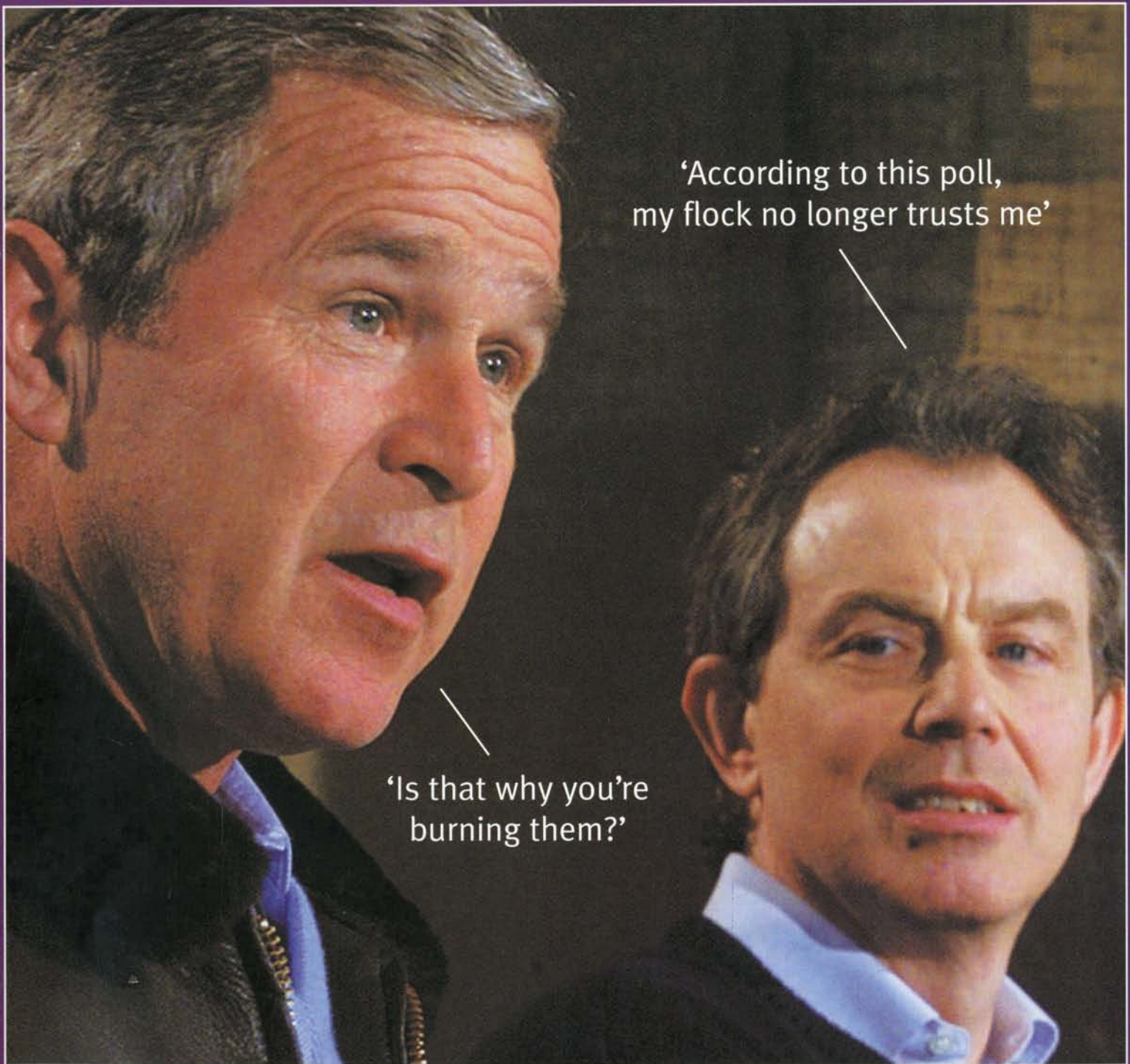


THE Ecologist

VOLUME 31 NO 4 £3.50

RETHINKING BASIC ASSUMPTIONS

MAY 2001



'According to this poll,
my flock no longer trusts me'

'Is that why you're
burning them?'

**The Great British
Environmental Survey, page 33**



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CHARLES SECRETT · COLIN HINES · GEORGE MONBIOT · JAY GRIFFITHS

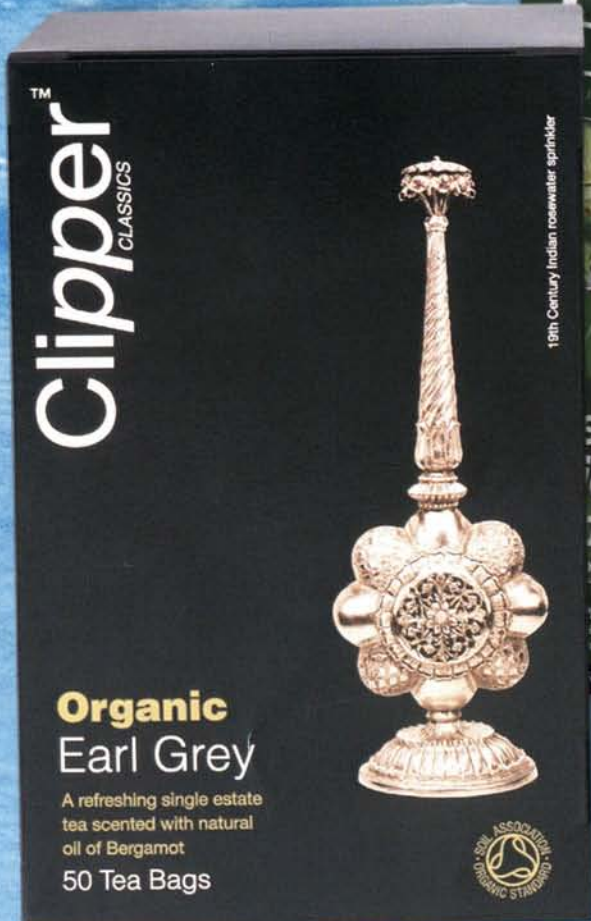
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WEEDING OUT THE TRUTH

Sometimes, what you don't do sticks in people's minds more than what you do. Two years on from 'Are the Experts Lying?', *The Ecologist's* 80-page indictment of what we called the cancer industry, the fact that we did not mention the role of tobacco is still the cause of regular correspondence. Why, people still ask, did we avoid what is in most peoples' minds the single greatest cause of cancer? One commentator has even suggested we were in the pay of the tobacco industry.

Smoking undoubtedly causes lung cancer. The link is long established, and only the tobacco industry itself would still deny the obvious. But because the link between smoking and lung cancer is so well established, it has become convenient for other industries to blame virtually every form of cancer on smoking. Sir Richard Doll for instance has said that cancer increases of late 'can be accounted for in all industrialised countries by the spread of cigarette smoking'. But of the dramatic rise in cancer incidences since 1950, 75 per cent have been in sites other than the lung. And among non-smokers, the incidence of lung cancer has more than doubled in the past few decades. What's more, studies have shown that Chinese smokers are less likely to contract lung cancer than their American counterparts. It is simply not true that smoking is solely responsible for the current cancer epidemic. In other words something else, on top of smoking is causing cancer of the lung. Yet the cancer establishment appears intent on avoiding an examination of those 'hidden' causes, instead flogging and flogging again the same old horse.

According to Dr Chris Busby of Green Audit, 'lung cancer correlates with air pollution generally. In a recent study of 104 wards around Hinkley Point nuclear power station the highest relative risks for lung cancer followed the tidal rivers, indicating that there's a strong component of radiation exposure from inhaled particles in the aetiology. These particles are looking more and more likely to be the culprits.'

What characterises modern society more than almost anything else is the level of contaminants surrounding us. There are more than 100,000 man-made chemicals in use today, of which barely a fraction have been tested, and not properly by any means. We surround ourselves with nuclear plants whose radioactive emissions are carcinogenic, despite claims by the industry to the contrary, and we persist in sending plutonium-powered satellites into space that, if an accident were to happen, would spray radioactive particles of Plutonium-238, hundreds of times more radioactive than plutonium used in atomic weapons, over the entire planet.

The cancer epidemic is caused by numerous factors. Smoking plays a very major role, but cannot account for all cases. In a sense, tobacco has become a scapegoat for all the other cancer-causing industries. It is a sacrificial lamb, but because of the nature of the industry it will not die. We all know smoking causes cancer, yet we continue to smoke. They are hopelessly addicted to nicotine, and the tobacco market is somewhat assured in the Western world (not to mention the Third World where markets are only now being prised open). The same however does not apply to producers of DDT, Dioxin, BGH and other known carcinogens. If the establishment finger were to point at them, all hell would break loose. People are neither addicted to them, nor do they benefit from their use. An honest campaign against such influences, at even half the level of the anti-smoking campaign, would trigger almighty ripples through fundamental modern sectors, not least the chemical, pharmaceutical, nuclear and plastic industries. In short, it would not pay for the establishment to play such a game.

Finally, campaigners have failed to distinguish between tobacco and the industry behind the plant. Yes, smoking causes cancer. But a quick look at some of the ingredients in a modern cigarette reveals some unpleasant truths. One organic tobacco company in New Mexico for instance provides a comparison between their own tobacco, whose ingredients include tobacco leaves and nothing else, and that tobacco marketed by the tobacco giants which commonly contains up to 600 different additives. Could it be that the latter varieties greatly increase the risk of smoking? Judging by the ingredient list, too long to include here, it seems more than likely.

In which case, the villain of the story may not be tobacco per se, but rather the monsters that have come to dominate the tobacco market. It is they who have corrupted the plant with countless additives, pesticides, and other man-made chemicals, not to mention their biotechnology plans.

And the result is that among the long list of the tobacco victims, we must include the traditional cultivators who have with great skill and difficulty maintained small tobacco patches on the same land for generations without depleting the soils and the smokers, who are not only poisoned needlessly by increasingly squalid tobacco, but whose personal freedom to smoke is undermined by a backlash that is unable to discriminate between good and bad.

ZAC GOLDSMITH



THE Ecologist *contents*

VOLUME 31 NO 4, MAY 2001



COVER FEATURE

Politicians always tell us that the environment is not a 'vote-winner'. Economists always tell us that people want more trade, more things to buy. But what do the people really think about the most pressing issues of the day? About global economics; transport; climate change; energy; farming; and politics itself? To find out, we commissioned a wide-ranging ICM opinion poll – **The Great British Environmental Survey**. The results may surprise you. They should certainly surprise our politicians. They reveal a public often at odds with the political class; interested in subjects that are rarely debated; and wanting something done. We hope our leaders will read it – and take serious note.

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Cover and above: Reuters and AP Photos

72%

OF THE BRITISH PUBLIC:

does not believe the government when it tells them something is safe

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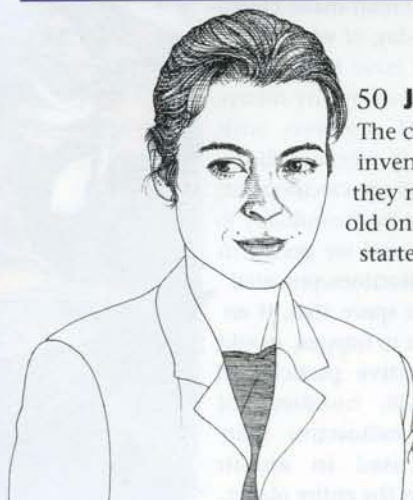
If you think your home is your castle, says Martin J Walker, think again; the average home, and the everyday products we buy for it, contain potentially fatal doses of toxic chemicals.

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CLARE INTENTIONS

On 2 February, Hugh Bayley MP sent to Clare Short MP a letter he had received from his constituent Guy Wallbanks, co-ordinator of York and Ryedale Friends of the Earth. Wallbanks' letter outlined his concerns about Brazil's development plans for the Amazon region (for further information, see *When forward is backward*, Vol 31 No 3). Did Short, of the Department for International Development, share his and our concerns? Read her reply below and judge for yourself.

We understand Mr Wallbank's concerns about the *Avança Brasil* programme, following recent press coverage. However, we believe that the deforestation projections, based on a model, should be treated with caution, as many factors have not been taken into account and past patterns of destruction may not, in this case, be a reliable guide to the future. Furthermore, the model does not account for the social and economic benefits which the Brazilians say the programme is designed to provide. We believe that sustainable development and conservation of global goods cannot be achieved without creating development opportunities for the 17 million people of the Amazon region, many of whom are desperately poor.

The *Avança Brasil* programme includes plans for investment in a range of sectors, including infrastructure, social development and natural resources management. We understand that the Ministry of Environment intends to conduct, in conjunction with the Ministry of Planning, a study of the environmental impacts of the programme for the Amazon region. This will be in addition to the environmental assessments legally required for specific projects under the programme. According to the Brazilian authorities, the overall investment target for 2000-2007 is US\$12 billion, not up to US\$40 billion as has been reported in

the press. Transport infrastructure accounts for less than US\$8 billion, all of which is for upgrading existing routes. No new roads are planned.

In recent years, the Brazilian Government has made real progress on development planning, participation and environment impact assessment. However, serious challenges remain and more needs to be done to ensure that development is sustainable, including improved enforcement of existing regulations. This will need political will and further capacity building for the Brazilian authorities responsible for development in the Amazon; supported, where appropriate, by the international community.

Through our bilateral co-operation programme, including the G7 Pilot Programme to Conserve the Brazilian Rain Forest, to which we have contributed £16 million to date, we aim to support sustainable development initiatives which respond to the development goals of Brazil and its people, particularly the poorest – and maintain environmental benefits. We do this though strengthening the capacity of Brazilian environment and development agencies, piloting new approaches to resource management with the active participation of poor people, and raising knowledge and awareness of the issues.

CLARE SHORT, MP London, UK

FISH FACTS

I very much enjoy reading your magazine but must take issue with the sensationalist reporting on Scotland's salmon-farming industry as 'the worst environmental catastrophe to hit the Western Highlands in recent history' (*Save Scotland's rivers*, Vol 30 No 7). The big publicity money slating this industry is more often than not coming from 'charitable' trusts funded by wealthy sporting fishermen such as the Bulmer Somerset Cider tycoons on the Isle of Lewis & Harris. It suits these southern grandees better to have an empty Highlands with a few sheep dotted around and plenty of sport at exorbitant prices which certainly cannot be afforded by the locals rather than have any kind of indigenous industries where natives can actually find work and stay to live in the country where they were born.

Other reasons for less salmon include Russian submarines breaking up and releasing radiation, industrial farming by Denmark for sand eels, and the proliferation of seals.

JOHN MACKENZIE Surrey, UK

Stephanie Roth, News and Campaigns editor replies: The issue is one of scale and one of recent history. Farmed production of Atlantic salmon in Scotland has grown from 500 tonnes in 1980 to 30,000 in 1990; jumping to 120,000 tonnes in 1998.

Visualise this within its limited environment and consider this: there were about 63,980 active salmon farms in northern Scotland in 1997. With an average life span of 15 years before allocated spaces are so polluted that they need to be relocated and with up to half a million fish crammed into cages on one single farm, fish farming on such an intensive scale has generated a host of infectious diseases, new diseases and the illegal use of chemicals to cosmetically combat these very effects.





Only last summer FoE Scotland exposed the illegal use of a highly toxic insecticide at a Scottish fish farm. Whilst the product's prescribed use is to control mites and lice on chicken and horses, the farmer, using it to treat sea-lice, pumped his cages with the insecticide until severe head shaking occurred in the fish pen; then he knew that treatment had to be aborted. This did not happen once or twice; sea-lice infestations are a regular pest. Farmers in trying to prevent and cure disease are equally treating their fish with antibiotics; SEPA's estimates for 1995 were at 10,000kg. Since micro-organisms are incredibly adaptive they don't take long before adapting to whatever new toxic cocktail is concocted – resulting in ever more clever but dangerous bacteria to fish. Put into perspective, one escaped Atlantic salmon caught in British Columbia contained bacteria resistant to 11 common medications, including penicillin. All the while, new diseases like furunculosis, infectious pancreatic necrosis and cardiomyopathy (CMS) are surfacing.

Only last year, CMS wiped out 60 per cent of a 27,000 stock of adult salmon in one single loch. The remainder was destroyed. As a result of Infectious Salmon Anaemia (ISA) in Scotland in May 1998, 400,000 fish were slaughtered and three quarters of all salmon farms were placed under quarantine. Barely a year later ISA was found on farms in Shetland, the Western Isles, Loch Roag and Orkney. Worse still, by then ISA appeared to have jumped the species barrier; it was detected on Scottish sea trout farms.

Farmed fish regularly and in increasing numbers escape into the wild where they interbreed, spread diseases to native species and dilute the natural gene pool. Within the first six months of last year, 400,000 farmed salmon escaped into Scotland's water where they already outnumber their wild cousins by 400 to one. You mention Russian nuclear submarines, Danish sand eel farming and seals as reasons for less salmon. There is no need to look as far as Russia: Sellafield & Co have a reputation to look after. Whilst you can embrace the effects of Danish sand eel farming, the figures presented above are just a few examples highlighting that the problem is serious and close to home. Whilst seals' appetites are a convenient excuse, human appetite is what's truly dangerous.

Finally you mention the interests of wealthy tycoons: whilst there are plenty of escaped farmed salmon to catch around picturesque lochs, foreign multinationals now control three-quarters of the 'Made in Scotland' salmon industry and in the absence of effective regulation they will continue to exploit these parts of your natural heritage.

CAST OFF

I was taken aback by the comments of Peter Jowers (*Fantasy Island*, Vol 31 No 2) concerning his so-called experiments in self-sufficiency during his handsomely rewarded 'sabbatical' on Taransay for the BBC Castaway 2000 programme.

Did he honestly think that his not-so-desperate existence on the island would eventually reward him, or the public, with any greater depth of knowledge on this subject than had already been offered into the public domain? The wind generator, animal husbandry, horticulture and biodigesting latrines are all old tech, however we may feel about their global availability and utilisation, so no pioneer points there. The proclaimed environmental ethos of this project was a green herring; a mere backdrop, opening the possibilities for mounting more of this questionably enlightening ecopop. Would not following such a development as re-establishing self-sustainable livelihoods on the Scottish islands be a more environmentally worthwhile pursuit to archive, than aping it for a year with massive funding and all home comforts, in the backyards of the genuinely distressed?

Perhaps what's most discomfiting is how this article qualified as copy worthy of publication in *The Ecologist*. My own opinion is that the whole flabby saga belongs in the popular media arena for which it was clearly created.

MICK MARLOW Gloucestershire, UK

EXPERT JUDGMENT

In your editorial (*Stung by the experts*, Vol 31 No 1), you state 'it is the nature of experts to be wrong on almost every issue they

address because there is no creature, human or otherwise, so determined and capable of missing what is obviously the truth'.

I have before me a large photo of Lewis Wolpert under the heading, *You have to believe in something* (*Daily Telegraph*, 24 January 2001).

He goes on to say: 'The world is not built on common sense; if an idea fits with common sense, scientifically it is bound to be false!' Well, my common sense tells me that Wolpert with such a belief as he has, deserves to fall into the depths of a deplorable depression and remain in it until common sense rescues him from it. This abandonment of common sense and reason is dangerous, particularly when scientists consider themselves to be the only persons fit enough to serve as jurymen in law courts.

DAVID MARTIN Manchester, UK

FARMING IDEAS

I was interested to read the debate (*Can small farms feed the world?* Vol 30 No 1) between Séan Rickard and Steven Gorelick. I do not know Mr Gorelick, but agree wholeheartedly with him. Séan Rickard is more familiar, he was chief economist with the National Farmers Union some 20 years ago when I was still active in the NFU. Séan was one of our chief speakers, using facts and figures to explain the harm caused by uncontrolled expansion. Today, big business is all-powerful. Séan seems no exception: his published views have changed completely. He is using facts and figures for his present argument that we need only 20 per cent of the farmers to produce 80 per cent of current production.

JC WHALEY Newcastle, UK

JUST A QUICK WORD...

SHOPPING FRENZY

Surely it cannot be the aim of GATS to not stop until 'foreigners think like Americans, act like Americans and – most of all – shop like Americans' (*The Last Frontier*, Vol 31 No 1). If everybody consumed at the rate the Americans do, there would soon be nothing left for the Americans to consume. So the aim must be to stop everybody else shopping like the Americans.

ANTJE SCUFFIL Leverkusen, Germany

APPLIANCE OF SCIENCE

I have a theory. When the last unhealthy cow, sheep, pig and goat in the land is shot and burned, and nature is held accountable for its inability to heal its own, we will be urged to turn, hands tied, to science for salvation. Welcome back, Dolly the Sheep, and her new found friends, Polly the Cow, Molly the Pig...

Perhaps we can guess now at how foot and mouth REALLY started...

MARY MACDONALD London, UK

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THE CLIMATE AM-BUSH

It's finally official – George Bush doesn't give a fig about climate change

Just months after taking office, President Bush has reversed his campaign pledge to regulate CO₂ emissions from power plants. Citing a US Energy Department study concluding that regulating CO₂ emissions would lead to significantly higher electricity prices – ‘harming consumers’ (unsurprising given the source of the study) – the US President decided to royally dump on us all.

‘Given the incomplete state of scientific knowledge of the causes of, and solutions to, global climate change and the lack of commercially available technologies for removing and storing CO₂,’ he wrote, he didn’t feel able to take any action whatsoever to reduce his country’s (the world’s biggest polluter, with 24 per cent of CO₂ emissions and just 4 per cent of world population) greenhouse gas emission. At all.

Barely a week later Bush pulled out, and killed the Kyoto treaty altogether.

At least Dubya’s cards are on the table. Expecting an oil patch president and deputy, and a like-minded Congress, to include CO₂ regulation or even the promotion of renewables was always naïve. Oil was what made President Bush rich; oil is what he believes in. Vice-president Cheney on the other hand, blatantly suggested that rather than a ‘seriously flawed’ Kyoto treaty to fight global warming: ‘If you really want to do something about CO₂ emissions then you ought to build nuclear power plants. They don’t emit any CO₂; they don’t emit any greenhouse gases.’ So who’s hiding behind whom? Whilst Bush doesn’t believe in global warming, Cheney does, in order to resurrect a nuclear

generation. It should come as no surprise that the young Bush administration has already relaxed standards on adding ethanol to gasoline, arsenic levels in



water, and overturned rules on surface mining. A plan for protecting 30 per cent of the remaining US national forests has been delayed, and Interior Secretary Gale Norton simply declared a couple of endangered species as ‘recovered’. She is also about to make a decision on the Arctic National Wildlife Refuge, thought to contain the largest reserve of oil and gas in the country.

As things now stand, Kyoto still is an option, and the EU and Japan should stick to their guns and finally implement the sort of changes they promised, as Bush has other, dangerous intentions.

