrums and early milk for the full first six weeks of life leaves them susceptible to infection. The pig industry tries to compensate for this by giving them a whole raft of drugs, including antibiotics, probiotics and gut-acidifying agents.

The impoverished conditions can lead to fighting and tail-biting. Mutilations such as teeth clipping and tail docking are routinely practised to reduce damage. Males grown to heavier weights are often castrated. All these procedures are normally practised without anaesthetic, causing pain. As with most species of farmed animal, pigs are bred for rapid weight gain and as a result are prone to leg and heart problems.

According to the EU's Scientific Veterinary Committee: "Selection for large muscle blocks and fast growth has led to leg problems, cardiovascular inadequacy during periods of high metabolism and increased risk of mortality and poor welfare during handling and transport". Globally, 1.2 billion pigs are slaughtered for meat every year.

Dairy cattle

These are reared in a similar way to pigs. Cows suffer lameness and milk fever, and calving problems are now rife. In the UK, studies have shown that 50% of dairy cows suffer from foot or leg problems and 35-40% from mastitis. Again, cows and calves are



www.civf.org.uk

separated at a very early stage, causing an emotionally painful separation for both mother and young.

The pressure put on the cow to give more milk means that she is often worn out after two to four pregnancies and is then sent for slaughter, the meat going into products such as pies or hamburgers. A cow's natural lifespan is about 20 years.

As with piglets, calves are susceptible to disease and pneumonia is common.

Beef

In the UK, about 50% of beef comes from the calves of dairy cows. Most are reared intensively in buildings and yards. They rarely graze but are given a high-

energy cereal diet. In the US, thousands of cattle are confined and fed almost entirely on grain. This is in addition to those cattle reared in the felled rain forests, but the factory method is spreading to Australia, Brazil, China, India and the Philippines.

Sheep

Sheep in upland areas are often left to roam and many get foot-rot. Lambs dying from cold, exposure and starvation are estimated at 3-4 million pa in the UK alone. Even though the industry has been heavily subsidised in the EU under the Common Agricultural Policy, sheep reared on hills and uplands have low monetary value. Ewes now produce twins and even triplets through selective breeding etc. On lowland farms animals may be crowded into sheds. The idea is to produce three lamb 'crops' every two years.

Other animals

Turkeys, ducks and rabbits are all intensively farmed. They experience injuries and suffering during transport, at markets and at time of slaughter. A further worry is the obsession with genetically modified animals, the process often causing huge suffering and premature death.

With thanks to Compassion in World Farming for allowing me to use extracts from their excellent report: 'The Global Benefits of Eating Less Meat', compiled and written by Mark Gold, foreword by Jonathon Porritt, 2004.

A list of data sources is available from Julie Roxburgh – phone 01483 282995 or e-mail springside@connectfree.co.uk

EDITOR'S NOTE

This article, and the one preceding, is a litany of horrors that makes one ashamed to be a member of the human race. We know that Julie has researched all the facts thoroughly, and that everything she states is accredited.

I want to say here what Julie has omitted: that there are many, many farmers in this country who equally abhor the practices she has outlined, and who treat their animals, and their land, with great respect. I believe that, with continued pressure from groups such as Compassion in World Farming, the Soil Association, and the Wildlife Trusts (who liaise with farmers via the Farming & Wildlife Advisory Groups), the number of enlightened farmers and food producers here will steadily grow until intensive farming of all kinds becomes a thing of the past.

And of course the most potent vehicle for change is the public. We must refuse to condone woeful farming methods by not purchasing the resulting produce.

It's clear that for all-round benefit we should rely on produce from local small-scale farms, that follow best practice. Yet we realise that such farms struggle to make a profit: in Surrey, we are told, the biggest 10% of farms average only 150 hectares, and last year earned only £50 per hectare before costing in the labour involved.

To fill us in on the current state of Surrey's farming, the Forum has invited Andy Marshall, chairman of the Surrey County Agricultural Society, to speak to us later this year.

Clare Windsor



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Birds before buildings



Nightjar

www.rspb.org.uk

Raymond Smith looks at the impact of recent wildlife policy changes on future house building in Guildford

FOR ONCE the needs of wildlife have had a very direct impact on our Town Planning process. The combination of the designation of the Thames Basin Heaths as a Special Protection Area (SPA) combined with a vital judgement in the European Court has brought a freeze on new grants of planning permission for dwellings in the town of

Guildford, and many other parts of west Surrey and nearby Hampshire and Berkshire. Although the implications are still being worked out, the fallout from this policy change may not be as beneficial to wildlife as it should be, however.

The importance in policy terms of the Thames Basin Heaths is

that they contain more than 1% of the GB population of three birds, the Nightjar *Caprimulgus europaeus*, the Woodlark *Lullula arborea* and Dartford Warbler *Sylvia undata*. In the case of the Dartford Warblers nearly 28% of the British population of the species resides in this area.

The creation of SPAs has been a long drawn out process, resulting from the Birds Directive and the Conservation (Natural Habitats &c.) Regulations 1994. The building of more homes poses problem for the SPAs as they generate

more visitors to the site, especially dog walkers, which disturb the birds. By the middle of 2005, English Nature was consulting on the creation of a 'Delivery Plan' that would set out the way that development would either be stopped, have

its effects on the heathland mitigated, or be redirected.

Last Autumn, however, came a European Court ruling that the UK must do more to control the impact of development on SPAs. In essence, local authorities now have to be able to demonstrate that a development would not have any impact on the SPAs. Currently they do not feel that it would be possible to prove this, without providing mitigatory measures.

The expectation now is that in the zone closest to an SPA, up to 0.4 km, there will be no new development permitted. Beyond that, up to a radius of 5 km mitigatory measures will be needed – the provision of alternative open space to relieve pressure on the SPA. Even if it is clear that developers rather than local councils have to pay for the land that would become open space, there would still be a question of how it would be administered in the future.

Most of the publicity around SPAs has concentrated on the consternation that has been caused amongst planners, developers and estate agents. Whitmoor Common is the main piece of the Thames Basin Heaths that has an impact on Guildford. Its buffer zone reaches across the centre of the town as far as the A3/Hogs Back interchange, sweeping just north of the Chantryes and round to West Clandon. Other parts of the SPA have buffer zones to the west and north-east of this.

The very real potential benefits have tended to be overlooked, however, although Guildford Environmental Forum (GEF) has stated that "Whilst it is recognised that the alteration of the regulatory situation with regard to SPAs is a challenging one, in terms of meeting the Borough's targets for new dwellings, the Group welcomes this change. It entails some very valuable recognition being made of the impact of human populations on wildlife habitat."

But there are the potential threats, on



Woodlark



Dartford warbler

www.birder.pwp.blueyonder.co.uk

www.raywilsonbirdphotography.co.uk

which the Forum has also commented. Rather than having new alternative open spaces, the possibility is also being discussed of simply upgrading the 'facilities' at existing public open spaces: more parking spaces, picnic tables, etc. These would inevitably increase the disturbance of wildlife at these sites. Whilst it may comply with the letter of current legislation, it certainly works against its spirit. GEF does not feel that *"it would be acceptable to pursue accessibility at the expense of existing wildlife habitat on those sites, even if the sites do not have any recognised nature designation. Especially in view of the general lack of commercial interest in agriculture at present, we feel that open spaces should be created from agricultural land and that they should also be managed to create valuable wildlife habitats, which are also likely to be attractive to most recreational users."*

An additional complication is Guildford Borough Council's proposal to sell Tyting Farm. GEF has said that *"the farm should remain as countryside in the hands of the people of Guildford. There are obvious risks that the proposed sale has a potential for adverse effects on wildlife."* In addition we have argued that it would be *"fundamentally unbusinesslike, and poor value for money, to sell off an asset at precisely the*

moment when a growing need for it can be seen in the future. A far better approach would be to manage the farm for wildlife, combining this with a rolling programme of release as public open space to compensate for the impacts of new dwellings in the town centre."

Against this proposal it has been suggested that the impact of new facilities (parking, etc) would be unacceptable, but it is not immediately obvious that the facilities should be any greater than those already existing at Whitmoor Common. There is also a renewed interest in the possibility of Surrey Wildlife Trust taking over Tyting Farm, and this may prove to be a viable alternative.

The situation is still very much unresolved. The Council is intending to issue a Supplementary Planning Document in July as part of its Local Development Framework, which would be based on the English Nature 'Delivery Plan'. Meanwhile, the South East Regional Assembly in combination with the 'Office of the Deputy Prime Minister' (as it was) and English Nature have commissioned "Land Use Consultants to investigate options to provide extra recreational space for new homes close to the SPA to reduce pressure on bird habitats" in order to "clear the planning gridlock". This work should be completed by the end of July.