YOU’VE BEEN WARMED

Sorry Dubya – it really is happening

Whilst our elected representatives are scrambling over how to effectively (and efficiently) but modestly limit amounts of greenhouse gases and whilst the elected representative of the world’s largest green-

house gas producer has had ‘a change of mind’, a scientific study conducted at the Imperial College of Science, Technology and Medicine in London has verified the earth’s warming. The scientists compared satellite data for a region over the Pacific Ocean and the entire globe to cal-

culate the differences in the levels of atmospheric methane, carbon dioxide, ozone and chlorofluorocarbons. ‘There has been quite a significant change over the past 30 years, particularly in methane,’ said Dr H Brindley, one of the scientists. Methane is one of the most powerful greenhouse gases emitted from disused mines and landfill sites.

According to Dr Harris who led the study: ‘The results presented here provide... the first experimental observation of changes of the Earth’s outgoing longwave radiation spectrum; therefore the greenhouse effect.’

A monthly roundup of George W Bush’s recent words of wisdom

‘I say things because I believe them’

D’OHBYA!

‘But the true threats to stability and peace are these nations that are not very transparent, that hide behind the—that don’t let people in to take a look and see what they’re up to. They’re very kind of authoritarian regimes. The true threat is whether or not one of these people decide, peak of anger, try to hold us hostage, ourselves; the Israelis, for example, to whom we’ll defend, offer our defenses; the South Koreans.’
Media roundtable, Washington, D C, 13 March 2001

‘I think there is some methodology in my travels.’
Washington, D C, 5 March 2001

‘Ann and I will carry out this equivocal message to the world: Markets must be open.’
Swearing-in ceremony for Secretary of Agriculture Ann Veneman, Washington, D C, 2 March 2001

BILL DEORE/DALLAS MORNING NEWS





SUGAR HIGH

Work this out, if you can...



Members of the European parliament recently voted on renewing EC regulation No 2038/1993; on price support, import quotas, export 'refunds' and all those 'indirect' subsidies that keep Europe's sugar mountain piling up. The EU currently pays more than double the world price of sugar per ton. This gives EU farmers an incentive to cultivate ever more beet whilst luring others into the sugar-beet business.

Sugar-beet now are grown in every member state except Luxembourg. Whilst farmers now produce to the maximum – 18m tons – the EU consumes 12.5m tons a year. Hence the EU deposits at least 5m tons of sugar on the world market per year – at a loss. Since EU sugar distributors are not in the business of making losses, the EU provides 'refunds'; rather costly ones, too. Only if the refunds are sufficient will the 5m tons of sugar get moved.

With falling sugar prices the EU had to reduce the amount of exports refunded by 29 per cent. Whilst one of the alternatives

in getting rid of all the excess is to encourage Europe to eat more sugar, the current 34 kilos per person per year seems to be about enough sweetness to stuff down our throats. Artificially high domestic sugar prices have, on the other hand, encouraged European food manufacturers to buy sugar cheaply from abroad. 'Fortunately' the EU has a strict import quota system – who knows; otherwise all of its sugar might go unsold. But import quotas hurt former colonies who still have a voice due to colonial connections. So the quota system is further complicated by handing out special favours.

But such price-support systems and 'free trade' don't mix. Whilst EU enlargement will only add to the cost and a new WTO round might put sugar growers on a diet, the EU members should ask themselves what sense it makes to accelerate and hit the brakes at the same time.

PRECAUTIONARY PERVERSION

The EU wants to promote biotechnology

'We cannot afford to lose more years of not aiding the biotechnology industry,' said Margot Wallstoerm, the EU's environment commissioner, warning that the EU head office could face lawsuits from biotech firms if the ban imposed on the marketing of new GM products continued. Back in February, the EU introduced so-called 'strict' safeguards to regulate the licensing of such products but was blocked by six countries remaining opposed to lifting the moratorium (see *News The Ecologist* Vol 31 No 3). Wallstroem's strong warning seems to have worked. Barely a week later, MEPs passed a resolution calling for no less than greater institutional and financial support to the biotech industry. It was passed with virtually no amendments, but passages expressing 'regret' that some EU countries had maintained an 'unjustified' de facto moratorium were excised by many voters. Irish Green MEP Nuala Ahren alleged that the resolution's 'unashamedly pro-biotech' tone was probably due to the 'explicit involvement' of pharmaceutical giant Glaxo Wellcome in early drafting.

BUTTERED

EU Commissioner Pascal Lamy recently had to defend himself against accusations of wrongdoing at a hearing called by MEPs probing an export subsidies fraud case. Fléchar, the French firm at the centre of the case, had its fine cut from 17.6 million euros to 3 million after it was caught claiming subsidies for butter supposedly earmarked for the Soviet Union but actually destined for Poland. Former Commissioner René



Steichen – farm chief at the time of the decision in 1994 – told the hearing that he believed the fine should have been double the figure that was eventually decided.

Both he and Lamy admitted that the French government had lobbied the Commission to reduce the fine. The decision to cut it was taken during a meeting chaired by then Commission President Jacques Delors' deputy chief adviser. The minutes of that meeting have since disappeared.

NOTES & QUOTES

According to the US Federal Centres for Disease Control and Prevention, the frequency of serious gastrointestinal illness, a common gauge of food poisoning, is 34 per cent higher than in 1948. According to the agency, every year 5,000 deaths, 325,000 hospitalisations and 76 million illnesses are caused in the US by food poisoning.

30,000 litres of water are used in the construction of one single personal computer.

Within the EU, computers contribute 6 million tons of waste per year and, according to *Der Spiegel*, this figure will almost have doubled by 2012.

Each year, Germany alone wastes 20 billion kilowatts/p/h of electricity on the 'standby' device of electronic goods.

A recent study by the National Academy of Sciences suggests that as many as one out of four developmental and behavioural problems in children today may be linked to genetic and environmental factors, including neurotoxic compounds such as lead, mercury and organophosphate pesticides.

China banned logging in its virgin forests after massive floods on the Yangtze in 1998. Below are China's timber import figures:

1998 – 4 million cubic metres
1999 – 10 million cubic metres
2000 – 14 million cubic metres

21% – Burma's forest cover in 1949
7% – Burma's present forest cover

6.1 bn – the current world population
9.3 bn – the UN-predicted world population by 2050

According to the WHO, about 8 million tuberculosis cases occur each year and at least 2 million deaths. Present trends indicate that the number of new cases is expected to increase to 10.2 million a year by 2005.

Last year the US was forced to close 7,000 beaches due to pollution. Every spring, pollution creates a 'dead zone' the size of New Jersey in the Gulf of Mexico.

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NOTES & QUOTES

A report published by the Tearfund says that water consumption rose sixfold between 1990 and 1995, more than twice the rate of population growth. The magnitude of severe future water shortages is such that the world will witness 'water refugees' – millions of people forced to leave their homes in search of clean water.

According to *Pesticide News* around 30 per cent of the \$900m pesticides marketed in developing countries per year do not meet internationally accepted quality standards.

According to Klaus Toepfer, UNEP's chief executive, Argentina's promotion of fisheries exports as a consequence of trade liberalisation has led to a five-fold growth in fish catches between 1985 and 1995. The profits that the fishing firms gained from this liberalisation are estimated at \$1.6bn. However, the resulting depletion in stocks has led to a net direct cost of about \$500m, solely in terms of damage to the populations of the most exploited fish species.

According to *Der Spiegel*, 40 per cent of President Bush's planned tax reduction will apply to the country's top earners; about 1 per cent of all taxpayers.

'Our targets... for intensifying the Lisbon strategy are as follows: a mandate for the EU Commission to prepare an ambitious action plan on biotechnology to facilitate a European leap forward... Speed up market opening in... financial services, electricity and gas and postal services. (An) Agreement to regulate EU traffic control... Securing a comprehensive new WTO round this year to ensure that the benefits of free trade are extended more widely.' Tony Blair, telling it like it is

'Our methods are disastrous. Our ambitions are limited. But we are moving ahead anyway.'

French President, Jacques Chirac, commenting on the Stockholm Summit

'We have a major energy crisis... We have a choice in this country of having the lights on or, at least in the short run, having more CO₂... We need more refineries, we need more power plants, we need more pipelines.'

Lawrence Lindsey, White House chief economic adviser

SPONSOR A SCHOOL

The UK government is following the US example of handing schools to corporations

The government has launched a new unit or 'one stop shop', to broker US-style multi-million-pound sponsorship links between big business and schools. According to *The Financial Times* such sponsorships have already totalled £120m since 1997 and the area is expanding. The business development unit (BDU) – an agency inside the Department for Education – will work with officials to open up areas of sponsorship for companies and manage links in the long term to make sure that companies get the most out of it! The decision follows a fact-finding mission by Estelle Morris, school standards minister. According to the minister: 'Links with industry have really blossomed since the general election. We have to have proper ways of managing these relationships.' US research has shown that companies can gain a wide range of benefits from sponsoring schools – says the BDU. Prepare your children to be targeted for all that increased consumption...

GORLEBEN ODER LEBEN?

German anti-nuclear activists in Gorleben, south of Hamburg, are protesting against the resumption of nuclear waste shipments from France. After a four year suspension over safety concerns, shipments of German nuclear waste resumed in late March, guarded by 17,000 riot police.

Just a few weeks before Cogema was due to return treated nuclear waste for storage at Gorleben, a French court, in an unprecedented move, forbade the unloading of a ship carrying spent nuclear material from Australia at the port of Cherbourg. The court ruled that the highly radioactive material should stay on board because Cogema, France's state-controlled nuclear reprocessing company, did not have the required permission to treat the fuel at its nearby

plant in La Hague. According to Greenpeace, which brought the court action against Cogema, the company has for years been sidestepping the law by storing foreign nuclear waste for too long a period.



Fair cop: demonstrators dressed as policemen with an effigy of German environmental minister Jürgen Trittin.

PROFIT MAKING

Dangerous drugs are being pushed – quite legally

Dr Leong runs a pain clinic in Bangor, Maine. He remembers the day when he had finally had enough of a drug company salesman pressing him to prescribe OxyContin. 'We threw him out of my office!' Dr Leong also remembers Prudue Pharma LP's – the drug's producers – repeated offers of free weekend trips to Florida. And when that salesman suggested that OxyContin – which is as powerful as morphine – was safe to treat short-term pain, Dr Leong exploded.

Whilst this doctor was not converted, others were. OxyContin's sales have hit \$1bn in four years. According to an official at the Drug Enforcement Agency in the US, no other prescription drug has been abused by so many people during the last 20 years. All the while, OxyContin has been a factor in the deaths of at least 120 people, and medical examiners are still counting, according to the *Herald Tribune*. Whilst the company pushed the drug without adequate warnings over its potential for abuse, critics point to Prudue Pharma's aggressive marketing strategy which recruited and paid doctors to speak to other doctors. The company also contributed to foundations looking into pain research, pharmacy schools and Internet sites aimed at educating consumers.

SHELVE SHELL

The award of the largest overseas contract ever won by a UK offshore company was hailed by Tony Blair as a milestone in Britain's efforts to capitalise on its North Sea oil expertise to clinch orders worldwide. The £300m contract for an oil and gas processing module for the £1.6bn Bonga field off Nigeria was placed by Shell with Amec.

Mr Blair, who made a personal appearance at the announcement, was particularly happy to hear that the contract will create 4,000 jobs in the UK alone. At roughly the same time, over in the US, the Supreme Court cleared the way for a lawsuit accusing Royal Dutch/Shell of involvement in the torture and murder of Nigerian environmentalists by government forces of the former military regime.

The US justices, without comment, refused to intervene between Shell and relatives of Ken Saro-Wiwa, executed in 1995. The court refused to consider Shell's plea that the dispute had no connection to the

US and should not be heard there. The lawsuit was filed in 1996 under a law that allows US courts to hear suits by non-citizens claiming violations of international law, such as human right abuses.

In order to improve its reputation in Nigeria and around the globe, Royal Dutch/Shell has, since the incidents, instituted a community development programme on which it spends roughly £38m a year.

However, a recent unclassified study commissioned by the CIA states that at least 100,000 barrels of oil were still spilled in 1997 and 1998 in the Nigeria Delta, where Shell is by far the largest oil producer.

The study found that while oil extraction has 'generated immense profits, the delta's inhabitants have suffered increasing poverty and a general decline in the quality of their lives, due in part, to the environmental impact of oil extraction.'

OIL'S DRIPPING EFFECTS

It was not until his last months in office that Bill Clinton spoke about the suffering in the Sudan where some 2 million people have been killed and about double that amount have been driven from their homes. Sudan activists, concerned about the ongoing human rights abuses, have been targeting Talisman Energy of Canada for its oil drilling operations that produce revenues for the Sudan government. Oil development in the Sudan by companies such as Petronas of Malaysia and China National Petroleum is yielding the government some \$500m a year and the regime has used the cash to double military spending. Lundin Oil of Sweden and OMV of Austria more recently joined the list. Activists are now targeting Fidelity Investments which owns over 5 million shares of Talisman Energy. A letter-writing campaign to Fidelity's CEO Edward Johnson has been mounted to urge Fidelity to divest from Talisman. Contact Eric Reeves at ereeves@smith.edu. Meanwhile President Bush, lobbied by Christian religious groups is considering initiatives aimed at ending the civil war in the Sudan. For a start, how about sending Fidelity's CEO an email?

BEYOND BELIEF

Whilst President Bush has made drilling in Alaska's Arctic National Refuge a centrepiece of his energy policy; environmentalists have long been trying to persuade BP Amoco (aka 'Beyond Petroleum') to refrain from drilling on the coastal plain of the Arctic National Wildlife Refuge. It's a birthing ground for 130,000 caribou and home to the Inuit people. More recently, BP reaffirmed that it would compete for projects in the Arctic Refuge if drilling goes ahead and has simply excluded the Arctic resolution from its annual meeting agenda – just in case anyone dares to introduce a shareholder resolution.

Whilst it looks like BP is going to help President Bush realise his national energy

policy; it is also 'helping the British Museum to hang up its anoraks. BP supports the British Museum's Ethnography department... currently funding an exhibition called Annuaraaq: Arctic Clothing from Igloodik... On display are fine examples of the weather-proof clothing that has been made of caribou skin by Inuit people for at least 2,000 years to help them withstand temperatures as low as -30°C.' Whilst it looks like both the Inuit and the caribou may not be able to withstand even the next 200 years, it is worthwhile visiting an exhibition of a people and culture that the sponsor has been helping to drive from their homes. Entrance is free and the exhibition is on till 27 May.

NOTES & QUOTES

'The multilateral trading system has probably done more to boost living standards and lift people out of poverty... than any other government intervention.'

Mike Moore, director general of the WTO

'Trade liberalisation contributes to economic growth, yet the benefits have not been fairly shared between countries and, in some cases, have led to greater environmental degradation and increased poverty.'

Klaus Toepfer, UNEP's chief executive

'We encourage mismanagement of our resources, and then complain... that we are poor.'

Wangari Maathai, environmental activist

'It is all too easy to lose sight of the overwhelming national good in the defence of narrow special interests... and to allow the WTO to cop the blame for national failings and to fail to explain, and explain again, the case for trade liberalisation.'

Mike Moore, director general of the WTO, once again

'This is not about a new EU-US trade dispute, this is a veterinary and sanitary issue... and at this stage we are certainly not seeking recourse to the WTO.'

Antony Gooch, spokesman for Pascal Lamy, after EU Food Safety Commissioner David Byrne called the US movement to ban all EU animals and meat as excessive, unjustified and threatened to go to the WTO

'We now have what we never had before – the muscle to turn our products into blockbusters.'

Igor Landau, management board member of biotech firm Aventis

'Aventis has applied for a licence to sow a crop of GM seed... less than half a mile from us... I am an organic farmer certified by the Soil Association and have a real chance of losing my certification...'

Peter Muskus, a farmer in Scotland

'...Some of these newer guys are going to gone soon. Those are what gardeners call 'annuals'. We've got the money to be a perennial.'

Jonathan Rothberg, CEO of biotech company, Curagen

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NOTES & QUOTES

'You never hear debates about ethics or morals here (in Britain), just about saving money. It's no wonder the place is falling apart.'

Le Monde, France

'...fundamental decisions are no longer being taken by the government. Why bother, then, over whether the government is left wing or right wing, or centre wing (if such a thing exists). We propose that the concept of nation ought to be reconstructed in Mexico... We have to reconstruct the nation upon another foundation, and such foundation is the recognition of differences. When we say that the new century and the new millennium are those of the differences, we set a breaking point with respect to the 20th century, characterised by the struggle among hegemonies. The last one, that between the socialist and capitalist camps, provoked two world wars.'

Subcomandante Marcos of the Zapatistas, Mexico

'We want to be working with everybody... If you want to be big, you have to think big.'

Vicente Fox, Mexican President on the Nafta-style agreement with the EU

'As long as the United States keeps consuming cocaine there will be violence in Colombia.'

Luis Fernando Ramirez, Colombian defence minister

'These people have been smuggling (bananas) without a licence and without a quota. The additional supply has meant we were unable to pass on the higher dollar costs to our customers. Prices actually marginally declined when they needed to increase.'

Carl McCann, Fyffe's CEO explaining the company's sharp fall in pre-tax profits

'Attempting to clone a human would be extremely cruel for the woman and children involved, and there could be a backlash against valuable research.'

Ian Wilmut, Dolly's creator

'Cloning creates ordinary children who grow up to be unique. We are here to encourage scientific research and good ethical behaviour.'

Dr Severino Antinori, who is about to clone the first child, probably in Israel

JOBS FOR THE BOYS

Jobs are good – whatever they are

'For generations, people have dreamt about a return to full employment, but for the first time it is within our grasp,' said Tony Blair, rallying support for a second term. Really? At what price? Here's an example: according to *The Independent* a dispute recently broke out among ministers over a decision by Michael Meacher to order a public consultation on the future of BNFL's controversial MOX plant at Sellafield.

Whilst the DETR insists that a public

consultation is necessary to establish the case for the plant, Stephen Byers, the secretary of state for trade and industry is keen for the plant to be opened as soon as possible. Mr Byers is hoping to privatise BNFL but without approval for the MOX facility, Sellafield's commercial survival (and sale value) is in doubt. According to the DTI, the plant would provide 600 jobs directly at Sellafield and support a total of 1,800 jobs in the county's economy. Jobs doing what? Apparently that doesn't matter...

PRIVATE HEALTH PROBLEMS

According to *The Independent*, HCA, the third largest owner of UK's private hospitals, is facing legal action in the US over alleged healthcare fraud. The company is being sued by the US Federal Government over allegations that it gave improper inducements to doctors for patient referrals and skewed the system so that Medicaid, the Federal public health insurer, paid the bills. Because of these actions, HCA was able to pocket \$400m. The company denies any liability. Just over 15 months ago HCA paid a \$840m penalty to the US Justice Department after admitting to healthcare fraud. Back then, Whistleblowers told Federal investigators that executives of Columbia Healthcare, which merged with Healthcare Corporation of America to form HCA, conspired to violate US anti-kickback rules to grow the business. HCA commented that the US actions have no bearing on its operations in the UK.

MIND YOUR OWN BUSINESS

The US wants to stitch up the WTO before we notice

Richard Morningstar, US ambassador to the EU, wants WTO members to strike an early deal on future trade liberalisation in order to avoid a repeat of the 'Battle of Seattle' when the WTO meets in Qatar in November. 'We can't have a repeat of Seattle. The basic agreement must be reached before we get to Qatar,' he said during a European Voice conference on transatlantic relations.

Morningstar's comments were supported by Robert Wright, Canada's deputy trade minister, visiting Brussels to discuss prospects for launching a new round. 'We have to be careful that this is set up in such a way to ensure that we don't have another failure,' Wright said. 'We need to narrow down

differences for ministers to consider. In Seattle we had too long a list... We should try to achieve agreement on the broad scope [of the round].'

According to Morningstar, 'Bush has made it clear that trade liberalisation will be a top priority for this administration,' adding that the US 'can and will pursue bilateral and multilateral negotiations concurrently'. He added that US Trade Representative Robert Zoellick wants to

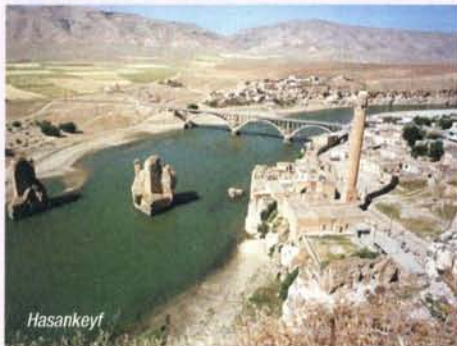
ask Congress for fast-track authority to negotiate all types of agreements, including for the WTO round and regional deals. So that's democracy.



in brief

HUNTED DOWN

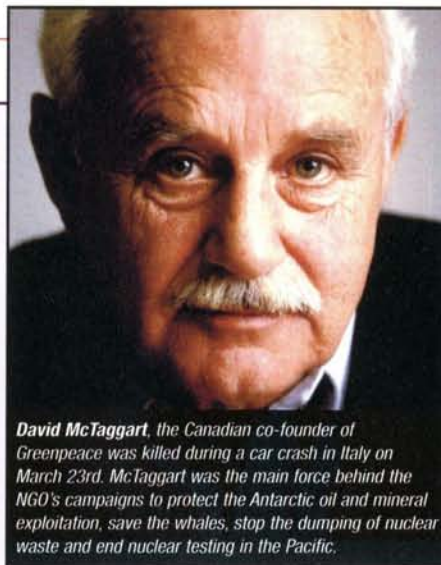
Dresdner Kleinwort Wasserstein (DKW) and Winterflood Securities, Huntingdon's only two brokers, have pulled out from quoting a stock price for the life science company. DKW pulled out a day after its only counterpart, Winterflood Securities, decided to pull out. As a consequence the life science's fell to 5p, valuing the business to £14.5m. Confronted with the threat of violence, many companies have stopped doing business with Huntingdon. Meanwhile a report to Tony Blair calls for 'streamlining' the process of granting licences to test drugs on animals by reducing red-tape. Huntingdon Life Sciences is backed by the government and the drug industry.



Hasankeyf

DEMOCRATIC DAMBUSTERS

Friends of the Earth (FOE) have taken a £30,000 stake in Balfour Beatty to force the British construction company, at its AGM, to adopt stringent guidelines on big dams. FOE has submitted a resolution calling for the adoption of guidelines set out by the World Commission on Dams (WCD) – a group that includes World Bank representatives, international experts and various governments. FOE has repeatedly criticised Balfour Beatty for its involvement in the controversial Ilisu



David McTaggart, the Canadian co-founder of Greenpeace, was killed during a car crash in Italy on March 23rd. McTaggart was the main force behind the NGO's campaigns to protect the Antarctic oil and mineral exploitation, save the whales, stop the dumping of nuclear waste and end nuclear testing in the Pacific.

dam in Turkey. After adopting WCD guidelines as company policy, Skanska, the Swedish company, pulled out of the Ilisu project last year. Despite FOE's shareholder submission and despite the Swedish precedent, Balfour Beatty insists on opposing the resolution nonetheless.