City life

London would need a land mass the size of Spain to support itself sustainably.

(Source: WWF News, Summer 05)

FACTS & FIGURES

Let's twist again

Of plants that have a twining habit, 90% coil anti-clockwise and 10% clockwise. These figures mirror the proportions of right- and left-handers among humans. (A few species, such as woody nightshade, twine in either direction.)

(Source: BBC Wildlife, Jan 06)

OyezStraker Business Supermarket, here in Guildford, now stocks a wide range of recycled products.

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OyezStraker Business Supermarket

thereby cutting down on the miles travelled between manufacturer and retailer.

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Toxic build-up in the Arctic

The Arctic now has higher concentrations of toxic chemicals than in many of the countries that produced them. Trapped in ice, often for decades, chemicals ranging from DDT to flame retardants are re-released during melting periods. They are building up in Arctic fish, seal and whale populations, and are already affecting the immune, hormone and reproductive systems of polar bears.

(Source: WWF News, Summer 05)

Yellow buses

Sixty cars taking a child each on the average school run of 2.7 miles will produce 44,300g of CO₂. Transporting 60 children on a yellow school bus produces around 2,600g. In Surrey, Runnymede has introduced seven yellow buses, serving four schools – 280,000 rush-hour car journeys will have been saved in this school year. Costs are partly met by sponsorship from local businesses.

(Source: The Independent, 29 Apr 06)

FACTS & FIGURES

Wedding presents

For many of today's couples, traditional wedding gifts are redundant. Charity wedding lists allow guests to contribute money in the couple's name to the charity of their choice. Find out more at www.weddinglistgiving.com

(Source: WWF Action, Oct 05)

Spring arrives



THE FIRST REAL day of Spring for me is when the Brimstone appears in the garden. Always the boldest and bravest butterfly, it emerges on the first warm, sunny day in search of nectar having awakened from its winter hideout. The floating flutter of sulphur gives joy like nothing else.

March and early April were cold this year but on 5th April the sun shone after an overnight frost and Brimstone, Peacock, ladybirds and bees awakened to charm us with transitory beauty. Though ephemeral, the Brimstone is actually the longest lived of all British butterflies, surviving from August to the following May. It shares this longevity with the Small Tortoiseshell and its relations the Peacock and the Comma, but all other butterflies live fleeting lives of at most 20 days.

On the following day a Comma appeared on the tight purple flowers of Daphne and then two spiralled in a love dance over the plant a week later. Chalk Hill Blues, Orange Tip, Speckled Woods and Whites followed as the days slowly warmed.

On Greenland's (not-so-frozen?) wastes

SIX ADVENTUROUS young people have braved two weeks of Greenland's ice in order to become ambassadors to fight climate change. One of them is Ben Richards, aged 24, from Guildford. Ben is an active member of Guildford & Godalming Friends of the Earth and well known to some of us in the Forum.

The other five are from different parts of the UK and all have won a 6-month training place with Ben & Jerry's Climate Change College. Ben & Jerry's are the well known US organic ice cream makers, and have set up the project together with Dutch polar explorer Marc Cornelissen and the World Wildlife Fund. Regular blogs from Greenland have kept the world informed on what they have been up to on the ice. Apart from real work it is mostly basic survival at -15°C in the day and -25°C at night, and digging toilet pits and then balancing on skis when using them!

Before embarking for Greenland, Dr Andrew Shepherds from the Scott Polar Institute at Cambridge University told them about data collected from tide gauges and satellite measurements. Since 1900 sea levels have risen 15cm and scientists predict a further rise of 50cm by 2100. The biggest cause of sea level rise is expected to come from thermal expansion due to rising sea temperatures. If

global warming is allowed to continue and we pass certain 'tipping points', there is the potential in Antarctic ice alone for a 10m rise in sea level over the next few centuries.

With their first-hand experience, these young ambassadors will be beating a path in earnest to the door of our elected decision-makers looking for real action.

How to save water

WATER RESERVOIRS in the south-east are dangerously low after two winters of less than average rainfall, and further water restrictions are likely to be imposed.

The vast majority of our wonderful water never enters our gut. It's used for watering the garden, washing things and flushing the loo: approximately a third goes down the loo.

So here's a simple idea that has worked well for me for the last five years.

Tie up the ballcock in your loo cistern to shut off the mains

water. Keep a large jug in the loo and a plastic yoghurt pot. Use a plug whenever you use the handbasin and ditto with the bath. Transfer your 'grey water' from the handbasin and bath into the jug using the yoghurt pot. Fill the cistern with the grey water to flush the loo. When there isn't any grey water to hand, nip down to the garden and fill the jug from the water butt. Hey presto! Your water consumption drops by 33%.

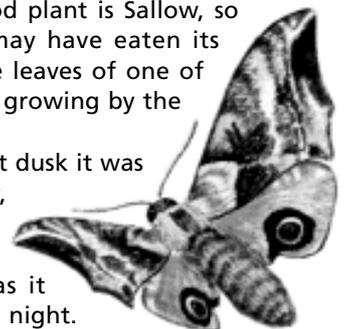
OK, if the children are playing up and the dinner's burning, leave it until later or train the children to use grey water. Or, as a last resort, pay to fit an automatic rain/grey water system. Try to love mains water for the precious gift that it is.

A beautiful moth

A FREAK ENCOUNTER in May took me right back to my boyhood on Wimbledon Common, where I developed a fascination for hawk moths and their caterpillars. Tucked under the stonework on the Town Bridge was a freshly emerged Eyed Hawk-moth. I was able to gently pick it up and carry it to safety.

The 'eyes' that give this Hawk-moth its name are on the hind wings and the moth lifts its main wings to flash its eyes if disturbed. Growing to 8cm, this is an impressive creature. Its food plant is Sallow, so the caterpillar may have eaten its way through the leaves of one of the Willow trees growing by the bridge.

The next day at dusk it was preparing to fly, possibly for the first time. I wished it well as it took off into the night.



GOOD NEWS



compiled by John Bannister

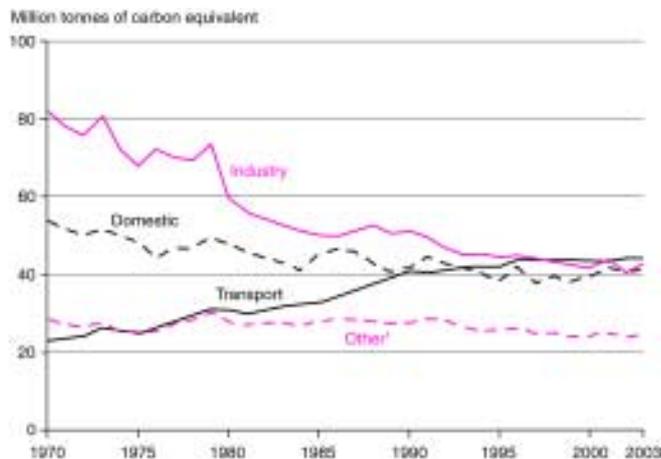
Too much travel

I HAVE JUST finished reading Jared Diamond's *Collapse*. He tells in depressing detail of the collapse of whole societies like Greenland and Easter Island. People failed to change their habits or their culture and, as a result, having ruined an often fragile environment, they just died out.

Looking at Britain's love of transport is like reading the introductory chapter to a similar horrid saga. In fact it is probably more horrid, because instead of keeping our values at a constant level that is out of tune with our future survival, we are actually increasing our bad habits.

Using *Social Trends 2006* to look at carbon dioxide emissions, industry has done well, with a 48% reduction between 1970 and 2003. Of course, much of this was exported elsewhere as we cut back our manufacturing and outsourced more factory work. Emissions by domestic users have been reduced by 24% since 1970, but this has been offset by transport emissions which have grown by 89%; this sector is now the main producer of CO₂ emissions.

Carbon dioxide emissions, United Kingdom: by end user



1 Includes commercial and public sector, agriculture, and military ships and aircraft.

Source: National Environmental Technology Centre

To make matters worse, this does not include emissions from international aviation and shipping. EU emissions from international flights grew by 73% from 1990 to 2003. This increase could widen to 150% by 2012 unless action is taken. Such growth would cancel out more than a quarter of the 8% reduction in total greenhouse gas emissions that the Kyoto Protocol requires the EU-15 to achieve between 1990 and 2012.