IMF TRANSPARENCY

Glossy reports, outspoken leaders and multifunctional web sites may lull some into believing the IMF's commitment to being open and transparent, but when it comes to real accountability, the fund is quick to pull up an untransparent wall of silence. Swiss prosecutors investigating alleged misappropriation of a 'minor' £3.3bn lent to Russia by the IMF during the 1998 meltdown face silence from the fund. The investigative judge 'just' wants to determine whether the Russian banks which received parts of the loan used the funds to prop up the rouble or diverted them to offshore accounts but has been denied access to just this crucial kind of information. Whilst the judge has testimonies supporting the fact that funds may have been diverted to benefit third parties, the IMF said it was satisfied the money had been well spent. And that's that!

SMOKE THAT PIPE

The EU Commission is taking Philip Morris and RJ Reynolds to court claiming that the companies had 'a scheme to smuggle cigarettes on a worldwide basis'. According to court papers, the two companies 'control, direct, encourage, support, promote and facilitate the smuggling of cigarettes into the EU'. For example, between 1995 and 1997 both companies knowingly supplied large volumes of cigarettes to a network of UK-based front companies known to be a cover for smugglers shipping them illegally to Spain and Portugal. According to a spokesman for RJ Reynolds: 'It is important to note that Reynolds Tobacco and its employees were not involved in managing or operating any international tobacco businesses. Those businesses were operated by RJ Reynolds International'. The EU commission is suing for about £3bn lost in taxes over the last 10 years and nine individual EU states have signed up to the action. The UK has not.

**APROPOS RUSSIA**

According to WISE, Evgeni Adamov, the Russian Minister for Nuclear Power, is alleged to have had private business interests whilst working for Minatom. A report by the Duma's anti-corruption commission lists dozens of private business activities carried out and companies set up by the minister. In one of these companies, Omeka Ltd, Adamov controlled \$3.15m and his wife a further \$1.5m. According to Greenpeace, this consulting and management company has current contracts with Tekhsnabexport, the import arm of Minatom that benefits from imports of spent fuel (see News *The Ecologist* Vol 31 No 3).

DOING BUSINESS AT HOME... IN THE NAME OF CHARITY

Denmark has reported that 92 per cent of contracts financed by Danida, the official Aid Agency, go to Danish companies. Whilst tied aid results in 20-30 per cent overpricing, resulting in less value for money, the Danish Ministry of Foreign Affairs confirmed that, as a rule, these tenders are not open to international competition. What this means is that whilst recipient countries have found that donors (including Denmark) are pressing them to privatise and open their markets, local initiatives for projects are left unconsidered.

EBRD HIT RECORD DEALS IN 2000

The European Bank for Reconstruction and Development (EBRD) signed a record Ecu 2.7bn in deals in 2000; representing a 24 per cent increase over the previous year. The Bank, founded in 1991 to help Central and Eastern European countries make the transition to free-market economies said it now has Ecu 12.2bn committed to projects in its region of 27 countries. The bank's largest country of operation remains Russia with a total 106 projects; accounting for 21 per cent of the bank's total commitments of Ecu 16.5bn.

TO WHOM IT MAY CONCERN

According to an official US government survey, most Americans carry detectable amounts of plastics, pesticides and heavy metals in their blood and urine. The substances include many that cause brain damage, reproductive problems, cancer and other toxic effects. One of the surprises noted in the report on human exposure to environmental chemicals was the unexpectedly high level of synthetic compounds called phthalates; used to soften plastics or emulsify soaps. Tested in laboratory rats, phthalates can cause birth defects and reproductive problems.

MALAYSIA BREAK BAKUN

After having shelved the \$2.4 million mega-project at the height of East Asia's economic crisis, the Malaysian government decided in early March to revive the construction of the massive Bakun hydroelectric dam in the Borneo rainforest in Sarawak. The Bakun dam is now set to be built according to its original specifications and thus will be one of the world's largest – flooding an area of rainforest the size of Singapore.

As a result, nearly 10,000 people have already been displaced, and without adequate compensation. In addition to the huge environmental destruction and human displacement, the project will have adverse impacts on water levels and salt water intru-



sion, thereby seriously degrading the fish habitat. Critics say that it makes no sense to build this vast dam – bigger than two football pitches, with a generating capacity of 2,400 megawatts – so far from major industries or population centres.

They say that the dam has been revived mainly to provide work for the country's flagging construction industry, which is still recovering from the economic crisis. What's more, statewide elections are due sometimes before September in Sarawak, and the infusion of cash provided by the Bakun project could help ensure that the federal government retains control over the state. 'Once completed, Bakun Dam will spur more industrial development and investment in Sarawak and Sabah', Leo Moggie, Malaysia's energy minister was quoted as saying in a local newspaper. The federal government has not announced how it will finance the dam, which will cost the equivalent of 10 per cent of the country's annual federal budget, but it is obvious that politics and greed, not common sense, has determined that the Bakun Dam should go ahead.

MAKE A DIFFERENCE

Sign a petition to be presented to the Malaysian government on www.suaram.org/bakun or contact Suaram & SOS Selangor on +60 3 77843525



The world-famous *arribada*, or mass nesting, of Olive Ridley turtles at Bhitarkanika, Orissa, India, could soon be a thing of the past. The construction of the proposed Dhamra port by International Seaports Ltd would destroy one of the largest nesting sites for the Olive Ridley turtle in the world.

Bhitarkanika is a major nesting ground for the endangered Olive Ridelies. In recent years, as many as 250,000 turtles have been known to nest at the Gahirmatha beach in one season, making it the world's largest rookery for these animals. The proposed Dhamra port together with the increase in shipping traffic would devastate the turtle congregations. Besides taking up vast amounts of their nesting space, the increased illumination at night would disorientate turtle hatchlings and prevent them from finding their way to the sea after they hatch.

When the Bhitarkanika National Park was established in 1988, it covered 367 square km. However, by 1998 it was reduced to a mere 145 square km by simply excluding ecologically important areas such as the site of the proposed port. Unsurprisingly, this happened just after the state government had entered into the Dhamra construction contract with International Seaports Ltd.

An official Environment Impact Assessment report completely neglected these conservation aspects, and clearance for the project was granted by the Ministry of Surface Transport in January 2000.

In recent months, the Orissa Government, with NGOs such as the Wildlife Protection Society of India and the Wildlife Society of Orissa have made efforts to protect the turtles: but what good is such belated action when their breeding site is about to be destroyed? The only justifiable next step is the cancellation of plans to construct the port at Dhamra.

MAKE A DIFFERENCE

Ask for the Dhamra project to be dropped – write to: The Secretary, Ministry of Environment and Forests, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi 110 003. Chief Minister of Orissa, Secretariat, Bhubaneswar, Orissa. The Managing Director, International Seaports Ltd of Singapore, Mount Poonamallee Road, Manapakkam, P O Box 979, Chennai 600 089
The Chairman, ICICI Towers, Bandra Kurla Complex, Mumbai 400 051.

GLOBAL SECONDS OUT; ROUND TWO...?

NGOs from around the world have issued a joint statement opposing efforts, led by the EU, to launch a new trade round of negotiations at the WTO. The NGOs are particularly against the attempt to include the new topics of investment, competition and government procurement at the WTO Ministerial Conference in Doha, Qatar, in November. The NGOs are also rejecting the EU Commission's new strategy that would introduce investment and competition issues as 'plurilateral agreements'.

They also criticised Mike Moore, WTO director general for campaigning for a new trade round when many member states are against it. The campaigners believe that a civil servant of an interna-

tional agency should not take sides with one group of members against the opinions of another set.

Initial signatories to the statement were collected during a meeting in Geneva discussing GATS services negotiations and the new round proposals.

MAKE A DIFFERENCE

NGO's wanting to sign on to the statement can do so by emailing their details to Third World Network (attention Cecilia Oh) at twonet@po.jaring.my or fax +60 4 226 4505
For more information, visit www.wdm.org.uk and www.twinside.org.sg

Please send information on your local, national or international campaigns to Stephanie Roth at: **The Ecologist**, Unit 18, Chelsea Wharf, 15 Lots Road, London SW10 0QJ, UK. Tel: +44 (0)20 7351 3578. Fax: +44 (0)20 7351 3617. Email: campaigns@theecologist.org



international campaigns and events in May

1 May 2001

Global.

International Workers Day

Visit www.mayday2001.org

2 May 2001

British Academy, London, UK.

Corruption of Scientific Integrity?

A one-day conference on the commercialisation of academic science. Tel +44 (0)1225 826570 or email DE.Packham@bath.ac.uk

3 May 2001

London, UK.

BAE Systems AGM

Annual Meeting of BAE, the UK's largest arms exporter. Visit www.than.onthepc.co.uk/whats-happening/campaigns/bae.html

3 May 2001

Regents College, London, UK.

Food for the Future

3rd Annual Conference on Nutritional Aspects of Children's Physical and Mental Health – topics include leukaemia, depression, attention deficit disorder. Call +44 (0) 1344 360 033

4-6 May 2001

Leeds, UK.

International Conference on US National Missile Defence

Visit www.gn.apc.org/cndyorks or call +44 (0) 1274 730 795

6-12 May 2001

Tartu, Estonia.

The Power Game – Activist meeting on Corporate Influence in the EU and UN

Visit www.aseed.net or call +31 20 668 2236

6-13 May 2001

Panama City, Panama.

Indigenous Peoples' Millennium Conference

Organised by the Netherlands Centre for Indigenous Peoples. Contact Leo van der Vlist on leo@nciv.antenna.nl

8-10 May 2001

Amsterdam, The Netherlands.

Sustain 2001

The World Renewable Energy Exhibition – the world's largest clean energy forum. www.sustain2001.com or call +31 (0)20 549 1212

8-19 May 2001

El Cerrito, California, USA.

Nature as Teacher, Indigenous Wisdom and Rainforest Conservation Strategies – Wilderness journey into the Ecuadorian Amazon

Visit www.experimentals.org or call +1 510 235 4313

9-11 May 2001

Dornach, Switzerland.

Workshop on the intrinsic value & integrity of plants in the context of genetic engineering

Visit www.anth.org/ifgene or call D Heaf on +44 (0) 1766 523 181

9-11 May 2001

Stockholm, Sweden.

From Research to Action – Bridging the Gap

Speakers include Philippe Busquin, Margaret Wallstroem, Kjell Larsson and many others. Visit www.eu2001.se and www.bridging.viron.se or call +46 8 698 10000

10-15 May 2001

AWE, Aldermaston, Berkshire, UK.

Trident Ploughshares Camp

www.tridentploughshares.org or call +44 (0) 1603 459 296

12 May 2001

Imperial College, Exhibition Rd, London, UK.

Frontiers of Medicine: Human Genome – Human Being

An open conference of the Scientific & Medical Network. Visit www.scimednet.org or call +44 (0) 207 371 2999

14-18 May 2001

Argonne, Illinois, USA.

Eco-Infoma 2001: environmental risks & the global community – strategies for meeting the challenges

Visit <http://eco-infoma.ead.anl.gov/> or call +1 630 252 3243

14-20 May 2001

Brussels, Belgium.

Third UN Conference on the Least Developed Countries

Visit www.un.org/events

17 May 2001

International Rivers Network's Benefit Dinner.

The Poetry & Politics of Rivers

With Pulitzer Prize Winner & Essayist Gary Snyder. Call +1 510 848 1155 or email aleta@irn.org

17-19 May 2001

Austin, Texas, USA.

All things organic

The organic traders' association conference and trade show. Call +1 413 774 7511

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www.sheepdrove.com

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www.saveourevironment.org

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Nonukes@foesyd.org.au

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www.chamoix.org/arsmb

Sign a petition against the return of trucks to the Mont Blanc Transit Route



Cernavoda

EUROPE MONEY FOR OLD REACTORS

The EU Commission is set to discuss, and possibly recommend to the Council of Ministers, a proposal to increase the lending ability of Euratom. Established in 1957, Euratom was set up to facilitate the development of nuclear energy within the EU. With most member states now rejecting nuclear power, construction firms desperate for business are looking to Eastern Europe. So the remit of the fund was changed in 1994 to allow projects in Central and Eastern Europe and the former Soviet Union to be considered.

Unsurprisingly, the only projects funded by Euratom in the last decade have been in Eastern Europe. Since the financial situation in many of these countries is unstable, and investment from the private sector is not easy to obtain, Euratom has become a vital guarantor and source of funding for con-

struction firms, such as Siemens and Framatom. Whilst the Commission's power to 'issue Euratom loans for the purpose of contributing to the financing of nuclear power stations' was initially restricted to a credit ceiling of 500 million Euros, the ceiling has now been expanded, currently standing at 4,000 million.

When agreeing to this latest increase, the Council stated that when 3,800 million Euros had been spent, the Council should be presented with a revised proposal for new funds. In 2000, Euratom made two loans, for the Kozloduy 5 and 6 reactors in Bulgaria, and Khmelniysky 2 and Rovno 4 in Ukraine, which took the total expenditure up to 3,696 million Euros.

The Commission is about to present the Council with a revised request. Euratom is currently considering projects for the completion of Kalinin 3 in Russia, and the commission is said to be considering a loan of 250 million Euros to complete a second reac-

tor at Cernavoda in Romania. Euratom Loans may also be considered to fund multiple Mox production units in Russia (see Campaigns, *The Ecologist* Vol 30 No 6).

The further extension of the Euratom Loan Facility requires the unanimous support of member states, therefore any country can stop it happening. Nuclear power has been rejected all over Europe: now it's time to stop this subsidy for Western European construction firms in Eastern Europe.

MAKE A DIFFERENCE

Write to your finance minister and object. In the UK, write to: The Rt Hon Gordon Brown, House of Commons, Westminster, London, SW1A 0AA. For more information contact EU Enlargement Watch, Tel: +44 (0) 207 923 0412, email: afroggatt@btinternet.com and visit www.foeeurope.org for updates.

UK WEALDING THE KNIFE

Weald Vale in Sussex is worth a visit; nestling between the North and South Downs, and adjoining the High Weald of Sussex and Kent, it harbours an abundance of wild flowers, ancient woodland, various species of bats, a flourishing population of skylark, grey partridge, woodcock, song thrush, starling and many other endangered species.

But hurry, because Horsham District Council, in alliance with opportunist landowners and developers, is about to destroy this ecologically sensitive countryside.

As a result of Government insistence that tens of thousands of houses be built in West Sussex alone, Horsham Council anticipates that it will be required to build, by 2016, at least 12,000 new homes, for which there is no local need. West Sussex County Council intends to allocate these houses in the full knowledge that at least 70 per cent will be built on countryside.

To accommodate all new homes, and despite considerable public opposition, Horsham Council went for an option to build on countryside west of Horsham; misleadingly terming it 'urban extension'. The principal beneficiary of this development will be Christ's Hospital, Britain's wealthiest public school. To obtain approval to develop their land, the School employed Dalia and Nathaniel Lichfield

Associates, a development-planning consultancy, whose two partners were in 1997 Joint Chair of the Labour Finance and Industry Group, with a remit that included advising the Government on housing development. The School now stands to benefit financially as a direct consequence of Government policy on house building.

Although the Council has claimed that the threatened countryside is of 'limited



Flooding caused by the river Arun. Much of the land to be built on is prone to flooding.



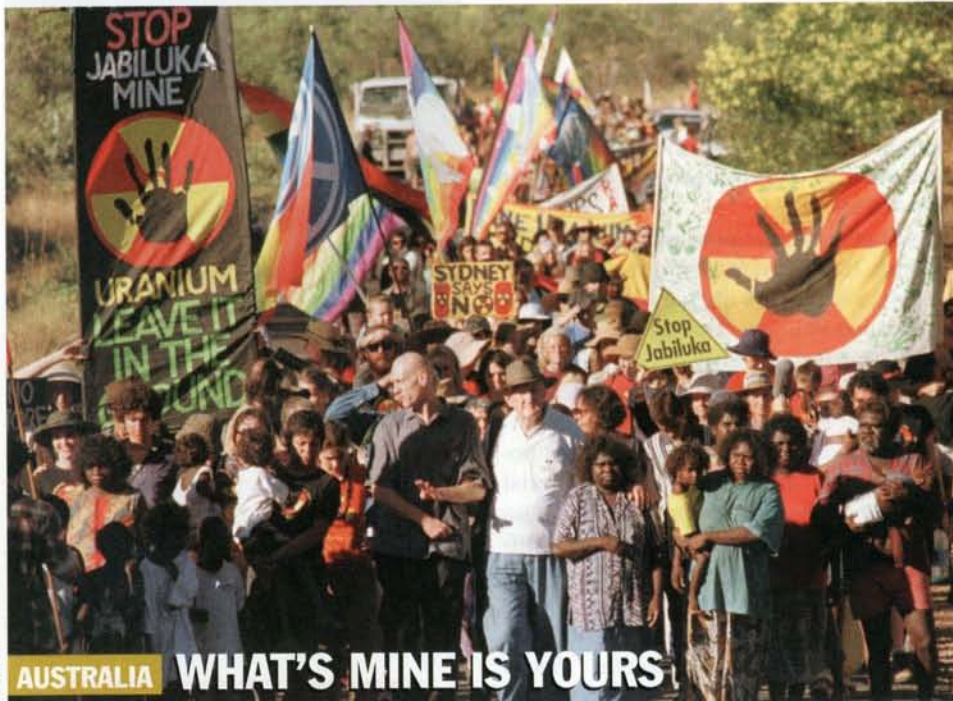
The ancient Shelly's wood, home to many protected species.

MAKE A DIFFERENCE

Please send a letter to John Prescott, Deputy Prime Minister: Eland House, Bressenden Place, London, SW1E 5DU, email: john_prescott@detr.gsi.gov.uk urging him to prevent West Sussex County Council and Horsham District Council from building these houses. Please copy your letters to The Weald Vale Association, PO. Box 205, RH13 7FZ; email mail@wealdvale.org. For more information visit www.wealdvale.org

ecological value', it is in reality home to a rich variety of wildlife including endangered species protected by the UK Biodiversity Action Plan. But this is not all, for at the centre of the proposed development lies an environmental time bomb: the Baystone Farm landfill. Closed down in the early 1980s, it contains an estimated 1 million cubic metres of domestic, commercial and industrial waste. An investigation by the DoE found that the landfill posed a 'serious risk'.

Should the Council have its way, then, Weald Vale will lose ecologically sensitive countryside and new residents will be accommodated in houses in close proximity to a toxic landfill site.



AUSTRALIA WHAT'S MINE IS YOURS

The Mirrar Aborigines of Australia's Northern Territory are fighting the development of a uranium mine within their territory. The Jabiluka mine could destroy this small clan, whose land and society is already suffering due to the effects of another uranium mine operating within their land. The nearby Ranger uranium mine has a disastrous environmental track record and has had a devastating effect on neighbouring Aboriginal clans.

The Mirrar will face a similar fate if the Australian government allows the British mining company Rio Tinto, who recently took control of both mines, to develop Jabiluka. It will also result in an additional 20 million tonnes of radioactive waste or tailings being stored at the Ranger mine, which the Mirrar believe will lead to sickness throughout their land. Contaminated water from the mine is annually released into the wetlands. Many of the Mirrar live by, and gather their food from, these wetlands.

The Mirrar say that when the mineral lease

was signed in 1982, the clan were falsely led to believe that they would only gain rights to their land if the mine at Jabiluka went ahead. In 1998, a UNESCO delegation called on the government to reconsider the mining agreement, and allow the Aborigines to maintain their rights over the land, and in 1999 an Australian Senate enquiry found that, 'the 1982 Jabiluka Agreement was negotiated under questionable circumstances'.

MAKE A DIFFERENCE

Write to the Australian Prime Minister, stating that mining must not commence at Jabiluka and that the land should be given back to the Mirrar. John Howard MP, Prime Minister, House of Representatives, Parliament House, Canberra, ACT 2600, Australia; Fax: +61 (0) 2 6273 4100. Please copy your letter to Survival, 11-15 Emerald Street, London WC1N 3QL; fax: +44 (0)20 7242 1771 and visit www.survival-international.org for updates

COSTA RICA

HARKEN TO THE HAWK

The Costa Rican government has granted concessions for oil and gas development along its Caribbean Coast, in a region known as Talamanca; one of the country's most cherished and protected areas.

Harken Energy, President Bush's one time employer and vital ally, is now poised to drill for oil and gas in this UNESCO World Heritage site.

No matter that the local indigenous people are opposed, or that even the municipal government declared the Talamanca county an 'oil free' zone. No matter that 88 per cent of Talamanca's territory is protected, and home to some of the most magnificent coral reefs, mangroves, sea-turtle nesting beaches, rare manatees and one of the world's richest diversity of fish.

No matter that the region's mountainous terrain and tropical rainforests are as rich as the sea. No matter that the country's government and citizens overwhelmingly oppose this development and that the law requires civic participation in development decisions.

No matter – the concessions have been granted regardless, and the drilling will forever change the unique beauty of the area.

MAKE A DIFFERENCE

Write to the President of Costa Rica, urging him to cancel the concessions. Sr Presidente de la Republica, Miguel Angel Rodriguez, Casa Presidencial, Apdo. 520-2010 Zapote, San Jose, Costa Rica; fax: +506 253 9078, email: presidente@casapres.go.cr. Write to Bruce Huff, CEO, Harken Energy Corporation, 16285 Park Ten Place, Suite 600, Houston TX 77084, USA; fax: +1 281 717 1400, email: info@harkenenergy.com. Please copy your letters to Global Response, PO Box 7490 Boulder, Co 80306-7490, USA; or email on info@globalresponse.org

seven magnificent websites

www.gets.org

Read the GETS/WTI joint report on 'Trade and Environment: Bridging the gaps and moving forward'. Issues covered include services, agriculture, TREMs... and civil society participation in the WTO... just in time to appease the next trade round.

www.globalhistory.cjb.net

Is globalisation a hollow term? Is the movement misguided or is it a progressive social movement? What is unique about our present time and about these globalising forces? Read contributions from historical thinkers, community leaders and intellectuals.

www.transnationale.org and <http://responsibleshopper.org>

are two excellent sites helping you to find out what multinationals are really up to.

www.clonejesus.com

Thanks to Schnews you can learn about The Second Coming Project – devoted to bring about the Second Coming of Jesus Christ... by cloning! No joke.

www.resist.org.uk

Resist! For your World is not for sale. Excellent links and news on upcoming events.

www.realworldbank.org

Debunk the World Bank as 'Knowledge Bank'.

AUSTRALIA MINE YOU

After ongoing pressure and heavy rainfalls, mining corporation Delta Gold decided in early March to initiate rehabilitation and closure planning for its Timbarra Gold Mine in Australia's New South Wales (NSW). The mine is located in a unique high altitude wetland – a Noah's Ark for wildlife – and at the headwaters of the Clarence River, one of the region's largest and cleanest catchments.