Within Great Britain, distance covered per person per year has risen by a factor of nearly three between 1961 and 2003. Domestic air travel grew the most, by nearly ten times. However, the most miles are actually done in the car, the commonest mode of transport. The growth of miles done by car, taxi and van has risen by a factor of four, most occurring in the 1960s and 1980s with a steady rise in the 1990s.

Looking at car trips per person per year, 28% are done for commuting or business, 23% for leisure, 20% for shopping and 1% for education/escort. Nationally, more children get to school on foot – which is comforting – but car use for 5 to 11 year-olds has gone up from 27% in 1989/91 to 41% in 2004, with averages of 2.1 to 2.7 kms. For 11

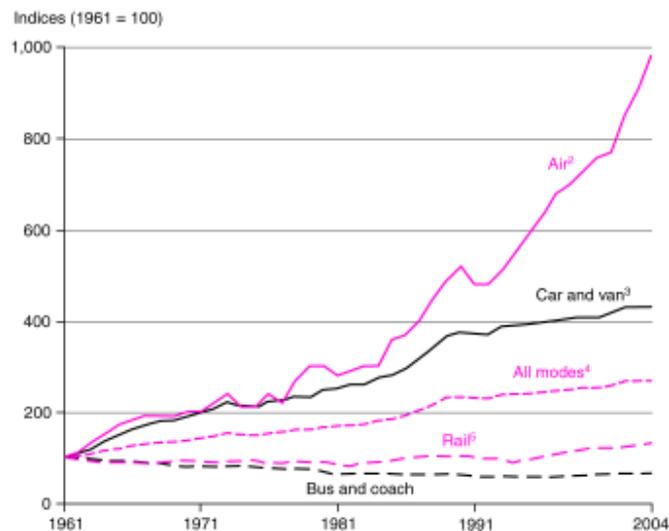
to 16 year-olds, the figures are up from 14% to 22% and from 4.5 to 4.7 kms.

For international travel more people are travelling more miles by air. They tend to go further, each trip being on average 1.5 times further between 1991 and 2004. Generally though, people are flying more trips rather than necessarily going on longer ones. Cheap flights are changing geography (exactly what Easyjet's Stelios planned to do) as people are now sending their children to boarding schools abroad and investing in properties in southern and eastern Europe. Gone is the stag party or hen night in the local pub: now it's a weekend in Amsterdam or Barcelona or even New York. Of course, there is the odd refreshing exception; my son spent a stag weekend sleeping and cavorting in costume in the local woods.

Expenditure on transport is the biggest single item in the household budget. In 2004/5, total average weekly expenditure per household was £432.90, of which £72 (17%) went on transport.

Sad to say, Surrey tends to have a worse performance. We top the country in terms of average flights per person per year at a figure of 2.9, according to a 2003 teletext.co.uk survey. In Guildford Borough, 58% of people in employment travel to work by car, the figure being 55% nationally. However, we have quite a high proportion who walk to work and we make greater use of trains.

Passenger kilometres, Great Britain: by mode¹



1 Road transport data from 1993 onwards are not directly comparable with earlier years.

2 Includes Northern Ireland, Channel Islands and Isle of Man.

3 Includes taxis.

4 Includes motorcycles and bicycles.

5 Data relate to financial years.

Source: Department for Transport

Cheap air travel has been a recent revolution, driven by deregulation in the airline industry and by the entrepreneurial genius of Easyjet and Ryanair in packaging a low cost, no-frills service to an appreciative public. Like driving a car, flying is fast becoming an entrenched habit not easy to break. The industry is one of the biggest spenders on public relations and is strong on lobbying.

Changes would need international action and this is not easily achieved. As an individual you can change your habits, and fight through pressure groups like Friends of the Earth. I think the only real solution will come from increasing oil prices.

Barbara Edwards (Forum member)

Save the Stonehenge landscape

by Sally Crundwell

*Parks & Countryside Events
and Booking Officer,
Guildford Borough Council*

AS SOMEONE who regularly drives from Guildford to Cornwall via the A303, I have enjoyed the breathtaking views of Stonehenge from the current road. As you drive up and over a hill, suddenly an expanse of undulating grassland stretches on all sides underneath a wide unobstructed sky in a landscape stretching as far as the eye can see. To the right, a circle of stones nestles in the curve of the hills, a mysterious reminder of prehistoric times, surrounded by chalk downland.