Delta Gold extracted the gold employing a highly controversial method called cyanide leach mining technology. This technology makes it possible to coax microscopic gold flecks from low-grade ore. Today, more than 90 per cent of the 2,500 tonnes of annual global gold production is extracted in this way. In addition, the cyanide waste from mining is commonly stored in ponds with thin liners about 1.5mm thick. Spills of cyanide waste are not unusual; they contaminate ground water; kill fish and threaten public health and land alike.

Heavy rainfalls throughout the month of March have lead to an overflowing of the waste ponds into the Clarence River. With the mine currently being in a 'care and maintenance status' none of the waste ponds were filled with cyanide waste. Yet at the time of writing these ponds have already overflowed twice.

In the light of this, local campaigners are extremely worried by the fact that the mine still doesn't have a 'full closure status' and that Eddie Obeid, the official holding both the minerals and fisheries portfolios has done as much as he could to keep the mine operational.

There are currently five other mines in NSW which use the controversial cyanide leach mining technology. In June last year, a bill that would ban cyanide in NSW was introduced and is now about to be discussed. It is possible to pass legislation banning mines using this technology. In 1998 the state of Montana, USA, did just that and so has the Czech government.

MAKE A DIFFERENCE

Lend your support for the 'Mining Amendment (Cyanide Leaching) Bill 2000' to be enacted in NSW and for the Timbarra Goldmine to receive immediate 'full closure status'. Write to Premier Bob Carr, Parliament House, Macquarie Street 2000, Sydney, NSW, Australia, Fax: +61 (0)2 9228 3935; email: bob.carr@www.nsw.gov.au. Please copy your letter to The Greens NSW, GPO Box 1220, Sydney 2001, Australia; Fax: +61 (0)2 9519 2177, email: office@nsw.greens.org.au

PERU GOD & CHAINSAWS

The territory of the uncontacted indigenous tribes of the states of Madre de Dios and Ucayali, known as the Mashco-Piro, is being threatened by loggers; and even a group of missionaries.

In response to national and international pressure, the Peruvian government created, last July, a temporary reserve zone to protect the Mashco-Piro, who live in voluntary isolation, and banned logging concessions in that area. But the zone did not include all of the Mashco-Piro's territory, and consequently loggers have come to interpret the temporary reserve zone as new territorial boundaries and started entering Mashco-Piro territory outside the reserve zone from different points, with the purpose of extracting high value timber.

At the same time, a group of missionaries from the evangelical church, South American Mission (SAM), called 'Pioneers', has created a community within the temporary reserve zone with the purpose of 'converting' the Mashco-Piro; leading to dangerous contact between the two groups.

Feeling forced into areas inhabited by other native communities has led to unprecedented conflicts between the Mashco-Piro and the Native Amahuaca community of Santa Cruz. A clash in February lead to the death of several members of the Mashco-Piro.



In order to avoid further conflicts, and to save the integrity and cultural survival of both communities, it is imperative that the government takes action to prohibit loggers and other outsiders from entering the territories of the Mashco-Piro, and to establish a permanent protection for their territory.

MAKE A DIFFERENCE

Send a letter to Dr Valentin Paniagua Curazao, Presidente de la Republica del Perú, Presidencia de Consejo de Ministros, Av. Miraflores 878, Miraflores, Lima 18, Peru; fax +51 14 266 770 or email postmast@pcm.gob.pe
Please copy your letter to Antonio Iviche Quique, Presidente de FENAMAD; fax: +51 84 572 499 or email marinke@terra.com.pe

STAN AT EASE by Stan Eales

GRACE UNDER FIRE

For the steak we are about to receive, may we be truly thankful...



... nor any Mad Cow Disease, CJD or e-coli bacteria.



... and please Lord, let it not contain any Foot and Mouth disease...



Actually, there's a nice new vegetarian that's just opened around the corner.



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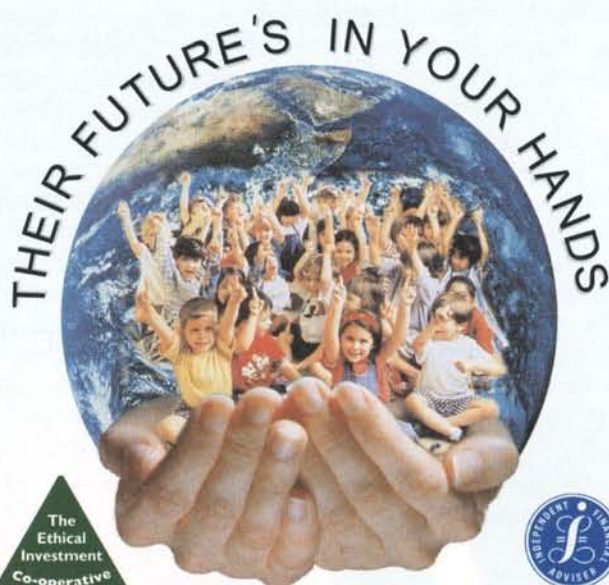
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burnt out

What can the UK draw from the disaster of foot and mouth? First, **Richard North** provides an overview of the lowlights of the last few weeks, and shows on page 22 how the crisis should have been dealt with. Then, on page 23, **Colin Hines** examines the lessons we need to learn for the future.

When, on 19 February, reports came through of a suspected foot and mouth case reported in an abattoir in Essex, few could have realised that this was the start of a crisis which would grip the nation, rock the government and foment near-riot in the countryside. Nor could anyone have even guessed at what would come to light as the crisis progressed. Initially, media commentators were quick to pick up the link between the Essex slaughter-house and the pig farm in Northumberland which had supplied it with sows. The obvious inferences were drawn. Here, exposed for all to see was the effect of the Ministry of Agriculture's policy of closing down hundreds of small slaughterhouses, necessitating the transport of animals hundreds of miles, taking infection with them and spreading it through the country.

But, no sooner had the spotlight settled on Essex and the cluster of cases around the abattoir, than the focus shifted to Carlisle and Longtown market, and then Welshpool market. In a matter of days, the government had imposed a total freeze on animal movements and the countryside was closed for the duration. France ordered the slaughter of 20,000 sheep imported from Britain since 1 February, the Netherlands destroyed over 4,000 sheep, deer and other livestock imported from Britain. The EU Commission announced an immediate export ban and, once again, the UK was the 'leper' of Europe.

Meat prices soared as slaughterhouses were closed down, only some of which were reopened under licence to allow a trickle of animals to be killed. Prime Minister Blair blamed the supermarkets for having an 'armlock' on the farmers as the prices climbed higher, while the pundits blamed intensive farming and 'cheap food' for the crisis.

Politically, the Labour government secretly welcomed in the crisis. On 27 February, it had forced the Countryside Alliance to call off its "freedom" march, scheduled for 18 March, when more than 500,000 countryfolk were expected to march through the centre of

London. Now confined to quarters, they were safely neutralised, leaving the way clear for an early general election on 3 May, a date about as secret as the fact that Friday follows Thursday. And, with a mere 30 outbreaks reported by 1 March, Agriculture Minister Nick Brown was confidently claiming that the outbreak was under control.

Meantime, the government had launched a policy of 'slash and burn', putting flocks and herds in quarantine and moving in with its slaughter teams. Supposedly a well-tested policy, based on the experience of the last great epidemic of 1967, it soon transpired that it was anything but 'tried and tested'. In fact, the bureaucrats had been at work, in form of EU Commission officials, codifying procedures in Council Directives 85/511/EEC and 90/423/EEC. Add to that the little known 'groundwater directive' and the scene was set for chaos.

Firstly, with only 200 vets in the field – chasing up over 43,000 sheep from just one market – the rigidity of the rules required an 'official veterinarian' to be present at each of three crucial stages: the testing of the animals, their slaughter and their disposal. Then, under the influence of the groundwater directive, the government's Environment Agency ignored the experience of 1967, where quick burial was the preferred option, and plumped for open air burning.

Soon, the television screens were filled with the awesome spectacle of funeral pyres, with thousands of animals being incinerated in a ghastly, EU-inspired ritual.

But just as quickly came reports of many more thousands of massacred animals being left in fields to rot. Vets who had been to infected sites had to be stood down for five days before going onto a 'clean' site, and the process started to grind to a halt. The Ministry had simply run out of vets.

On Sunday 4 March, the epidemic had risen to 69 confirmed cases and gruesome stories started emerging of bungled kills, with amateur hired killers running amok, blasting pigs with shotguns after they had



been stampeded by cattle being killed in their presence. Despite this, the services of experienced hunt slaughtermen were refused for fear their use might bolster the pro-hunt lobby at the time the Bill to ban hunting was going through Parliament. And the number of outbreaks reported rose inexorably.

By 8 March, farmers were being told that they faced weeks more of misery as the government's chief vet, Jim Scudamore, warned that the crisis would last a 'long time'. The number of outbreaks had risen to 106 with the epidemic looking distinctly out of control. On 12 March France saw an outbreak of the disease – blamed on the import of live sheep from England. Ireland and then the Netherlands reported outbreaks. Numbers continued rising in the UK, with a spread into Scotland, Wales and most areas of England. Things were looking even bleaker.

Losses, by then were multiplying, tourism was badly affected and when, by 18 March, outbreaks topped 300, the bill was estimated at £9 billion, with no end in sight. The Government was increasingly being accused of incompetence and Scudamore was co-opted to visit farmers in Cumbria to justify the government's 'pre-emptive strike'.

He was heard to complain that the Ministry was having difficulty tracing many of the sheep suspected of carrying the disease, attributing the problem to 'the lack of movement documentation for many animals'. The situation had now got so bad that, on 15 March, MAFF announced plans for a 'pre-emptive strike', the indiscriminate killing of all animals in the 3km zones around infected farms. Up to a million sheep were to die and, although cattle were originally included, Nick Brown had to issue a hasty retraction, adding to the sense of crisis and confusion.

Part of the reason for the focus on sheep was the EU's sheep subsidy system which had encouraged a few 'rogue' dealers to shift ewes around the country to gather more subsidies than they had qualifying sheep. A new meaning to the term 'bed and breakfasting' broke into the public consciousness, as it was learned that sheep were trucked into fields overnight, ready for visiting inspectors to count, only to be moved on the next day to be counted again in a different field – a black market in 'black' sheep.

As prime minister Blair jetted off to an EU Summit in Stockholm, dropping in to see farmers in a carefully stage-managed visit on the way, his election plans were beginning to look decidedly shaky. In Stockholm, he was caught out confiding with Commission president Romano Prodi that he had ten days to decide whether to go ahead. Back home, Blair made another stage-managed visit to the countryside – taking care not to meet real farmers. Thus armed, he decided to take charge, to be rewarded with a tally of 587 outbreaks.

Needless to say, the rumour mill had been running in overdrive – as it always does in crisis situations – and all sorts of theories were advanced as to the cause of the epidemic. These ranged from the intervention of Saddam Hussein to animal rights terrorists deliberately releasing a virus stolen from the government's biological warfare laboratory at Porton Down.

Dismissed as 'urban myths', there were nevertheless persistent reports that the government had had prior knowledge of the epidemic – and had even warned other countries. Irish farmers were warned to improve their 'biosecurity' and, back on 18 January, the EU Commission had voted to spend £270,000 on testing the potency of emergency vaccine stocks.

Then there was an intriguing report that the MAFF had ordered 'infected area' road signs from an Irish manufacturer, six weeks before the outbreak, while a MAFF official was overheard on a train predicting 'uproar' when it was discovered that 'Tony' had known about foot and mouth being in the country 'for months'. The satirical magazine *Private Eye* put the date more precisely – 4 December.

Then a French stock dealer operating out of the UK, Mr Hugues Inizan, claimed he had sent sheep to France on 31 January, which were tested some weeks later in France and claimed to be infected with foot and mouth disease. Although the sheep had been slaughtered, French sources dismissed the results as 'false positives'.

Despite lofty denials from government, the 'no smoke without fire' brigade were reinforced in their belief of an earlier outbreak by the sheer scale of the epidemic which even the government's chief scientist was claiming to be 'out of control'. Nick Brown reacted by extending the killing zones to 2 miles around each farm, while Tony Blair called in the Military Police to help co-ordinate the slaughter. These were quickly reinforced by more troops and a fleet of bulldozers to dig massive pits in a disused airfield in Great Orton, Cumbria, capable of burying 500,000 carcasses. Funeral pyres had become politically unacceptable and the Environment Agency had thrown the EU rules out of the window.

Serious alarm was building up in the farming community. The disease had broken out into the Cumbria Fells, and the National Park was facing an 'absolute Doomsday scenario', with the threatened extinction of the unique breed of Herwick sheep. The body count now exceeded the record set in 1967 and millions more animals were at risk, with estimates of 30 million having to be killed. Farmers and others were seriously questioning the validity of the 'contain and destroy' policy, and the prospect of mass vaccination was being seriously discussed.

In fact, it was being more than discussed.

The Soil Association's Patrick Holden was calling for it and millionaire publisher and pioneering organic farmer, Peter Kindersley, was planning to take the government to court to challenge its killing frenzy and force through a vaccination policy. The MAFF spin machine had already been working overtime, blaming the spread of foot and mouth on illegal sheep movements, and identified the source as a 'dirty' pig farmer who had failed to boil swill from a Chinese restaurant – which had imported meat illegally from the Far East. Nick Brown went to the Commons to announce that pigswill would be banned and sheep movements would be controlled while MAFF went into 'anti-vaccine' mode, dredging up every reason it could find as to why vaccination would not work.

Here, the MAFF showed its true colours, naked in tooth and claw. Animals which had the vaccine were 'infective'; the vaccine took too long to work and did not work very well anyway; and the 'killer' fact – EU rules required all vaccinated animals to be slaughtered. On 27 March, with over 100,000 rotting carcasses still lying in the fields and 634 outbreaks declared, Ben Gill, the president of the NFU, went on television denouncing vaccination saying that 'his members' wanted the killing speeded up. Vaccinated animals were the 'walking dead'.

But the tide was already turning. Blair was already seriously considering the vaccination option, two Conservative MPs were openly advocating it and Paul Tyler for the Liberal Democrats was calling for a change in policy. Fred Brown, a British scientist now working for the US Plum Island Animal Disease Centre, was scathing. A world-renowned scientist and a leading expert on foot and mouth, his view was that it was 'crazy' not to vaccinate. He suggested that Scudamore should look for another job – like gardening. His wrath was also directed at the MAFF for turning down a new American diagnostic field test which could detect foot and mouth in 40 minutes, cutting days from the process of disposing of infected animals.

There it stood in the dying days of March, with Fell farmers planning a meeting in Cumbria, mad enough to gather their pitchforks and march on London in a modern-day version of the peasants' revolt and the whole country in crisis.

So where did it all go wrong?

Essentially, at the heart of the machine was a fatal policy flaw. ❧

'Nick Brown went to the Commons to announce that pigswill would be banned, while MAFF went into anti-vaccination mode.'

The killing of agriculture

One thing is sure: few of the farmers who have seen their animals go up in smoke will have either the energy or the funds to start all over again. Compensation, might just about pay off that loan; whilst machinery and land will be sold off to ever larger industrial farms which if any, are the most likely to survive. Developers, of course, are a further option. Tony Blair was partially right in pointing to supermarkets putting too much pressure on reducing costs thereby handing contracts to the few large abattoirs able to compete. However, Blair more than supported the expansion of these very supermarkets and so encouraged their very operation strategies. If Blair is able to make the connection between supermarkets, abattoirs and the spreading of disease, he should equally be able to comprehend the true implications and reasons that over the last two decades the number of licensed red meat abattoirs in Britain has fallen by more than 70 per cent – to about 340. The closure of so many slaughterhouses has not led to fewer animals being killed; on the contrary. As a consequence animals

have to travel further and wait in long queues before facing their fate. Yes, foot and mouth is highly contagious and travels, too. By the same reasoning Mr Blair should also conclude that a system forcing a farmer from, let's say, the Isle of Wight, to sell his cow, sheep or pig to a large contractor somewhere up in Scotland or Ireland must be seriously wrong (see FT 25/2/01 *Britain may have exported infected sheep*). BSE and the foot and mouth disease do have something in common; a market forcing farmers to feed their animals with the cheapest and most unethical of feed and a market forcing farmers to transport their animals crammed in lorries and for long distances is, in the Burkean sense, 'inorganic' and bound to bite back. To Blair all of this doesn't matter; not for the moment, at least. Whilst £250m is a modest estimate of the cost of the foot and mouth disease 'to the farming sector' per month, £15m is what Labour raised for a May election that never happened; and that's as far as this mental horizon seems to reach.

Britain, historically, had opted for disease-free status, an entirely realistic objective given its island status and its ability to maintain strong border controls. But, in 1993, with the advent of the EU's 'single market' – which politicians of all three major parties heartily endorsed – the UK dismantled its border controls and opened up its markets to virtually unrestricted imports, legal and illegal. At a stroke, trade policy was 'out of synch' with the disease-control needs. The only logical move then was to embark on routine vaccination, to protect against one of the most infectious diseases in the world.

Amazingly, however, in 1990 MAFF had convinced the EU to adopt disease-free status, forcing continental member states to abandon vaccination. The scene was thus set for a disaster of epic proportions.

But what really set the seal on the disaster-to-come was a paradigm shift in the way livestock was reared and marketed. Local markets and local abattoirs – driven by regulatory pressure – had given way to mass-movement of animals, partly to serve a growing export market, partly to satisfy the needs of centralised supermarket buying and partly because of the critically reduced profit margins for sheep farmers. Hill farmers, unable to live off the income from traditional farming, increased stocking levels and became 'nurseries', keeping breeding ewes and shipping their progeny off the hills to be fattened on low-land grazing. This accounted for the massive movements of sheep which, ultimately, were to spread the disease.

'Amazingly, MAFF convinced the EU to adopt disease-free status, forcing members to abandon vaccination.'

But the fatal flaw was the inability of the Ministry to factor in changed farming practices into its control plan. In fact, it could not change its plan as it was set in stone, dictated by EU directives. And that plan – based largely on the template developed during the 1967 outbreak – was based on one dealing with what might be called a 'phase one' outbreak. Four principles are involved: early detection of the disease; identification of the affected animals; isolation; and slaughter. There was no 'Plan B'.

With massive secondary infection having already occurred before the outbreak was detected by MAFF, 'phase one' was wholly inappropriate, right from the very start.

At the time of writing, the government response had been to widen the control areas and slaughter more and more animals. What started as a control policy had developed into a manic killing frenzy, destroying the very fabric of British farming. While a rapid vaccination programme could have brought this epidemic to a skidding halt in 30 days, it is not clear at present whether the Ministry of Agriculture will be able to see sense. If not, the cure will have been worse than the disease. Then a new slaughter policy will be needed – with the Ministry of Agriculture the sole target. ♦

Dr Richard North is an adviser on food and safety, and former environmental health officer.



Time for a new direction

In the debate about the future direction of agriculture, two factors must be brought to the fore. Firstly, the malign effects of imports and exports in both starting the foot and mouth tragedy, and ensuring that helping to deal with it through vaccination was criminally delayed. Secondly, the solution must be seen to lie in an emphasis on the localisation of production, aided by a decline in international food trade. Most importantly this reduction in agricultural products criss-crossing the globe will be a significant contribution to solving climate change.

The rarely raised but central question in the present UK foot and mouth debacle is why is it that a disease that doesn't harm humans, and that most animals recover from, is resulting in massive culls of healthy animals and the virtual shut-down of huge swathes of the tourist industry? The answer is to regain as soon as possible a foot and mouth disease-free status to protect future exports of meat, live animals and dairy products.

Yet even in cold economic terms this makes no sense. In her detailed report *Stopping the Great Food Swap – Relocalising Europe's Food Supply** the Green MEP Caroline Lucas points out that according to the National Farmers Union, the UK earns £630 million per year from meat and dairy exports. Compare this with the estimate of the cost of the foot and mouth epidemic of £9 billion, mostly losses in tourism, but also to farming. In effect that means that it will take more than 14 years of exports to match the cost of the mayhem and damage done in a few weeks of the present 'cull to eradicate' approach to foot and mouth.

Concerns about the increasing global food trade must go beyond agriculture however.

Central to the post foot and mouth debate must be the realisation that trade-related transportation is one of the fastest growing sources of greenhouse gas emissions and is therefore significant in terms of climate change. Although most food is distributed by road and ship, the air-freight of foodstuffs is increasing. For example, UK imports of fish products and fruit and vegetables by plane between 1980 and 1990 increased by 240 per cent and 90 per cent, respectively. UK air freight (imports and exports) grew by about 7 per cent a year in the 1990s and is expected to increase at a rate of 7.5 per cent a year to 2010.

The growth of such trade in and out of the European Union has accelerated. The continent remains one of the largest importers of food in the world. Imports of different food products to the EU have increased by between 4 per cent and 279 per cent over the last 30 years. On closer inspection it has also become clear that over the same period exports by EU member states increased even more dramatically, by between 164 per cent and 1,340 per cent.

In terms of animal welfare, the adverse effects of intensive livestock production in Europe and UK are made worse by the increasingly long distances millions of animals are forced to travel. In 1998, 6.8 million pigs, 2.9 million cattle and 2.5 million sheep were transported

between EU member states.

Although the UK is a net importer of food, it is also often involved in simultaneous exports of the same products. The absurdity of this 'food swap' is illustrated by the fact that in 1998, Britain imported 61,400 tonnes of poultry meat from the Netherlands, in the same year that it exported 33,100 tonnes of poultry meat to the Netherlands. Britain imported 240,000 tonnes of pork and 125,000 tonnes of lamb while it exported 195,000 tonnes of pork and 102,000 tonnes of lamb.

As more consumers, farmers and workers are experiencing the down-sides of such globalisation, now is the time to consider how we replace this with localisation. Europe requires a Localist Rural and Food Policy. Its goal would be to keep production much closer to the point of consumption and to help protect and rebuild local economies around the world. Its measures include prioritising such local production by introduction of eco-taxation to ensure that the real costs of environmental damage, unsustainable production methods and long distance trade are included in the costs. It would also promote the production of healthy foodstuffs by providing assistance for change-over costs and marketing to ensure that intensive systems are replaced by more benign ones such as organic farming. This new policy would end the long distance transport and live exports of animals, restrict the concentration and market power of the major food retailers and encourage rural regeneration and employment.

Dramatically reducing world food trade and relocalising production must also be central to the debate about transforming the Common Agricultural Policy. Fortunately such a radical demand is not restricted to calls from one UK Green MEP. The Chairman of the European Parliament's influential Committee on Agriculture and Rural Development, the Green MEP Friedrich Wilhelm Graefe zu Baringdorf has welcomed this approach and called for such a debate not just in Brussels, but also in the World Trade Organisation and in environment and agriculture ministries everywhere.

Germany's new Green agricultural minister Renate Künast has also demanded changes in Europe's agriculture to result in 'a great leap forward for local economies'.

For this to occur countries will need to limit imports of goods which can be produced domestically, and which could otherwise threaten such a rediversification of national agricultural systems.

The final reason why European countries can and must reduce imports and compensate for this by increased local production is that if they don't, how long can it be before foot and mouth reappears – or another disease pays a visit – through the importation of another far flung virus from somewhere in the world.

(* *Stopping the Great Food Swap – Relocalising Europe's Food Supply* by Caroline Lucas MEP is available on WWW.greenparty.org.uk)

Colin Hines is the author of *Localisation – A Global Manifesto* (Earthscan).



Can we ever justify

ARE ECONOMIC SANCTIONS THE CYNICAL PLOY OF POWERFUL STATES,
MILAN RAI AND DOUGLAS



MILAN RAI

Dear Douglas

A report by the House of Commons Select Committee on Development warned last February that economic sanctions, 'unless carefully targeted', have the capacity 'to kill more children than armed warfare'. *The Future of Sanctions* report noted US epidemiologist Richard Garfield's estimate that over 200,000 children had died in Iraq as a result of the comprehensive economic sanctions laid on that country over the past decade.

The all-party Select Committee concluded, after 10 months' study: 'We find it difficult to believe that there will be a case in the future where the UN would be justified in imposing comprehensive economic sanctions on a country.' The Committee favoured moving away from economic sanctions to focusing on sanctions on arms imports and on the finances and movement of key members of the Iraqi government.

Clearly, there are many different forms of economic sanctions, and each of these varieties has different impacts on different countries in different circumstances. In a highly technological, highly import-dependent country like Iraq, in the aftermath of a bombing campaign estimated to have caused over \$200bn worth of damage to the infrastructure and civilian economic assets, the cutting off of normal trade has caused an enormous humanitarian crisis.

Dr W Kreisel, the Executive Director of the World Health Organisation Office of the European Union, summed up the situation in Iraq before a committee of the European Parliament on 26 February 2001, saying that, before 1990, Iraq had invested in infrastructure and in 'human resources development' to create 'an efficient health system that was considered one of the best in the Middle-East Region'.

He also notes that 'malnutrition was virtually not seen... health care services were guaranteed by an extensive network of well-equipped, well-supplied and well-staffed health facilities, and that [large investments in water and sewage treatment plants assured] nearly universal access to abundant safe drinking water and to a relatively clean environment'.

This has all changed under economic sanctions. In September 2000, the World Health Organisation found, in a joint study with other UN agencies, that about 800,000 children under the age of five are 'chronically malnourished'. (Chronic malnutrition can lead to lifelong mental and physical stunting.) UNICEF reports that death rates for babies less than a year old have more than doubled, as have death rates for under-fives (comparing 1984-1989 with 1994-1999).

'Diseases that were virtually under control are re-emerging,' says Dr Kreisel. 'Most of the health facilities are in poor physical state, lacking water and often without power supply, making them unsafe

and unsuitable for good patient care.' Water and sanitation plants lack spare parts and maintenance, and need repair and rehabilitation, 'as unsafe drinking water, unhygienic environment and poor sewage systems continue to endanger the health of large sections of the Iraqi population'.

Dr Kreisel concludes: 'The severity of Iraq's humanitarian situation stems from the massive and swift degradation of the country's civilian infrastructure, aggravated by over 10 years of economic and trade isolation.' The 'swift degradation' was caused by the deliberate bombing of Iraq's civilian infrastructure by Britain and the US, though Dr Kreisel is too diplomatic to say so.

A powerful case has been developed, primarily by the Centre for Economic and Social Rights (CESR), that the economic sanctions on Iraq are illegal. Despite the UN Security Council's duty to uphold human rights, enshrined in the UN Charter and the Universal Declaration of Human Rights, the Security Council has never conducted a human rights audit of its policies towards Iraq. There are lessons here.

Secondly, the CESR argues that the economic sanctions regime has massively violated the human rights of ordinary families in Iraq, and particularly the rights of children, which have special protection. This violation has continued, despite the introduction of the UN 'oil-for-food' humanitarian programme, whereby Iraq is allowed to sell oil to pay for certain kinds of humanitarian goods. The September 2000 finding by UN agencies that 800,000 children under the age of five continue to be chronically malnourished is an indicator of this continuing violation.

Voices in the Wilderness UK campaigns against the comprehensive economic sanctions on Iraq, because we believe that these economic sanctions are the major obstacle to the solution of the humanitarian crisis in that country. This is a view shared with two former UN Humanitarian Co-ordinators for Iraq who resigned in protest against the sanctions. However, we do not have a view on the imposition of financial or economic sanctions targeted on particular sections of the Iraqi elite, which do not pose the same threat to ordinary people in Iraq.

The Select Committee on Development has suggested that, 'if sanctions are to be retained as a credible instrument of foreign policy, they must increasingly seek to target the assets of specific groups or individuals responsible for breaches of international law'. This is not merely a question of credibility, but of morality and of legality.

Milan Rai

Dear Milan

Thank you for your letter about Iraqi sanctions. I have no reason to argue with most of your presentation; however, I have entered into this debate to

economic sanctions?

OR A JUSTIFIABLE WEAPON FOR USE AGAINST DICTATORS?
EDEN THRASH IT OUT.

discuss the efficacy of 'economic sanctions' as a tool of state policy, rather than any one particular example. I would expect you could point to more than one case in history – and recent history – where you would be in support of economic sanctions.

Let me first clarify my view of the definition and political role of sanctions. All states use sanctions to protect their political, security and economic interests or to project their power on behalf of these interests. The purpose of the state that employs sanctions is to persuade its opponent state to accede to its wishes and interests. It has decided that some use of force is required to achieve its aims. Deployment of sanctions of any type is a use of force, whether it is an attempt at 'friendly persuasion' or outright aggression. Sanctions can take mainly four forms: diplomatic, military, ideological and cultural or economic. We have agreed to discuss solely economic sanctions; however, I do not think it possible to avoid all reference to the other forms. All are in the armoury of nation states or their governing regimes to deploy as they deem appropriate.

I realise that I have already given an unqualified answer to the question under debate. Economic sanctions are as justifiable or unjustifiable as any other sanction a state may employ to achieve its policy objectives. Sanctions have no status except as instruments of national policy. No international or non-national body can employ sanctions except as an agency of nation-states that have decided to exert such a policy. So, we have to consider first the circumstances which may lead states to choose sanctions at all and to select economic sanctions rather than one of the other forms.

Economic sanctions are normally chosen when a state is unwilling or unable to use military force to achieve the result it is seeking and when diplomatic sanctions are embarrassingly ineffective. For example, sanctions applied to Japan after it had occupied Manchuria and invaded central China in the 1930s were initially diplomatic but then economic because the League of Nations' members and the US were unwilling or unable to resist Japan's aggression by going to war with her (military sanction). An ultimate effect of US sanctions (particularly an oil embargo that inhibited the Japanese war effort) was the Japanese attack on Pearl Harbour, which brought the US into the war against both Hirohito and Hitler.

Another, more recent, example is the application of economic sanctions against the apartheid regime in South Africa. This was welcomed by probably a majority of the South African population, who were willing to experience consequential privation in order to improve chances of removing the regime. Diplomatic sanctions had already failed and none of the countries which employed these sanctions were

willing to take military action against the South African regime.

The economic sanctions did not become effective in shifting opinion in the regime until the US adopted the policy. The involvement of so great a power as the US negated the stealthy breach of sanctions by other minor powers and contributed to the end of the apartheid regime. The US moved to apply economic sanctions partly out of national ideological motivation and partly out of domestic political pressure from the large African-American community, but there would have been little support in the US for aggressive military action against South Africa.

Every other nation and regime that decided to employ sanctions against South Africa had its own national interest reasons for deciding to act and for choosing economic rather than another form of sanction. For most of those involved, any consequential damage to their trading and economic interests from embargoing South Africa was minor and bearable. Some states which had some cause to suffer more serious economic disadvantages from joining the embargo, nevertheless joined the embargo out of concern for their diplomatic and political interests, although they were less assiduous about enforcing the embargo.

The point is that national governments and no other authority can decide to employ sanctions. The sanction chosen is the one that will do least harm to the perpetrator and has most chance of achieving the perpetrator's objectives. There is little point in choosing economic sanctions if they will be made ineffective by other states refusing to recognise them.

If a government decides to employ economic sanctions and can obtain the co-operation of other states in observing the embargo, but the regime suffering the embargo resists, it may still be worthwhile to impose the embargo in order to maintain a political alliance and the support of public opinion against the antagonist regime. There is also the possibility of the domestic population, increasingly disgruntled by the effects of the embargo, overthrowing the antagonist regime. This however is unlikely if the population is effectively suppressed by the regime and weakened by the effects of the embargo. This seems to be the case with respect to Iraq. The question arises as to whether, if a programme of economic sanctions is rendered ineffective or is not perceived to be likely to produce the desired result, the policy should be changed. I might return to this in my next letter to you.

Douglas Eden

Dear Douglas

Thank you for your letter, which leaves a question mark in my mind about the criteria you use in judging the use of economic sanctions. ✎



DOUGLAS EDEN

Douglas Eden heads the Centre for the Study of International Affairs at Middlesex University. He is senior fellow at the Atlantic Council of the UK and has written various books on international politics, including *Europe and the Atlantic Alliance: Issues of Identity, Security and Power*, *The Future of the Atlantic Community* and *Political Change in Europe*.

'Whether one views economic sanctions as peaceful actions, or as tantamount to warfare, there are legal criteria by which they can and should be judged.'
Milan Rai



Clearly when we are talking about economic sanctions, we are talking about unilateral sanctions carried out by countries acting alone (of the kind imposed on Cuba by the US), multilateral sanctions imposed by groups of countries (for example the European Union sanctions on Serbia) and UN sanctions.

In all these cases, there are indeed issues of 'efficacy', as you point out, but there are also questions of legality and morality – standards which you have not yet touched upon.

In the case of UN sanctions, there are particular duties and procedures laid down, for example, in the UN Charter. The Charter says, in chapter seven, that sanctions may be imposed by the UN Security Council when there is a 'threat to the peace', 'breach of the peace', or 'act of aggression', according to Article 41.

The Charter has an underlying moral framework. The Preamble reaffirms the faith of the member states of the United Nations 'in fundamental human rights, in the dignity and worth of the human person, in the equal rights of men and women and of nations large and small'.

It is generally agreed that the peacetime activities of the UN should conform to the human rights framework within which the Charter and other fundamental agreements were formed. It is also generally agreed that military action by the UN should conform to the laws of war, so-called 'humanitarian law'.

So, whether one views economic sanctions as peaceful actions, or as tantamount to warfare (and recall the Select Committee's warning that economic sanctions are capable of 'kill[ing] more children than armed warfare'), there are legal criteria by which they can and should be judged. In the case of Iraq, therefore, the Centre for Economic and Social Rights has argued that the economic sanctions have violated the standards of international human rights law, including those embodied in the Universal Declaration of Human Rights, the Convention on the Rights of the Child and the International Convention on Economic, Social and Cultural Rights.

The CESR has also argued that the economic sanctions have failed to reach even the more permissive standard of the humanitarian laws of war, which require both 'distinction' and 'proportionality'. 'Distinction' means that you should attack only military targets. 'Proportionality' means that attacks on these military targets should not cause excessive civilian damage.

The Geneva Conventions say that proportionality prohibits any 'attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects... which would be excessive in relation to the concrete and direct military advantage anticipated'.

The CESR points out that the 'critical issue' with regard to distinction is 'whether the sanctions are targeted at the entire population as a means to influence the regime – a clear violation – or at the regime, causing collateral damage to civilians'. I believe that the same moral and legal frameworks that apply to the UN

economic sanctions on Iraq should be applied to any economic sanctions against any country. I wonder if that is also your opinion? My impression so far is that you believe that economic sanctions are acceptable if they are effective.

So, if the sanctions on Iraq were being 'effective' in, for example, forcing the Iraqi government to accept UN weapons inspectors, they could and should continue, whatever the human cost.

Is this an accurate rendition of your view?

Milan Rai

Dear Milan

Thank you for your reply to my letter, which confirms your reliance on legalism-moralism rather than realpolitik to determine international policy. The problem with legalism is that the world's national political cultures do not all share the same respect for signatures on international agreements and they do not apply the same interpretations or definitions to 'human rights', 'aggression' or 'self-defence'. Further, most states will apply the international legal doctrine of changed circumstances to escape international agreements that are later interpreted or implemented against their national interests, especially if the relative power of the signatories should alter.

International agreements, including declarations on human rights, are only binding on the nation states that agree them so long as each is satisfied it can interpret the agreement to suit its own perceptions and interests. The United Nations is not a higher authority. It has no sovereignty, but is a mechanism created by independent nation states as a forum for negotiation, diplomacy and display in the furtherance or defence of national policies. All that limits the will of the individual powers is their own political, economic, cultural, ideological and military strength. I am not arguing that this is right or just. I am arguing only that we deceive ourselves if we assume that international peace and justice is liable to one interpretation and that we can secure our own perception of it simply by relying on international instruments and legal and moral constructs.

As you are keen to concentrate on Iraq, let us consider it as an example. Saddam Hussein invaded Kuwait. Most of the world's nation states abjure the changing of national boundaries by force. Acceptance of unprovoked force as a legitimising principle for this would undermine the security of every state, particularly in the Arab world where the coincidence of national populations and state boundaries is often questionable. Hence, most states criticised Saddam's attack as 'aggression'. He, on the other hand, saw it as the 'liberation' of Arabs who, in his opinion, should properly be Iraqis. He had already conducted chemical warfare against his own people, killing thousands he considered dissident. His hold on power had (and has) no legitimacy: he did not inherit and was not elected to office, but seized it. Like many before him, he exploited Arab nationalism and Islamic sectarianism to appeal for support outside his own country

while employing ruthless suppression and corruption to maintain his power inside Iraq. He still does. His continuing efforts to develop chemical, biological and nuclear weapons (weapons of mass destruction) and delivery systems were and are aimed at destabilising the region (at least) and projecting his personal power beyond the boundaries of Iraq.

The extraordinary coalition of countries, all of which decided it was in their interests to repel Saddam's assault on Kuwait, was unable to sustain its armed co-operation after his expulsion. Thus he survived in power. Instead, the coalition members arranged at the UN for inspectors to find and destroy his weapons of mass destruction. When he refused access, they applied sanctions. Sanctions relief was allowed to aid the Iraqi people but has been exploited by Saddam, at his people's sad expense, to maintain the flow of his own supplies. Arab rulers feared his racial appeal over their heads to their populations; others in the region and further afield consider it in their interests to treat and provision him by cheating sanctions. In these circumstances, the regime of international sanctions aimed at controlling his power appears to have had limited success in achieving its declared objective.

Saddam continues to impoverish and deprive his own people by using all resources available to Iraq for his clique and his power projects. There appears to be no way to relieve them without strengthening him. Yet, it is important that an improved strategy is developed. The differing perceptions of self-interest and morality among the nations who opposed Saddam (or half-heartedly opposed him) are reducing the effectiveness of sanctions and opposition to Saddam. Unless a revised economic and political approach can be devised successfully, it is likely that direct confrontation and war will eventually recur. A victorious and expansionist Saddam unopposed by the great powers would result in death and devastation, let alone deprivation, far beyond the suffering caused to Iraqis by Saddam's manipulation of the present sanctions regime. I would hope we can agree on that.

Douglas Eden

Dear Douglas

If I may divide my response into three sections, the first concerns historical fact.

Contrary to your suggestion, economic sanctions were not imposed after Iraq refused UN weapons inspectors access. Economic sanctions were re-imposed on Iraq in April 1991 before the UNSCOM inspection agency had been formed. Also UN officials have repeatedly made it clear that there is no evidence of government diversion of resources from the UN oil-for-food humanitarian programme, contrary to your assertion that the programme has been 'exploited' to 'maintain the flow of [Saddam Hussein's] supplies'.

\$10 billion worth of humanitarian supplies has gone to Iraq since 1997 under oil-for-food. Iraqi revenues from oil smuggling are a fraction of this amount. It therefore cannot be the case that the Iraqi govern-

ment has impoverished ordinary Iraqis by using 'all' the resources available for the elite.

Secondly, you suggest that an 'expansionist Saddam unopposed by the great powers would result in death and devastation... far beyond the suffering caused to Iraqis by Saddam's manipulation of the present sanctions regime'. There is no prospect of the current Iraqi leadership being 'unopposed' by Britain and the US, whether or not sanctions are lifted, and the suffering in Iraq is caused primarily by the economic sanctions, not by Baghdad's 'manipulation', a fact supported by the resignations of two successive UN Humanitarian Co-ordinators for Iraq.

Thirdly, 'realpolitik'. It is one thing to recognise the amoral nature of the State. It is another matter entirely to abandon the effort to restrain those who rule our lives. If ordinary people had had the strength to impose the standards of international law on the great powers, hundreds of thousands of young lives would not have been destroyed in Iraq over the past decade.

Milan Rai

Dear Milan

We are in agreement or partial agreement on many of the most significant issues, but we shall have to remain at odds on a few.

The extent of the Iraqi regime's profiting from smuggling is in dispute, but not the fact that none of it goes to relieve the suffering of the Iraqi people. UN officials are scarcely in a position to assess how the Saddam regime applies receipts from the smuggling or the 'oil-for-food' programme (under which the powers applying sanctions permit the regime to sell a fixed amount of oil to obtain food and medical supplies). Were the supplies distributed to ordinary Iraqis as intended by the powers, the effect of economic sanctions on them would be mitigated.

In a sense, however, this is beside the point. You may have deduced from my previous letters that I consider economic sanctions against aggressors and tyrants futile in most cases. They are used mainly when powers lack the vital national interest, strength, will or popular support (in the case of popular democracies like the US) to use decisive force. Economic sanctions tend to work against authoritarian states only when they disrupt critical material supplies such as oil and arms. It is obviously impossible to deprive Saddam of these resources. However, abandonment of the present sanctions policy without adoption of a more effective anti-Saddam policy would strengthen him to the even greater cost of the Iraqi people and their neighbours. You should not think for a moment that any private citizen's moral duty to Iraqis and Saddam's past and prospective victims is acquitted by campaigning for the lifting of economic sanctions.

May I suggest that a moral campaign to end sanctions must be accompanied by a no less moral and responsible campaign for effective measures against Saddam if you wish to influence the great powers laying siege to his regime?

Douglas Eden

'All that limits the will of the individual powers is their own political, economic, cultural, ideological and military strength.'
Douglas Eden



THE GOOD

Juliette de Bairacli Levy, traveller, writer and champion of gypsy herbal medicines, is herself the greatest possible advertisement for her work. Born in 1912, (at 11 am, on the 11th day of the 11th month), she is still an active speaker and lecturer, travelling the world to share her love and understanding of the natural cures of her ancestors.

Born into an Egyptian-Turkish Jewish family, this eleventh-hour baby spent her childhood years in Manchester, England, eventually going on to study veterinary medicine at university. Her desire to help animals began at the age of just four – after the death of a loved puppy she became determined to do everything she could to alleviate animal suffering.

University, however, was not what she wanted it to be. Appalled by the vivisection and animal experimentation that beset the studies that were going on around her, she abandoned her formal education, opting instead to find out how animal care could be achieved without harming a single creature. Before long, she was travelling the world, spending time with gypsies and peasants wherever she could, learning the rudiments and skills of natural herbal remedies, returning to England in the late 1930s to set up

her own dog distemper clinic, treating and curing hundreds of dogs with herbs and natural diet alone.

The arrival of World War II sent de Bairacli Levy into the Land Army, where she gathered and used sphagnum moss to tend wounds. Once the war was over, she moved to Yorkshire, successfully treating sheep in their many hundreds, all of them

JULIETTE DE BAIACLI LEVY

suffering from Black Scour, and all of them previously considered lost cases by 'conventional' vets. Her work was so effective that notice was bound to be taken, and it came in the form of Sir Albert Howard, founder of the Soil Association and father of many of today's organic methods.

'Sir Albert arranged a meeting with me at The Farmers' Club in London,' she recalls today, 'and there I met with that great man, filled with nobility and kindness, and I was urged by him to write my herbal books for both domestic and wild animals.'

And write she did. In 1951 she produced the *Complete Herbal Handbook for Farm and Stable*, the first veterinary herbal text ever to be published. It recorded for the first time a wealth of herbal lore that she had absorbed on her travels through America, Europe and Africa, lore that had been handed down from generation to generation by word of mouth alone. Before long, more books followed, and Juliette de Bairacli Levy had become the pioneer of recorded holistic animal care.

Not that her approach to herbal remedy stopped with animals.

The *Illustrated Herbal Handbook for Everyone*, and *Natural Rearing of Children* have become such classics in the last half-century that her publisher receives more inquiries about her than any other of their writers: no mean feat, as her publisher is Faber and Faber, who number TS Eliot, William Golding and Ted Hughes among their authors.

In the 1950s, with her two young children Luz and Rafik, de Bairacli Levy moved to Israel where animal husbandry became a family affair. Owls, hawks, dogs, goats and donkeys were all raised in this caring menagerie – de Bairacli Levy gained great local notoriety when she saved her hives of bees from shelling during the Six Day War. The books continued to appear, and de Bairacli Levy developed a focus in particular on care of Afghan hounds. Today, her 90th birthday little more than a year away, she lives on the Azores.

To Juliette de Bairacli Levy, a slight and delicate woman of great mental fortitude and strength, the current foot and mouth outbreak suffered in Britain and many other parts of the world, is a damning indictment of the failure of the agricultural community to provide the type of care for animals she has been championing for nearly eight decades.

'Why have farm diseases become so widespread?' she wrote in March. 'In our present time, we can let the Bible answer this. The earth is sacred. Yes! Totally sacred, every inch of it. The "spilling of blood" upon the earth is classed as a deep sin. It is stated in the Bible that the only person who can cleanse the earth of blood, is the person who shed it.'

'And yet, look at the modern so-called slaughter-house, also known by the horrible name of abattoir, with the blood from the terrified animals being slowly bled to death by a wound from those terrible metal hammers which crash down upon the head of the victim. The only future for the animals, if there are any left after the killing by the hundred-fold from foot and mouth disease, is to make sure that kindness laws are enforced.'

She recalls the cattle reared by her old friend Sir Albert Howard in India, cattle who often 'rubbed noses over the fences with the native cattle suffering from foot and mouth,' yet never caught the disease themselves.

Today, de Bairacli Levy is still in touch with those farmers whose sheep she saved half a century ago. Their still naturally reared animals are in perfect health. Only very recently, she spoke to the farmers by telephone, to make sure they weren't losing their way during these disastrous times. Her words were simple. 'I reminded them of the importance of molasses, garlic and ivy, to be hand fed to their sheep.'



THE BAD

If you were an enlightened, forward-looking, liberal government, and you set up a 'task force' to examine the regulatory system, make it fairer and in particular reduce the 'burdens' it imposes on small producers, who would you put in charge of it? Someone with expertise; maybe someone with a small business background, or someone from outside business altogether; someone willing to kick the big boys in the pants in the name of fairness.