During the summer months, the traffic is almost at a standstill and there is plenty of time to watch the hundreds of visitors walking around the stones, studying one of Great Britain's most famous tourist attractions. During winter, the traffic speeds along but the slow pace of the visitors continues, fascinated by the mystery of the stones.

I am glad to have had this view, but it is a view from the cocoon of a modern car. The view from Stonehenge of streams of cars is not so great, nor is the noise. It's clear that such a busy road, running less than 200 metres from an internationally recognised World Heritage site, with the associated noise and visual impact, along with disturbance to the chalk downland setting, must be improved.

For the last 15 years, the Government has been investigating the options for improving the A303. English Heritage and the National Trust have proposed a 2km cut and cover tunnel, seen by the Department of Transport and the Department for Culture, Media and Sport as the first example of an "exceptional environmental scheme". The plan was later adapted to a 2.1km bored tunnel. There are also proposals for a visitor centre and the return of farmland to pasture around the monument.

Sadly, increased costs for the project have led to other options for routes to the north or south, with a

series of bypasses. Although cheaper options, as these do not involve any form of tunnelling, both are environmentally damaging.

The south route puts a new dual carriageway straight through the Normantons Down reserve, across the breeding site used annually by stone-curlews. The RSPB is convinced that if this option goes ahead, the construction and continued disruption from traffic will see the stone-curlews permanently disappear. The north route over Salisbury Plain passes through an area where stone-curlews have bred in the past. Again, this route will cut through the landscape, permanently disturbing the biodiversity of the area.

The more expensive tunnel option would allow areas of chalk downland in the north and south to be connected via the creation of new grassland above the tunnel. This habitat restoration, combined with support from local landowners, would go a long way towards ensuring the success of the stone-curlews into the future and improving the surrounding habitats.

How sad it is that such a famous and important site set in a significant wildlife habitat could fall victim to short-term financial gains. If we can't spend the necessary extra money to protect the environment at the most famous prehistoric site in Britain, then what hope for all our other landmarks and important habitats at less famous sites? Of course, cost is a factor in any 'improvement' scheme, but the potential environmental damage of these road options will be permanent, not just a short-term cost to the taxpayer. There will be long-term damage to the landscape, to wildlife, to birds, to flowers, to butterflies and insects, and to the people who live in and visit the area.

In exchange for the awesome view

of Stonehenge from my car, I hope I won't soon be viewing a landscape carved in two and valuable habitats damaged for good.

You can have your say by voting for the tunnel option by going online at, <http://www.highways.gov.uk/roads/projects/8098.aspx>

Relative Reflections

by Michael Tanner

Rain has swept night away.
Across the wide blue yonder
jets drag their snail trails
to somewhere safer
under the world's rim,

But snails
no more frangible than jets
have kinder spots to hide
observe advantages of scale
against fragility of shell.

You must agree
size makes for
differing ambitions.

Still, that leaves one
wondering just where
a fast-track virus
might fit in.





CALENDAR



Trudy Thompson's visit to green roofs in London has had to be postponed until late summer. Members will receive details when arrangements are finalised.

Thursday 22 June

GEF Annual General Meeting. Maria Adebawale, Founder and Director of Capacity Global: **"Environmental Justice"**. Speaker at 1900. Business at 2000. The Guildford Institute, Ward Street. (Liquid refreshments from 1830.)

Monday 26 June

GEF Sustainable Energy Group. Andrew Smith, Strategies Development Manager, English Rural Housing Association: **"A Housing Approach to Sustainable Development"**. 1900. Committee Room 1, Millmead Offices. (Liquid refreshments from 1830.)

Thursday 29 June

GEF Transport Group. Andrew Edgar, MD Streetcar: **"Streetcar – An Example of a Successful Car Club"**. 1900. Committee Room 2, Millmead Offices. (Liquid refreshments from 1830.)

Wednesday 5 July

GEF Waste and Pollution Group. **General update and discussion on future work programme.** 1900. Committee Room 1, Millmead Offices. (Liquid refreshments from 1830.)

Wednesday 19 July

GEF Biodiversity Group. Adam Owen, Guildford Borough Council: **"Chantry Wood and Peasmarsh – The Future"**. 1900. Committee Room 2, Millmead Offices. (Liquid refreshments from 1845.)

Wednesday 13 September

GEF Sustainable Energy Group. Sean Rendall, 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"**. 1900. Committee Room 1, Millmead Offices. (Liquid refreshments from 1845.)

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