That's what you might do if you were an enlightened, forward-looking, liberal government. However, if you were a reactionary, neo-liberal government, in hock to big corporations and intent on turning your country into a second-rate America, what you might do is scout around for one of your mates, who would do the job in much the way you wanted him to. If, say, you were, oh, I don't know, Tony Blair, for instance, you might call up your chum Christopher (Chris to him, Lord to you) Haskins, chairman of Northern Foods, a very, very large food company, and regular donor to New Labour. 'Chris,' you might say, 'fancy being head of the Better Regulations Task Force? You don't have to do much and we don't pay you, but it could be fun. Newspaper articles, speeches, the occasional flash dinner. Lots of useful new friends...'

Maybe it didn't happen quite like that, but when Lord Haskins was appointed to Blair's Better Regulations Task Force it was another victory for New Labour's style-over-substance government. Ostensibly set up to straighten out and simplify regulations, the task force (what is it with these violent Blairite metaphors, by the way? Task forces, Tsars, shock troops, hit squads; who are they trying to scare?), in reality, is stuffed with people in whose interest it is to remove rules that get in the way of profits. Apart from Haskins himself, the task force includes a millionaire consultant, a former member of virtually the same task force under the Tories, the chief executive of the group that lobbies for Scottish manufacturing industry,

the deputy director-general of the British Chambers of Commerce and the director of Europe Economics, which specialises in 'restructuring' things (ask a Corus steel worker what that word means...).

But Haskins is no evil plutocrat. On the contrary, he is a modern man, who just wants everyone to live their lives in their own way. He's not some bloated old masonic corporate stooge; he's a man of the people – a liberal, even – and he wants everyone to know it.

So Chris, for example, wants to see the Church of England disestablished, as well as to legalise cannabis, and he's against any legislation that tries to tell people how to live their lives. He thinks the internet should remain unregulated and he thinks Britain's licensing laws should be relaxed. All in all, a bit of a cool cat, in fact; and not a little out of tune with the current Labour-Tory consensus of stern Victorian morality, crack-downs on 'scroungers' and competitions to see who can talk toughest about immigrants.

And this is the problem with Haskins. His social liberalism thinly disguises his corporate libertarianism – and probably goes hand in hand with it. For while Cool Cat Chris thinks that, hey, people should just be able to live their own lives, man, without anyone getting, like, heavy with them, he appears to

CHRISTOPHER HASKINS

think that the same thing applies to vast corporations with economies the size of Africa.

So on agriculture, for example, Chris has little time for those whingeing greenies who want everyone to go organic. Perhaps unsurprisingly for the chairman of a big food company, he happily buys into the hoary old myth that 'without such products' (agricultural chemicals and GM crops) 'the world would be unable to feed itself'. What he wants is 'the responsible application of modern sci-



ence, including chemicals, pharmaceuticals and properly tested genetic modification'.

In fact, Chris just doesn't really like environmentalists at all, as a speech he gave last July showed. Fearlessly demolishing the foundations of the environmental movement with just a few razor sharp observations, he pointed out that 'yes, motor cars pollute, but what about horses?' and that 'Prince Charles has no right to deny poor countries the right to benefit from [GM crops]'. And that anyway, 'Greenpeace was wrong about Brent Spar'.

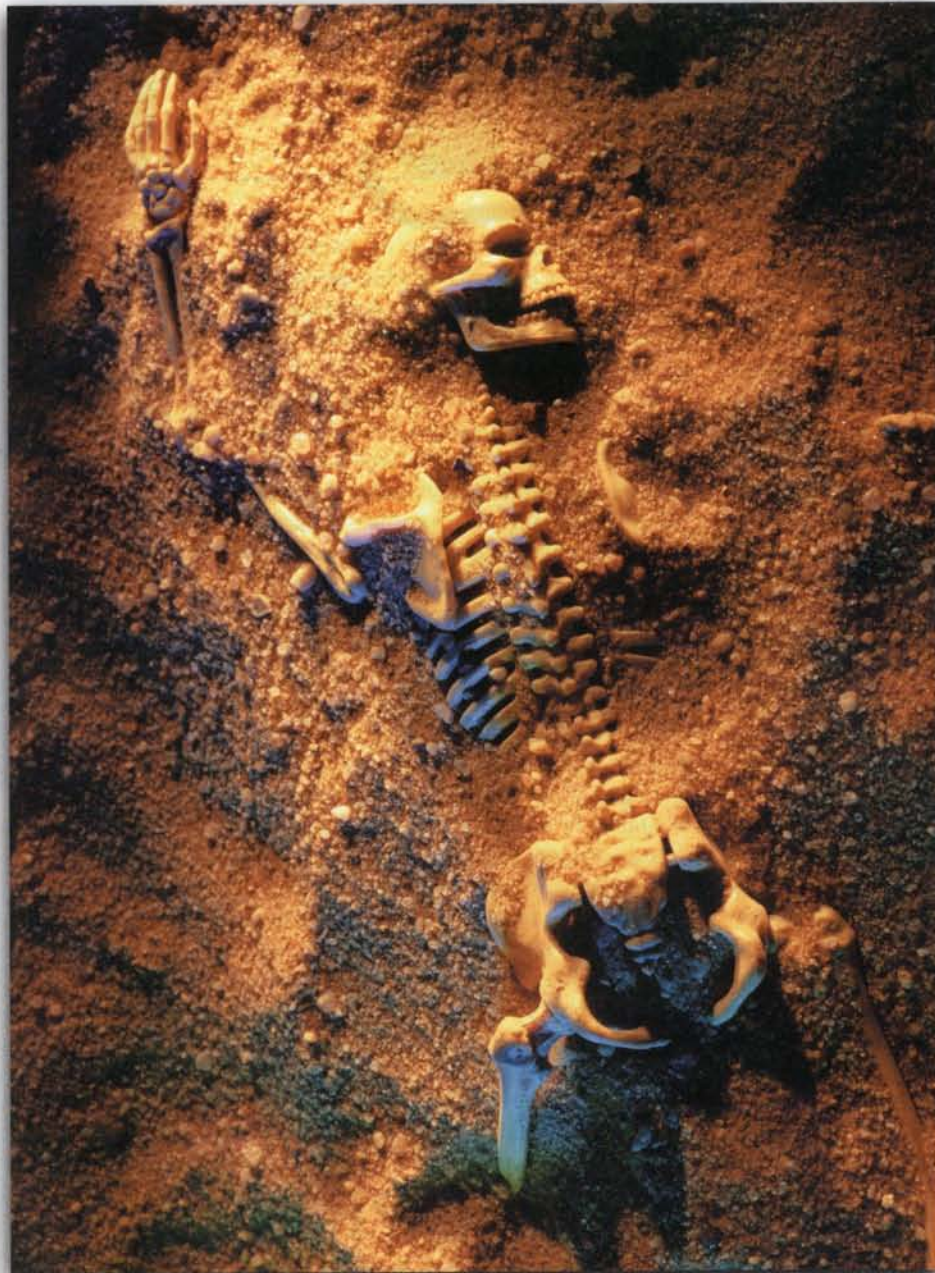
What Chris does like, though, is the free market. That's why he thinks that Britain should join the euro. That's why he's looking at reducing those annoying regulations that 'burden' the privatised telecom industries, pointlessly insisting that they put customers first. And that, in fact, is what's behind his real objection to sustainable farming. As he wrote recently in a *Financial Times* article: 'an exclusively organic system might cause a reversal of present trends towards global free trade if it led to reintroduction of protectionist barriers to support uncompetitive European farmers.'

Thanks, Chris. The whingeing greenies couldn't have put it better themselves.

...AND THE UGLY

'Thank you for emailing President Bush. Your ideas and comments are very important to him... Unfortunately, the President cannot personally respond to each message... Your interest in the work of President Bush and the new administration is appreciated.'

The automatic message you receive if you email President Bush to object to him tearing up the Kyoto climate Protocol.



grave injustice

As the shockwaves from the organ retention scandal at some of Britain's top hospitals continue to reverberate, *The Ecologist* reveals the nuclear establishment's own grotesque brand of 'bodysnatching'. **Eduardo Goncalves** on how doctors, multinational corporations and even Christian missionaries across the globe helped British and American nuclear scientists secretly steal the bones of thousands of dead children.

It was an icy-cold January morning in downtown Washington. The snow on the pavement contrasted eerily with the stony grey of the nondescript building where the men had been told to arrive. It was to be an important meeting, although few outside room 1201 here at the US Atomic Energy Commission would ever know its real purpose.

John Bugher, head of the AEC's Division of Biology and Medicine, eyed the gathering. Of the 29 men hovering around the long table, most were government nuclear scientists like him. A handful were military men. There were also two representatives of the Rand Corporation. Their contribution to this secret operation would be crucial.

It had gone 9am. Bugher cleared his throat, and began.

'We will come to order, please. We are a little late, and I notice the clock is four minutes slow anyway. The conference here as before is a classified conference. I will assume that no one is present who is not cleared for restricted data.'

And so began what was to be the most important meeting of 'Project Sunshine', one of a number of secret American atomic research programmes which today was to acquire special significance. Bugher introduced AEC Commissioner Willard Libby, who was to tell them of Sunshine's new drive.

'I would like to say that there is no effort which the AEC is engaged in which to my mind is more important than this project', began Libby. 'There are very great gaps in the data, and it should be our prime objective to fill those holes... By far the most important is human samples. We have been reduced to essentially zero on the human samples. I don't know how to get them, but I do say that it is a matter of prime importance to get them and particularly in the young age group... Human samples are of prime importance, and if anybody knows how to do a good job of bodysnatching, they will really be serving their country.'

He paused. If his colleagues were shocked, it did not show. Libby continued.

'I don't know how to snatch bodies. We hired an expensive law firm to look up the law of bodysnatching. This compendium is available to you. It is not very encouraging. It shows you how very difficult it is going to be to do it legally. It is a delicate problem in public relations, obviously,' he added, as if as an after-thought.

Laurence Kulp, an ambitious and energetic nuclear scientist from Columbia University, spoke up. He had already done research on the bones of young children and middle-aged people he had managed to acquire. He would later become director of Project Sunshine.

'We have the channels in these places where we are getting everything. We have three or four other leads where we could get complete age range samples from different other geographic locations. These three are Vancouver, Houston and New York. We could easily get them from Puerto Rico and other places. We can get virtually everyone that dies in this range... The channel is there, and the samples are flowing in,' he added.

'We intend to get virtually every death in the age range we are interested in the City of Houston. They have a lot of poverty cases and so on. Down in Houston they don't have all these rules.'

The scene could almost have been lifted from a B-movie, though the dialogue is not a film script, but is taken from official transcripts recently declassified by the US Department of Energy of meetings held in the 1950s, and these 'bodysnatchers' – as they were to become nicknamed – were not actors but government agents whose work was funded by taxpayers.

Concerns about the possible irreversible human and environmental consequences of nuclear testing had arisen after the first atomic bomb explosion in New Mexico, but now public and political pressure was growing.

America's announcement in January 1950 of plans to develop the H-bomb sparked the beginnings of a global anti-nuclear protest movement. A few years later, Bertrand Russell and Albert Einstein were to launch the famous manifesto signed by 11 of the world's top scientists – nine of them Nobel laureates – which warned of the massive genetic damage that could be caused.

Adlai Stevenson, who was to run for President in 1956, publicly called for an end to the tests, whilst an undated memorandum from the AEC to President Eisenhower showed that he too was worried: 'The last time we talked, you mentioned strontium-90 occurring in the 'fallout' from atomic weapons tests. It seemed to me that you indicated some concern with the amounts that had been produced.'

The flurry of publicity that followed the US H-bomb test at Bikini Atoll which contaminated the entire crew of a Japanese fishing vessel, and reports of mysterious sheep deaths near the Nevada testing site, prompted AEC officials to conclude in 1954 that the public,

'which is expected to accept a certain degree of hazard, has not been adequately informed of the extent and nature of the hazard'.³

In 1949 the AEC had set up 'Project Gabriel', a study to determine 'how many atomic weapons could be detonated before

radioactive contamination of air, water and soil would have a long-range effect upon crops, animals and humans'⁴, and with it a secret operation to establish a global network for the collection and measurement of fallout. But as the nuclear test programme expanded, so did the need for data, and in 1953 the Rand Corporation was contracted to review the operation.

Its report concluded that 'the release in the world of several kilograms of strontium-90 within less than a decade has probably disseminated enough of the contaminant to provide amounts that are probably now detectable in samples of inert and biological materials throughout the world... Today we are afforded the opportunity of doing a radioactive-tracer chemistry experiment on a worldwide scale.'

Samples had already been acquired of livestock, foodstuffs, water and soil. Now, though, the operation was to change codename and become known as 'Project Sunshine' – and human bones would be collected too. The first priority was to get baby bones.

Because the 'security specifications' of the operation had to be maintained, a cover story would be used: 'The stated purpose of the collection is to be for a survey of the natural radium burden of human bones. There are still enough uncertainties regarding threshold dose for injury to provide a plausible explanation for further surveys. As for the emphasis on infants, we can say that such samples are easy to obtain here, and that we would like to keep our foreign collections comparable'.⁶

By April 1956, the operation had begun to bear fruit. The previous year they had acquired 'only' 55 stillborn babies from Chicago, one from Utah, three from southern India and three legs from Massachusetts.⁷ Now, though, they could boast over 1,300 human bodies and bones collected from 26 different countries and cities around the world (see table on page 32). From Asia to Europe, Africa to South America. Some were young adults. Most were just hours or days old.⁸

The report cataloguing the gruesome tally was classified secret. It shows how the bodies were assigned simple numbers. An English baby boy who died in February 1956 at the age of two became 'sample B-1344'. A 13-month-old baby girl who died in September that same year was 'B-595'. Both are among the 27 bodies that were shipped to the Americans that year by Middlesex Hospital. The oldest was 30 years of age. The youngest – identified only as B-1102 – was a mere eight months old.

The 'bodysnatchers' did not stop there, though. More 'samples' were acquired from the Catholic University School of Medicine in

'Reports show that US officials acquired 'cadavers' from the UK as early as 1953.'

✦ Santiago, Chile, with the help of the Rockefeller Foundation in Rio de Janeiro, Brazil. The Foundation also helped secure human bones from the Maternity Hospital in Lima, Peru, and the Medicine Faculty at Brazil's Recife University, and Dr Shields Warren, who supplied hundreds of bones from his own Cancer Research Institute in Boston, Massachusetts, arranged for further 'samples' to arrive from Bristol, England.⁹

The Department of Energy says it has no evidence to suggest that consent was acquired from any of the relatives of the deceased, in Britain or elsewhere. In fact, the nuclear establishment in Britain was not only directly involved in Project Sunshine – it even had its own bone collection operation.

England was one of the first sites chosen by the AEC in the early 1950s to be part of the Sunshine network, and was assigned the code-name Area 5. Reports show that US officials acquired 'cadavers' from the UK as early as 1953.¹⁰ Sometimes it was the British themselves who were to take the initiative. In 1956, a leading scientist at the UK Atomic Energy Authority (UKAEA) wrote to the AEC: 'I enclose two copies of reports on the intercomparison of samples and on radiochemical methods. You will see that there is good agreement between the UK and the US on samples of bone, hay and milk.'

The title of this UKAEA report is revealing: 'Cross Checks between UK and US Sunshine Results'. The list of data offered within its pages includes 'a still-born child'.¹¹

Other US documents state that samples of human tissue from England were 'readily available' – including the ribs and teeth of babies and children. One letter from the UK Atomic Energy Authority to Washington is unabashedly entitled: 'Samples Required for Sunshine'. It followed a secret meeting between AEC Sunshine scientist Robert Dudley and UKAEA counterparts at the latter's Harwell headquarters on 2 January 1955.

But if American freedom of information legislation is now allowing some of the story belatedly to emerge, the whole truth about the extent of British-

American bodysnatching is unlikely ever to become public knowledge. When asked to release a file from the Project Sunshine archives entitled 'Classified Discussions at Harwell', the US government wrote back: 'This document has been determined to be NOT DECLASSIFIABLE and has been removed from this folder'.

Ironically, files now being released into the Public Record Office in London are shedding new light on Britain's own nuclear 'bodysnatchers'. They show that, as with the Americans, their main interest lay in young babies: of 276 UKAEA 'samples' collected between July 1963 and June 1964, for example, 112 were newborn babies, and 104 were younger than four years old. Stillborn foetuses were provided by institutions such as the Royal Cancer Hospital in London, the Royal Hospital for Sick Children, and the Regional Physics Department in Glasgow.¹²

More bodies and bones were provided to UKAEA scientists working in laboratories at Woolwich and Capenhurst by doctors in Cambridge, Newmarket, Norwich, Chelmsford, and the West London Coroner (see below). British nuclear scientists even mimicked their American friends' global aspirations by acquiring babies from as far afield as Hong Kong.¹³

The scandals at Bristol and Alder Hey hospitals, and now the organ-stripping of the Marchioness disaster victims, raised the issue of informed consent. But the nuclear bodysnatchers raises another question: where does the buck stop? Documents show that, in the United States at least, no less a figure than the President himself was kept informed of Project Sunshine's progress. Who will now take responsibility in Britain for this latest proven abuse of ordinary people's rights by the nuclear establishment? ♦

'Stillborn foetuses were provided by the Royal Cancer Hospital in London.'



Eduardo Goncalves is a Portuguese freelance journalist. He is currently writing a book about the hidden history of the nuclear age. He lives and works on an organic smallholding in southwest Portugal with his partner and 12 cats. References on page 66.

America's Body and Bone 'Collecting Stations'

SOUTH AND CENTRAL AMERICA

Brazil (Dr Humberto Menezes, Recife)

Chile (Dr David Rosenberg, Santiago)

Colombia (Dr Francisco Heberlin, Baptist Hospital, Barranquilla)

Ecuador (Dr Juan Montalvan, National Institute of Hygiene, Guayaquil)

Puerto Rico (Dr Lorenzo Galindo, University of Puerto Rico)

Venezuela (Dr L Potenza, National Pathological Anatomy Service)

EUROPE

Denmark (Dr Gunnar Teilum, Copenhagen University)

England (Dr C Treip, Dept of Histology, Middlesex Hospital, London)

France (Dr Jean de Brux, Boucicant Hospital, Paris)

Germany (Dr H Hamperl, Bonn University)

Italy (Dr Guiseppe Volante, Institute of Pathology, Turin University)

Switzerland (Dr Erwin Uhlinger, Institute of Pathology, Zurich University)

NORTH AMERICA

Boston (Dr Shields Warren, Cancer Research Institute, New England Deaconess Hospital)

Colorado (Dr James McNaught, Pathologist, University of Colorado)

New York (Dr Robert Coon, College of Physicians & Surgeons, NYC)

Texas (Dr Clarence Brown, Pathology Dept, Baylor University)

Canada (Dr W B Leach, Pathology Dept, Vancouver General Hospital)

ASIA

China (Taiwan) (Dr Shu Yeh, National Taiwan University, Taipeh)

India (Dr Timothy Takarc, Wanless Tuberculosis Sanatorium, Bombay State; Dr A Zerne Chapman, Landour Community Hospital, Uttar Pradesh; Dr Marian O Boehr, American Baptist Mission Hospital, Nellore; Dr W F Bulle, Bethesda Hospital, Ambur)

Iran (Dr Ashton T Stewart, American Christian Hospital, Tabriz)

Japan (Dr Tadashi Takeuchi, 2nd Tokyo National Hospital)

AFRICA

Liberia (Dr J Legendre, Liberian Government Hospital, Monrovia)

South Africa (Dr Howard Christoferson, McCord Zulu Hospital, Durban)

UK Atomic Energy Authority bone suppliers

Mr G L Thurston (London coroner)

Dr F Harris, Newmarket

Dr G A Gresham, Cambridge

Dr Morgan Hall, Norwich

Dr J H Dean, Newmarket

Dr J W Lacey, Chelmsford

THE GREAT BRITISH ENVIRONMENTAL SURVEY

2001

Sometime soon – at the time of going to press it looks like 7 June – this country is going to be faced with a general election. If that election is like most in the past, it will manage to avoid highlighting a huge tranche of issues central to the future of this country. The natural environment, for example, will barely merit a whisper. Pollution; overconsumption; congestion; the centralisation of economic power; the commercialisation of public services; the dominance of corporations. These are issues that confront people every day. Yet politicians rarely mention them.

The fact is that three virtually identical parties will compete for the crown when the election arrives. For all, ultimately, buy into and support a global system of increasingly deregulated corporate economics – globalisation, as the buzzword has it – which renders their differences virtually irrelevant. It is this system which leads to many of the problems mentioned above.

We wanted to know what the public thought about this. So we put together a wide-ranging opinion poll, the results of which we present over the next six pages, with commentaries from experts on the subjects in hand. We think that our politicians will be surprised – and maybe disturbed – by some of the results. Some of them surprised us. What they certainly should do is give our increasingly complacent political class a sharp kick in the pants.

What do you think?

A striking result was received when we asked people about economic growth. No mainstream politician has ever publicly questioned whether this flawed method of accounting is a good way to judge the health of society. Perhaps they should; for this poll shows, very significantly, that more people think it is an inadequate measure of society's progress than a good one.

Other findings also add to the impression that the public is ahead of the politicians. A remarkable 80% of people want more local control over economics and politics; surely a sign of just how undemocratic our democracy has become. An even more remark-

able 87% would support government measures to protect local producers from big corporations; something which the WTO or the EU (both unelected) would currently structurally forbid. As many as 54% want corporate donations to political parties banned.

If suspicion of big corporations is one thread that can be picked out from these results, concern for the environment is another. As Charles Secrett, of Friends of the Earth, points out, for the first time a majority of the public has strongly indicated that environmental policy will help determine their voting intention. They have also made the link between climate change and human-caused pollution, and shown strong support for investment in alternatives to road building. They are supportive of investment in organic farming, sceptical of biotechnology, worried about agribusiness, and, most damning of all for Blair, Prescott and Meacher, they don't think that New Labour has succeeded in improving the environment over the last four years. Combine this with the 55% of people who determine their voting pattern, at least partly, on environmental policy, and our leaders might want to ask themselves how many votes their neglect of these issues will lose them when the polls open.

So what?

Why does this matter? It matters because, as this poll shows, there is an increasing gap between the aims of our political class and the views of the people. The overall impression is of a public much better informed than the politicians and the media give it credit for. A public which cares about issues that don't even appear on the radar screens of most politicians.

If those politicians value their jobs, they will take note. And if they take note of nothing else, they might like to cast their eye over the simple, final question we asked: Which of the following is most concerned about the environment; Tony Blair (13%), William Hague (4%), Charles Kennedy (7%) – or you? You, by the way, romped home on 68%. Let's hope it starts to wake them up.

OVERVIEW CHARLES SECRETT, DIRECTOR OF FRIENDS OF THE EARTH:

Q Does environmental policy have an effect on the way you will vote in the general election?

55% Yes (net)
41% No
30% Yes, a little
25% Yes, a lot
5% Don't know

Q Since Labour came to power do you think they have succeeded in improving the environment or not?

65% No
26% Yes
9% Don't know

'Labour ignores this poll result at its peril, particularly when correlated against the dashed expectations of so many Labour voters [only 55% of those intending to vote Labour felt that the party had succeeded in improving the environment]. Yet this kind of polling evidence shows that environmental issues must feature strongly in all parties' campaigns. All parties must guard a vulnerable flank. Every time politicians turn their back on these issues, problems bite them in the arse.'

The movement has been working so long to make an environmental breakthrough, and these figures show that headway is at last being made. Politicians have long thought that the tried and tested models will work. They won't, which is a truth that voters understand.

Voters are way ahead of politicians.

The figures show that for 55% of voters environmental policy will have an effect on the way they vote. This is the first time that I can recall that there has been shown to be a majority of people who are prepared to act decisively on behalf of the environment. One of the reasons that this is so significant is that previous polls have highlighted public concern, whereas this one shows that people are saying 'I am prepared to do something about it'.

But this is a challenge to the environmental movement as well as to politicians, a challenge to push these many concerns to the forefront of everyday constituency issues. These figures show that the gauntlet has been thrown down to NGOs and politicians alike.'

CLIMATE, TRANSPORT AND ENERGY

Q Would you agree or disagree that climate change contributed to the storms and flooding late last year?

77% Agree
15% Disagree
8% Don't know

SIMON RETALLACK, EDITOR, 'CLIMATE CRISIS':

'These are encouraging findings. Climate change is undoubtedly the most serious environmental problem we face, yet, up to now, it has been hard to engage the public with the issue because it has been seen as a rather distant and abstract threat whose human origins have seemed difficult to believe. These poll results show that that may have changed. Well over three-quarters of the public accept that climate change is real, that it is already having a devastating impact and that our behaviour is causing it. Campaigners should build on that to persuade the public to take the next step: take action to reduce individual emissions whenever possible and apply heat on politicians until they act. With increased public awareness, governments should no longer feel able to avoid real action.'

Q Thinking about climate change, would you say that car emissions...?

62% Are a cause, but other factors play a greater part
25% Are one of the main causes
8% Do not affect climate change
5% Don't know

Q The government has announced a target of supplying 10% of Britain's energy from renewable sources, such as wave power, solar power and wind power, by 2010. Do you think this target is too high, not high enough, or about right?

49% About right
34% Not high enough
9% Too high
7% Don't know

JEREMY LEGGETT, FOUNDER AND DIRECTOR, SOLAR CENTURY:

'It seems to me that people will view this question, unfortunately, through the filter of what they read in the press. And so the fact that the government has set a target, and is 'struggling' to meet it, or whatever the latest situation is, will affect peoples' view of the bigger issue.'

I suspect that had you asked 'would you like to see a massive explosion of investment in renewables?' positive responses would have been much higher. It does show, though, public support for the concept of renewables investment; which is positive.'

77%

OF THE BRITISH PUBLIC BELIEVES:

that climate change contributed to the storms and flooding late last year

Q Do you think we should close down the nuclear industry or keep it running?

50% Keep it running
35% Close it down
15% Don't know

CHRIS BUSBY, DIRECTOR OF GREEN AUDIT AND OF THE LOW LEVEL RADIATION CAMPAIGN AND NATIONAL SPEAKER ON SCIENCE AND TECHNOLOGY FOR THE GREEN PARTY:

I am depressed by this result, although I might have predicted it had I thought more deeply, and beyond my own circle and friends. More people seem to want to keep nuclear power than want it abandoned. I wonder if they have been influenced by nuclear chants about global warming. The ratio of the pro: anti: undecided is fairly constant across age, social class and region. What gives me hope is the women (see p39). There is a significant gender split: perhaps this is due to being connected to the children, who suffer the results of nuclear power releases. Or perhaps the men just accept the arguments of authority more readily.

Q Would you agree or disagree that the government should renationalise the rail networks?

72% Agree
19% Disagree
9% Don't know

PAUL KINGSNORTH, DEPUTY EDITOR, THE ECOLOGIST:

'Anyone who has travelled on a train in Britain will understand why people are so dissatisfied with the current state of the railways. Even so, it's perhaps surprising to see such strong support for renationalisation. What this shows, it seems – certainly when the second question is taken into account – is that public support for a complete rethink on transport in Britain is extremely high. People now seem to understand that road building encourages new traffic, and adds to the congestion and pollution they see every day. They want alternatives, but no mainstream party will provide them; the government has picked up on roadbuilding again, knowing that it is a short-term 'solution', and is still intent on carving up the trains and the tubes and handing them out to privateers. The opposition, when in government, were even worse.'

Alternatives are certainly possible. The Green Party recently calculated that just 25% of the money to be spent on roads over the next 10 years would pay for a £1bn improvement in rural transport, an extra £4bn to reduce bus and rail fares over a decade, light rail systems for eight major cities, an eight-fold increase in bus lanes and 10,000 urban traffic-free 'home zones'. It can be done. People want it done. Why the delay?'

Q Do we need to build more roads, or should investment be channelled into alternative means of transport?

61% Invest in alternatives
22% Do both
15% Build more roads
2% Don't know

FOOD AND AGRICULTURE

Q Of the MAFF (Ministry of Agriculture Farming and Fisheries) annual food research budget thirteen times as much money is spent on GM research than on organic research. Do you think this is the right balance or would you prefer to see...?

- 66%** More emphasis on organic research
- 21%** Balance is right
- 7%** More emphasis on GM research
- 6%** Don't know

PATRICK HOLDEN, DIRECTOR OF THE SOIL ASSOCIATION:

'These results are positive – two-thirds of the nation wants to see more research into organic farming – but let's also look at the negative side of what the results reveal. The Soil Association was established to inform and educate the public on the important issues relating to the links between agricultural practice and health. The fact that there are still so many people who don't want to see the balance of research swing more towards organic research is a wake-up call. It is an indicator that we and others must invest more in public awareness programmes. From our research, we know that 58% of organic food in Britain is bought by only 7% of the population. Since organic food costs more in the shops, we know that income can be a factor in determining people's willingness to buy organic food but information is probably even more important. As with all environmental issues, public opinion can only be expressed if the public is fully informed. If there's one lesson to be learned, it's that when consumers are given full information and exercise this in their buying practices, they can be an extremely powerful agent of change.'

Q Would you buy more British food if more of it were available?

- 89%** Yes
- 7%** No
- 4%** Don't know

Q In an agricultural context, do you feel that you fully understand the following terms?

| 'GM' | 'Organic' | 'Intensive' | |
|------------|------------|-------------|------------|
| 73% | 94% | 72% | Yes |
| 27% | 5% | 27% | No |
| 1% | 1% | 1% | Don't Know |

CATHERINE FOOKES, ORGANIC TARGETS BILL COORDINATOR, SUSTAIN:

'The most interesting result here is that 94% of people say they know what organic food is, and yet, as the Soil Association has recently shown (see left), just 7% of consumers are buying 58% of the organic food on sale in this country.'

This may be due to its price, or may even be a reflection of the fact that, as the first question highlights, the vast majority of people want British or local food. Seventy per cent of our organic food is currently imported – we're trying to change that with the Organic Food Targets Bill currently going through parliament.

If there's a message to the government it seems to be that people know what organic food is, and want it – but also want it grown here. That needs government support in order to happen.'

Q Do you think supermarkets have a positive or negative impact on local communities?

- 46%** Positive
- 30%** Negative
- 21%** Both
- 3%** Don't know

Q Do you think supermarkets have a positive or negative impact on the environment?

- 33%** Negative
- 32%** Positive
- 24%** Both
- 11%** Don't know

GEORGE MONBIOT, AUTHOR, 'CAPTIVE STATE: THE CORPORATE TAKEOVER OF BRITAIN':

'I'm not really surprised that so many people have a positive perception of superstores: after all, they spend tens of millions on advertising every year for precisely this purpose. The voices of their opponents, by contrast, are muffled by the media's reluctance to challenge such a lucrative source of advertising revenue.'

Every month, for example, the papers and broadcasters tell us that one or other of the chains is 'creating x thousand jobs'. But the superstores' own figures show that the opening of every major store results in the net loss of 276 jobs. Fighting the barrage of misleading claims is extremely difficult. We'll just have to try harder.'

Q Which of the following do you think is the main cause of recent problems like BSE and foot and mouth?

- 41%** Intensive farming
- 23%** Globalised economy
- 14%** British Government
- 11%** None of these
- 7%** Don't know
- 4%** Supermarkets

ROBIN PAGE, FOUNDER, COUNTRYSIDE RESTORATION TRUST:

'These figures are remarkable.'

Intensive farming and globalisation are important elements in BSE and F&M, but who created the conditions for them? The politicians and the supermarkets. Our politicians have embraced damaging regulation and the production driven subsidies of the CAP, while the supermarkets have driven down prices and gone for cheap food overseas, causing our farmers to become more intensive in order to compete.

Just 4% blaming supermarkets seems to indicate that consumers have eagerly adopted the 'non-accountability culture', much favoured by MPs. The figures show that the driving forces behind 'cheap food' are not understood.'

FOOD AND AGRICULTURE continued

Q Do you think the import and testing of GM crops in Britain should be banned or allowed to continue?

48% Allowed to continue
45% Banned
7% Don't know

SUE MAYER, UK DIRECTOR, GENEWATCH:

'At first glance, these results would suggest that British people are fairly evenly matched in their opinions about GM food. Yet when you look closely at the question, 45% are actually against BOTH importing and testing of such crops. This is a highly significant finding, suggesting that nearly half the population currently wants nothing to do with GM foods. Bear in mind that those that voted for import and testing may still be in the process of making up their minds on the subject, and want more testing before they offer a final opinion. This is a deeply worrying finding for the future of the biotechnology industry.

Also of interest is the gender split [50% of women, 39% of men are for a ban]. In our own research, we've found that women tend to be more concerned about the long-term effects of GM food testing and consumption than men.'

ECONOMICS AND BUSINESS

54%

OF THE BRITISH PUBLIC BELIEVES:

corporations should be banned from donating to political parties

Q Do you think that economic growth is an accurate measure of the advances society is making as a whole?

48% No
40% Yes
12% Don't know

EDWARD GOLDSMITH, FOUNDER, THE ECOLOGIST:

'This is incredibly encouraging. It seems that people are beginning to realise that economic growth is part of the problem and not the solution. Economic growth is a measure of the extent to which important functions which have always been performed at community, family and local level – for free – are disembedded from their social context and commodified. Looking after children and the old, for example, or producing and cooking food. When this happens, communities atrophy, the environment is destroyed by the vast cities, roads, etc needed to expand markets, and the poor are left behind, because they don't have access to the market. Economic growth has increased by 12 times since 1950, and world trade by six times. If it was going to solve all the problems our leaders always tell us it will, we would all be living in paradise by now. Hopefully people now see that economic growth is not a measure of how well off they are, but a measure of how corporate interests are expanding – which is not the same thing.'

Q Do you think that local communities should have more or less say over how their economies and local areas are run?

80% More say
15% About right as it is
3% Less say
1% Don't know

Q Would you support the government if it introduced measures to protect local producers from large corporations?

87% Yes
7% No
6% Don't know

COLIN HINES, AUTHOR, 'LOCALIZATION: A GLOBAL MANIFESTO':

'The response to the second question clearly shows that the myth that 'globalisation provides cheap goods and this is what people want', is being seen through. People are clearly realising that cheap means cheap and nasty; and that the government's policy of pursuing this line, with its massive promotion of supermarkets in particular, is not what they want. It's very encouraging. The first question reflects the lack of involvement felt by people in their communities, which is also reflected in low voter turnout at local elections. If people had more say, they would say more, this question seems to be indicating. Linking these two questions shows that community activism and community support for local production seem to be on the rise – and things like foot and mouth disease can only spur the latter.'

Q Do you think corporations should be banned from donating to political parties or not?

54% Should be banned
37% Should be allowed to continue
9% Don't know

GEORGE MONBIOT

AUTHOR, 'CAPTIVE STATE: THE CORPORATE TAKEOVER OF BRITAIN':

'I think if you'd asked this question a few years ago, you'd have received a rather different result, but as the scandals surrounding the funding of both main political parties have gradually come to light, the logic of banning donations altogether has become inexorable. Political parties should be entirely funded by the state. This will cost us a few million pounds a year. The costs of the current system are incalculable: billions of pounds of public money spent on appeasing corporations; democracy distorted to allow their interests to override everyone else's.'

SCIENCE AND TECHNOLOGY

Q Do you believe the government when it tells you something's safe?

72% No
17% It depends
10% Yes
1% Don't know

PAUL KINGSNORTH, DEPUTY EDITOR, THE ECOLOGIST:

'What is interesting about this result is how cross-political the responses are. While 79% of Tory voters and 71% of Lib Dems don't trust government assurances, 57% of Labour voters don't either. This would suggest that it is not this government that is distrusted so much as all governments. British beef, GMOs, and a whole host of poisonous chemicals and bad practices have been certified safe by both parties over the years. It seems people have just given up believing them.'

Q Do you believe that genetic modification for human medical purposes is a good thing or a bad thing?

53% Good thing
34% Bad thing
14% Don't know

SUE MAYER, UK DIRECTOR, GENEWATCH:

'When it comes to human health, people tend to support many practices, so it's fascinating to see that so many people – more than a third – are against genetic modification for medical purposes. This is a very significant number. In addition, when you look at the socio-demographic figures, [58% ABs, 43% DEs], this may indicate that wealth is an important factor – with people being more inclined to support something they will be able to afford for themselves.'

Q Would you like to see greater public involvement in the assessment of scientific and technological development?

74% Yes
21% No
5% Don't know

TOM WAKEFORD, INSTITUTE OF DEVELOPMENT STUDIES, UNIVERSITY OF SUSSEX, AND COLLABORATOR ON CITIZENS' JURY INITIATIVES:

'This result is evidence of the widespread desire among citizens for them to be actively involved in decisions relating to science and technology. Research in this area suggests that people are quite capable of assessing complex arguments and reaching sophisticated conclusions so long as they are presented with both sides of the argument in a balanced manner.'

Methods such as citizens' juries and scenario workshops achieve this and are gradually replacing the patronising past efforts to ensure "public understanding of science".'

Q Some people say that advances in science and technology will end up damaging society more than they assist it. Do you agree or disagree?

49% Agree
42% Disagree
8% Don't know

DR VYVYAN HOWARD, TOXICOPATHOLOGIST, UNIVERSITY OF LIVERPOOL:

'The finding by The Ecologist Opinion Poll that a majority of respondents, across all age groups, thought that advances in science and technology would end up doing more harm than good to society is a reflection of the degree to which the public has lost faith in technologists, regulators and decision-makers. It should come as little surprise, however, for we now have many working examples of where it all went wrong. Too often in the past new technologies have been rushed into widespread use by commercial enterprises and governments with scant regard for the outcome, which was often all too predictable. For example:

i) The global distribution of persistent fat soluble industrial organo-halogen chemicals and pesticides is already causing measurable effects in the coming generation and has resulted, inevitably, in the contamination of all animal life on the planet with a complex cocktail of chemicals in their bodies, the toxicology of which is unknown and unmeasurable. In

addition a global distillation of these products, which will persist for centuries after bulk production ceases, if we ever get around to that, will ensure that many future generations will continue to be similarly affected.

ii) The disposal of radioactive waste into the sea, which still continues, comprising of some substances that have half lives measured in thousands of years, when it is known that they come back ashore again, is a threat to us and to future generations. About 30% of the PM10 (airborne particles of less than 10 microns in size) in the UK comes from resuspended marine aerosol. Measurements published over 15 years ago show that this mechanism causes highly toxic compounds to migrate inland. Yet we are told that either there is no risk or 'everything carries some risk'.

It is of little surprise that, in the wake of BSE, a new technology of the genetic modification of crop plants was roundly rejected by the population. Initially there were protestations that it had been 'thoroughly tested' but

now even some of the strongest protagonists are admitting there is a lot more that could and should be done to ensure safety before they are released in to the environment. It has also been admitted that it is a one way ticket, there is no recalling this technology once it has been released, all future generations will have to live with the consequences of any mistakes that are made.

The 20th Century, when science and technology reigned supreme, will be dubbed by history as the 'Toxic Age' and our generation, the architects of this legacy, will rightly be denigrated by future generations. It is encouraging to learn from this poll that a majority of fellow citizens now realise this. Of course we need science and technology but it has to be developed with nature and society rather than against it. We have to be prepared to take less for ourselves so that we can leave a reasonable place for our successors to live in. This poll perhaps detects the first seeds of change in a more positive direction for the next century.'

72%

OF THE BRITISH PUBLIC:

does not believe the government, when it tells them something is safe

AND FINALLY...

68%

OF THE BRITISH PUBLIC BELIEVES:

that they are more concerned about the environment than
Tony Blair, William Hague or Charles Kennedy

Q Do you think there should be national referenda on more issues than at present?

75% Yes
20% No
5% Don't know

ZAC GOLDSMITH, EDITOR, THE ECOLOGIST:

'This result is very exciting, and when combined with the answers people gave to the questions about localising economic and political activity, it shows clearly that people would overwhelmingly prefer to see decision-making power devolved to community level. On a deeper level, it shows that people no longer believe important national and regional decisions should be left to career politicians.

Imagine a future where local people make decisions on local issues, like the siting of supermarkets, or nuclear power plants, or incinerators, or roads. It seems likely, not least following other results in this *Ecologist* Poll, that Britain would be a very different place if power were restored, as people clearly believe it ought to be, back to the people.

And on national issues, like the European Union, the Single Currency, genetic manipulation, and so on, where would we be if those decisions too were made by ordinary people? Again, the country would be following a very different course, and one that reflected the interests and wishes of its people and not those of professional politicians. This issue, above all others must surely influence all main parties.

There is an arrogance in assuming that professional politicians are best placed to make such ground-breaking decisions, and there is an even greater arrogance in the belief that the people of Britain are not sufficiently equipped to determine their own destiny. Common sense, not political careerism should be the yardstick by which the excesses of the modern world are judged.'

Q The government has estimated that a further 3 million houses will need to be built across Britain over the next 15 years. Do you think that this is good housing policy?

49% Yes
44% No
7% Don't know

CHARLES SECRETT, DIRECTOR OF FRIENDS OF THE EARTH:

'This question should probably have been more focused, pointing out where the new housing is to be built. I notice from the demographics, though, that answers differ depending upon respondents' current housing. It's interesting to see that almost everyone's got a position on this issue.'

Q Do you know what any of the following are – GATS, Treaty of Nice, The TRIPS Agreement?

64% None of them
16% Don't know
14% Treaty of Nice
12% GATS
4% The TRIPS Agreement

BARRY COATES, DIRECTOR, WORLD DEVELOPMENT MOVEMENT:

'This is a sad reflection on the lack of democratic process in the UK, when international agreements which will have such a major impact on people are virtually unheard of.

GATS, (Global Agreement on Trade in Services), for example, has been called 'the most important trade agreement since 1948' by the WTO Secretariat, and will have a massive impact on public services both here and in the Third World. Services make up more than two thirds of the UK economy, yet most people are unaware of what is about to happen to them if GATS goes through. The good news, though, is that things are beginning to change. The public awareness campaign about GATS has only just begun, and already we have over 200 MPs putting down an Early Day Motion in the House of Commons calling for a debate on it.

I'd hope that if you asked this question again in a year's time, you'd get much higher public recognition.'

Q Who of the following do you think is most concerned about the environment?

68% Yourself
13% Tony Blair
8% Don't know
7% Charles Kennedy
4% William Hague

MALCOLM TAIT, MANAGING EDITOR, THE ECOLOGIST:

'We put in this final question largely for fun: partly because we wanted to see which of the main three party leaders were considered to be greenest, partly because we thought that 'You' might poll highly.

We didn't expect you to do so well, however, coming in with over two-thirds of the vote, and doing almost three times as well as Blair, Hague and Kennedy combined.

In addition, the poll showed that not one single prospective Labour voter thought that William Hague of the names listed was most concerned about the environment, while only one LibDem voter gave him the thumbs-up.

He didn't fare much better among his own supporters, either, with just 11% of Tory voters choosing him, while 30% of Labour voters went for Tony Blair, and 22% of LibDem voters picked Charles Kennedy. It seems that the environmental standards of the voters of Britain are seen to be considerably higher than those of our political leaders.'

FIGURE IT OUT

The stories behind the scenes can often be as interesting as the main tale itself, and the demographic results of this poll are no exception. ICM polled 1,003 people up and down the country, of all ages from 18 upwards and of various political persuasions. The complete demographic breakdowns of The Great British Environmental Survey are available on our website www.theecologist.org but here are some of the more intriguing details.

For a start, the recent rail horrors seem to have convinced most that our **networks should be renationalised** (72%), yet somewhat surprisingly, of those who declared an intention to vote Conservative at the next election, as many as 67% were for reversing their party's privatisation programme of last decade. Party splits figured significantly in road-building attitudes too: 22% of prospective Tory voters were for **more roads**, whereas a mere 7% from the LibDem camp put their hands up. Potential Labour voters came in at 18%.

Vive la difference

Gender threw up some intriguing differences: 28% of men want to **close down the nuclear industry**, whereas 41% of women want to see the back of it. Yet 40% of men want to see **more of Britain's electricity generated from renewable sources than is currently planned**, whereas only 29% of women feel the same way. Meanwhile, over in the US, George W Bush has made it quite clear that he thinks all this talk about climate change is a load of bull. Perhaps Americans should have elected a female president: Over here in our poll, 71% of men believe that **climate change contributed to the storms and flooding last year**, whereas a mighty 82% of women are convinced the two are linked.

Of great encouragement to environmental groups is the indication that the up and coming generation is more concerned about many green issues than its predecessors. Although only 10% of the 18-24 age group stated that **environmental policy will affect the way they vote** a lot, 59% said that it will affect the way they vote at least a little, more than any other group. In addition, the under-25s are the least enthusiastic about **new roads** (8%), the keenest to see **investment in alternative means of transport** (69%), and, amazingly, the only age group with a majority (51%) that believes

that **advances in science and technology will end up damaging society more than assisting it**. They are, however, the least inclined group to see the **banning of GM crop import and testing** (39%).

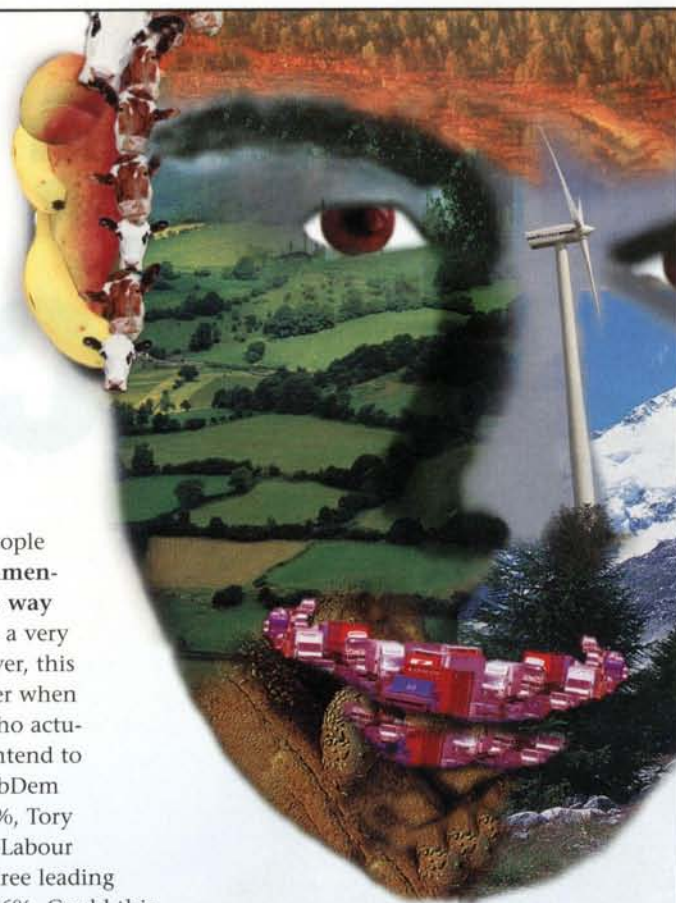
Time for change

The overall number of people who replied that **environmental policy will affect the way they vote** came to 55% – a very encouraging total. However, this result becomes even better when you look only at those who actually stated that they do intend to vote at all. Prospective LibDem supporters came in at 70%, Tory voters polled 61%, while Labour voters came last of the three leading parties in England with 56%. Could this latter figure be disillusionment? After all, only 55% of prospective Labour voters actually felt that **the Government had succeeded in improving the environment since they came to power**.

Another fascinating set of results came in the question: **Do you think that economic growth is an accurate measure of the advances society is making as a whole?** Prospective Labour voters were the most inclined to agree with that statement (45%), Conservative voters weighing in at 42%. The young, however, were the least inclined to tie the two measurements together, with a mere 32% agreeing from the 18-24 age group. The next group up, however, the 25-34 year-olds, gave that statement a 42% thumbs-up. In addition, more people in the North (42%) agreed with the statement than people in the South (40%).

Should local communities have more say over how their economies and local areas are run? Yes, say those in the North (83%) and the Midlands (84%), whereas those in the South are slightly less certain (75%). London bias, perhaps?

ICM interviewed a random sample of 1,003 adults aged 18+ by telephone between 19 and 21 March 2001. Interviews were conducted across the country and the results have been weighted to the profile of all adults.



Another fascinating split between male and female appeared in the question about **whether corporations should be able to donate to political parties**. Ban them from doing so, say 60% of men, but only 49% of women. Conservative voters (59%) are keener to see a ban than Labour voters (49%), too.

One of the biggest divides comes in social class when asked **whether supermarkets have a positive or negative effect on the environment**. Only 19% of ABs feel that the effect is positive, whereas that figure more than doubles among DEs (41%).

The question asking **whether you would buy more British food if it were more available**, however, drew an across-the-board similar response, with 18-24 year olds (77%) the only demographic group in any category not to record an 84+% yes.

It seems whichever way you cut the figures, the biggest political parties have a long way to go before they can demonstrate to the voters that they have the best needs of the environment at heart.

home

In the first of a two-part series, **Martin J Walker** explores the health hazards of everyday life in the modern world.

sickness



Most of us believe that life today is generally healthier than in the past. Doctors and medical scientists, certainly, tell us that we are healthier than we have ever been: they explain that medical science has eradicated the major diseases of the nineteenth century; that mortality rates have fallen; that people live longer, in more sanitary conditions; that we are all, as a result, healthier.

What they rarely say is that, while medical science has certainly eliminated many of the killer diseases of the past, they have been replaced by a growing list of new disorders; often less obvious but no less dangerous. Growing lists of cancers, asthma, heart disease, multiple chemical sensitivity, allergies, pesticide and chemical poisonings, infertility... What is striking about modern, post-industrial society, in fact, is not how healthy it is, but how unhealthy.

Growing concern

The list of new and resurgent illnesses in Britain, as elsewhere in the 'developed' world, can be depressing. Most strikingly, cancer rates are increasing. Incidences of male cancers rose by around 25 per cent in the period 1970 to 1990, and the mortality rates from all cancers taken together continue to rise. In some categories, male cancer deaths have rocketed; male prostate cancer cases, for example, have doubled and cancer of the oesophagus has almost doubled too.¹ And while we are often told that these increases are due to our increased longevity, this is not borne out by the statistics – the mean age of death for many cancers hovers around 71, falling with cancer of the breast in women to 69 and with malignant melanoma of the skin to 63.² And some of the fast-expanding cancers – testicular and breast cancer, for example – increasingly affect younger people.

While cancers rise, new illnesses have sprung up in certain age groups and locations. Asthma now affects one in four 5-year-olds living in London's inner city. Admissions to hospital amongst under 4-year-old male asthma sufferers rose from 6 per 10,000 to over 100 per 10,000 between 1955 and 1991.³ The US National Institute of Allergy and Infectious Diseases suggests that allergies affect as many as 40 to 50 million people in the US – one in five.⁴ Ischaemic heart disease in men aged between 45 and 54 quadrupled between 1921 and 1994.

Increasing numbers of people, meanwhile, are finding themselves intolerant of a variety of foods and sensitive to many unregulated chemicals. In America, an increasing number of people reported adverse reactions to chemicals. Multiple Chemical Sensitivity (MCS) is regarded by many physicians to be a growing disease of modern society. And each new wave of patients who suffer adverse reactions to a toxic environment, whether at war or on a sheep farm, have to fight with the state, the medical profession and insurance companies, to get their illness recognised.

Modern risk

Although medical scientists try to convince us that a longer, healthy life and levels of health risk are fairly evenly distributed throughout society, contemporary health risk, in fact, reflects deeper inequalities worldwide. In all important areas of illness, over the last 40 years, mortality amongst the professional classes has decreased, while increasing amongst the poor. While we now live longer than we did 60 years ago, we also suffer from longer and more debilitating illnesses. In the 52 years between 1935 and 1987, the number of Americans living with one or more chronic diseases doubled from 22 per cent to 45 per cent, while by the late 1990s, one in every four American children had a chronic condition.⁵ In the 10 year period from 1981-2 to 1991-2, the incidence of all cancers, malign and benign, for the whole population increased by 77 per cent, diabetes in males escalated by 61 per cent, asthma in younger males and females increased by 114 per cent and 165 per cent respectively, osteoarthritis increased in men by 58 per cent and in women by 214 per cent and breast cancer in woman rose by 39 per cent.⁶ It is a long, growing and chilling list, and the trend it highlights is becoming clear: the post-industrial age has introduced its own chemical- and environmentally-caused illnesses.

Life, of course, has never been without illness, and never been without risk. But what is striking about today's world is the cumulative nature of that risk. The ultimate health risk, for example, from a cocktail of pesticides is considerably higher than that of the single minimum quantity found on one vegetable or a piece of fruit. And today's world is so complex that the risks multiply often before we can identify them.

And what is most striking of all is that the source of many of these risks can be found where you might least expect them: inside your own home.

No place like home

In January this year, *The Mirror* newspaper conducted tests on a 36-year old woman who ate organically and avoided major environmental pollutants. The tests found an array of 39 toxic chemicals in the woman's fat and blood, including chemicals supposedly no longer used in Britain like DDT. There was also lindane, and three times the average level of xylene, a car exhaust emission.⁷ A similar test carried out on volunteers by the *Daily Mail*, also found lindane, together with carcinogenic wood preservers and chemicals from cleaning fluids.⁸ Overall, more than 400 toxic chemicals – some found in household products and food – have been found in human blood.⁹

This may point to the real story behind the increasing, and rapidly spreading, array of diseases already mentioned in this article. The chemical ingredients used by industry in food and household products have risen dramatically over the last 50 years. In 1940, the world output of chemicals was 1 billion lb; by the 1980s, this had risen to 500 billion lb.¹⁰ About 60,000-70,000 synthetic chemicals are presently in regular use. This level of artificial chemical use is unprecedented in human history; and increasingly, the link between the pervasive chemical soup that surrounds us all, even in our own homes, and the increasing sickness of modern society, is being made.

Watch where you step

What is genuinely worrying about this situation is how the simple act of staying at home and living a normal life can expose us to risks that previous generations would never have experienced. A brief trip through the average home will demonstrate this well.

One of the most damaging and persistent chemicals found in the home is an old staple: formaldehyde. It was first created in the late

1800s, when scientists created a transparent elastic substance which came to be used to glue wood together and to produce a self-hardening insulating foam. These products have been used widely in the building trade in America and Britain. More recently, formaldehyde has come to be used in latex paints, fabrics, automotive resins and cheap furniture. Few houses today are likely to be without it in some form.

But formaldehyde is also one of the best-known volatile organic compound (VOC) pollutants, and a potent carcinogen. Products made with it release unstable particles into the atmosphere, a process called

'outgassing'. It may take anything up to two or three years before all the fumes have released themselves from the products. It has been known since the 1920s that formaldehyde fumes are toxic but, ironically, the trend towards energy conservation has meant that many such fumes come to be trapped within new buildings. The inhalation of formaldehyde fumes cause flu-like symptoms, rashes, neurological illnesses and ultimately cancer.

Gassed

But formaldehyde is only one of a wide range of household products that emit potentially poisonous fumes into our homes. In 1996, the Building Research Establishment monitored 174 homes in Avon, in the west of England, and found that levels of formaldehyde gas were 10 times higher indoors than out. Twelve homes also exceeded World Health Organisation air quality levels.¹¹ This was partly due, the research concluded, to the cleaning agents used, and gases generated by modern appliances: carbon monoxide, benzene vapour and volatile organic compounds.

Once this can of worms is opened, the contents can be shocking. Household cleaners, personal care products, pesticides, paints, hobby products solvents: all these very common household products can, effectively, gas us in our homes. Spray cans and atomisers release particles into the air which can cause headaches, nausea, shortness of breath, eye, throat and lung irritation, skin rashes, burns and liver damage. The use of sprays can lead to an indoor build-up of large quantities of carcinogenic vapours. The fumes from chlorine products, such as bleaches, can irritate the skin and eyes. If chlorine bleach is mixed with other cleaning solutions, it can produce deadly gases.

Spring cleaning?

Wander around your house and see if you can find any of the products mentioned above. It's highly likely. Links between all of them and illness have been established. And there are many more. Clean your upholstery; use a phosphate detergent to do the dishes; use a chemical spot remover to remove those carpet stains; polish the floor; paint the ceiling; it's highly likely that the products you use to do all these things can, and perhaps will, make you ill.¹²

Many carpet and upholstery cleaners, for example, contain perchlorethylene, a known carcinogen which can cause anaemia, damage to the liver, kidneys and nervous system. Others contain ammonium hydroxide, which is corrosive, irritating the eyes, skin and respiratory passages.¹³ In 1999, in an unparalleled move, Right Guard upholstery cleaners, produced by the multinational 3M, were taken off the market. The company said it was 'playing safe' after suggestions that some of the contents were carcinogenic.

Benzene vapour, created by car exhausts and refineries, and from cigarette smoke as well as solvents used in the home, is potentially extremely poisonous. The use of chemical-based products such as bathroom spray cleaners¹⁴ is another domestic danger. Furniture polishes are petroleum distillates, which are flammable and can cause skin and lung cancer. They contain nitrobenzene, which is highly toxic and easily absorbed through the skin. ■

'What is striking about modern society is not how healthy it is, but how unhealthy.'



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Then there is simple washing-up liquid; responsible for many everyday cases of stomach upset. Dishwasher detergents are even more toxic; most of them containing poisonous chlorine in a highly concentrated dry form. In the US, these detergents are the primary cause of child poisonings.¹⁵

Dying to look good

Perhaps if you never cleaned your house, you could avoid most of these risks. Maybe; but it would depend on what you did with the rest of your time at home. Do you ever wear make-up, for example, or simply use deodorants, after-shave, talcum powder? The US National Institute of Occupational Safety and Health has found that 884 chemicals used in personal care products and cosmetics are known to be toxic.¹⁶ It is estimated that women absorb up to two kilograms of chemicals through toiletries and cosmetics every year.¹⁷

Thinking of dyeing your hair? You should know that long-term use of dark hair dye increases the risk of non-Hodgkin's lymphoma (NHL) by up to four times.¹⁸ Hair dyes have also been implicated in breast cancer.

Bath time? It's almost impossible to buy a soap, shampoo or bubble bath which does not contain synthetic sodium laurel sulphate or sodium laureth sulphate (SLS). This highly potent degreasing agent can destroy delicate tissues in the eye.¹⁹ The American Journal of Toxicology reported that SLS irritates skin tissue, corrodes hair follicles and impairs the ability to grow hair. It also permeates the heart, liver, lungs and brain.²⁰

But the most dangerous chemicals to be included in personal care products are ammonia derivatives, such as diethanolamine, triethanolamine, and monoethanolamine. Known to have hormone-disrupting effects, they are added to soaps, bubble baths and facial cleansers. When they are mixed with products containing nitrates, carcinogenic nitrosamines can be formed. The International Agency for Research on Cancer, based in Lyon, concluded in 1978 that, although no epidemiological data existed, nitrosodiethanolamine 'should be regarded for practical purposes as if it were carcinogenic to humans'.²¹

Finally, before you go to bed, you'll probably want to brush your teeth. Beware: the ingesting of too large a quantity of fluoride, a substance that is more toxic than lead, leads to dental fluorosis and skeletal fluorosis, a crippling bone disease. Fluoride is a waste product from the aluminium industry which, as well as mass-medicalising the water and some milk in many areas of Britain, is put into toothpaste.²² Most industrial toothpastes also harbour the same toxic chemicals that are put into industrial cleaners and cosmetic soaps: sodium laureth sulphate (SLS) and propylene glycol. Both are skin irritants and can, in conjunction with other substances, be carcinogenic.

Getting ahead

If you have children, it's a safe bet that, at some stage, they'll pick up a dose of headlice. For many years, the treatment for headlice and mites has involved a healthy dose of toxic pesticides. The three types of pesticide used in preparations are organophosphates, carbamate and pyrethroids. All are neurotoxins, which have also been shown to interfere with the functioning of the immune system. They can also cause endocrine disruption which may not become apparent until a child is older. Carbaryl and the pyrethroids are considered to be potential carcinogens.²³

Some lice shampoos also contain lindane which, when inhaled, ingested or absorbed through the skin, causes vomiting and diarrhoea. It can cause liver damage, stillbirths, birth defects and cancer.²⁴

As if this wasn't grim enough, the risk of childhood brain cancer is associated with the use of domestic pesticides to control termites, flea collars on pets, insecticides in the garden and herbicides to

control weeds. In the US, there are over 20,000 different household pesticide products, containing over 300 active ingredients and up to 1,700 inert ingredients (unregulated chemicals not listed on the label).²⁶ In 1990 in America, nearly 18,000 pesticide-related hospital emergency admissions were reported; 74 per cent of them were of children aged 14 and under.²⁷

A rose by any other name

Most women wear perfume at some stage in their lives. Perhaps if they knew what was in it, and how it is produced, though, they might be less keen to spray it on. The perfume industry, which launches thousands of toxic chemicals onto an unsuspecting public, is unregulated. In fact, the industry is protected by laws which allow it to keep the contents of its fragrances secret. And because no serious epidemiological work has been done on perfumes, there is little science to support the view of some doctors and chemists that perfumes are as damaging to health as tobacco smoke.²⁸

But suspicions are growing. More than 5,000 chemicals are used in fragrance manufacture,²⁹ 95 per cent of which are made from petroleum.³⁰ Most fragrances are produced from mixtures of up to 600 synthetic chemicals. The great majority of these substances have never been tested for human toxicity. In the US, the National Institute of Occupational Safety and Health reported that 884 toxic substances were identified in a list of perfume constituents.³¹

Many chemicals found in common perfumes and fragrances are designated as 'hazardous', including methylene chloride, toluene, methyl ethyl ketone, methyl isobutyl ketone, ethyl alcohol and benzyl chloride.³² Many of these toxins are capable of causing cancer, birth defects, central nervous system disorders and allergic conditions. They can also cause psychological, emotional and physiological changes in the human body. All fragrances are able to breach the blood-brain barrier.³³ When tested, a famous American brand of perfume was found to have 41 carcinogenic ingredients.³⁴

Many of the chemicals in perfumes are easily absorbed through the skin and reach major organs, where they accumulate. The rise in asthma cases in children has often been linked to fragrances and there is considerable evidence that toluene, one of the petrochemical ingredients of many perfumes, can cause asthma in previously healthy people.³⁵

Scents are now worked into many products besides perfumes; they are in air fresheners, deodorisers, cosmetic products, tissues, washing powders, detergents and cat litter. Many of these scents are produced from potentially carcinogenic chemicals.

Eat up your pesticides

Even if you never wash, never use perfumes or cosmetics and never clean your house (you'd be a rare breed), you'll need to eat. Today, even this is a health hazard. The nature of food, how it is produced, how it is sold, how we buy it and re-process it has changed radically over the last half century. Today, the British consume around a quarter of a million tons of food chemicals a year.³⁶ And despite endless official reassurances, the links between this consumption and serious illness are becoming clearer by the year.

The World Health Organisation reports that there are over 1,000 pesticides, in over 100,000 commercial formulations, being used worldwide. In 1988, the UK chemical industry sold 23,504 tons of pesticide active ingredients in Britain.³⁷ Commercial chemical fertiliser production went up from around 2 million tons in 1950, to about 50 million tons in the 1980s.³⁸ UK production of synthetic pesticides increased by over 700 per cent from 1948 to 1982. By 1988, pesticides were applied to 97 per cent of all arable crops, involving 22.4 million kg of active ingredients.

Most pesticides and herbicides have ingredients that affect the nervous system of insects; they also affect humans. Some contain



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dimpylate, which is better known as diazinon, an extremely toxic chemical. Some contain chlorinate hydrocarbons, which are carcinogenic and mutagenic. These chemicals are not necessarily evacuated from the body with food waste but accumulate in fatty tissue, where they can ultimately be responsible for degenerative diseases.

In Britain in the 1980s, Peter Snell, a food technologist, looked at 426 pesticides cleared in Britain by the regulatory authorities and found that 68 were possible carcinogens, 61 were possible mutagens, 35 had been linked with reproductive effects and a further 93 were known irritants.³⁹

OP, OK?

Back in 1960, Dr Franklin Bicknell published a book called *Chemicals in Food and in Farm Produce: their Harmful Effects*. This small book was a straightforward account of the chemical sources in food and their possible effects upon human health. Even then, more than 40 years ago, Bicknell was writing:

'The deliberate or accidental addition of possibly injurious chemicals, or "non nutritive substances", to food is not new, but only in the last few hundred years have such additions become so universal that it is now virtually impossible not to eat several every day. The chemicals commonly present in food number many hundreds, and each year new ones are introduced with an ever increasing chemical complexity and with an unknown effect on the body.'⁴⁰

Bicknell referred, long before they were commonly known about, to organophosphorous (OP) compounds. Detailing how much pesticide residue was found in the 1950s on sprayed fruit and vegetables, he cited the 1957 report of a Plant Protection Conference.⁴¹ Presentations at this conference suggested that Greek olive oil had been found to contain up to 14mg of parathion per kilo, and French wine up to 4mg per kilo. Bicknell then went on to discuss how OPs damage the human body:

'The symptoms of acute poisoning... are, contraction of the pupils; headaches; photophobia; bronchial spasm; abdominal pain, nausea, vomiting, diarrhoea; muscular weakness,

twitchings, convulsions, asphyxia and death...⁴² Other less obvious damage is done, which may be more important from the point of

view of covert prolonged poisoning from food... I cannot overstress my belief that in the future unexpected insidious damage to many organs will be found to be due to protein metabolism, essential amino acid metabolism, being deranged not only by insecticides but also by other chemicals, like those used to treat flour, present in our staple foods.'⁴³

Bicknell, who died in 1964, was a visionary whose vision went unacknowledged by the government and its research establishments. It was not until the 1990s, when sheep farmers began to complain about the damaging effects of organophosphate sheep dip, that scientists were again faced with the health problems they bring about.

Organophosphate pesticides were compulsorily used on cattle in the 1980s and early 1990s, and are still being used with antibiotics on salmon and trout farmed for food. Organic farmer Mark Purdey has promulgated the view that organophosphate chemicals were responsible for BSE.

Organophosphates, though, are only the most obviously toxic of all the pesticides that we find in our foods. Organochlorines, also found in pesticides, constitute a wide range of chemicals, many of them carcinogenic, some of them damaging to the ozone layer and most of them damaging to wild life. Organochlorines are very stable and not water soluble, they can remain in the human body and the environment for long periods. One of them is the notorious DDT which, despite being banned in the USA and restricted in Europe, is still, along with its breakdown products such as DDE, being observed in the blood of European and US citizens. A great deal of research indicates a relationship between chlorinated chemicals, such as the 209 PCBs, banned in the USA, and breast cancer, liver cancer and pancreatic cancer.⁴⁴

Globalising poison

Why is such chemical poisoning of our everyday food products allowed? One reason it happens is the globalisation of food production; this has meant that low cost, high energy food often comes from the 'developing' world. The minimal regulation of chemicals in Europe and America is not echoed in these new producing countries; quite the opposite. Multinationals dump dangerous pharmaceuticals and food production chemicals in massive quantities on them. As the West imports increasing quantities of food from the 'developing' world, consumers find their health threatened by pesticides of which they imagined the 'developed' world was now free. What goes around comes around, it might be said.

In December 2000, The UN Environmental Programme came to an agreement to prohibit the production of 12 of the world's worst 'Persistent Organic Pollutants' (POPs). Developing countries which still use many of these deadly chemicals are to be funded by developed countries to phase out their use and destroy stockpiles. The participating countries have been given five years to complete phasing-out. Eight of these 12 chemicals are pesticides developed in America and Europe – some of which, like DDT (Dichlorodiphenyltrichloroethane), evangelists for the chemical industry still swear were, anyway, always safe.

In 1990, the World Health Organisation estimated that there were a minimum of 3 million acute, severe cases of pesticide poisoning – not including chronic cases – and 20,000 unintentional deaths each year, mostly in developing countries.⁴⁵ A study by Jayaratnam, also in 1990, estimated that 25 million third world agricultural workers are acutely poisoned every year.⁴⁶ In 1991, Greenpeace commissioned a study which looked at the effects of pesticides in three Mediterranean countries (Greece, Tunisia and Morocco). The

'Some doctors and chemists believe that perfumes are as damaging to health as tobacco smoke.'



study found that in the region around Athens there were 500 acute pesticide poisoning cases reported annually, which led to 30 deaths; 67 per cent of these incidents were caused by organophosphate pesticides.⁴⁷

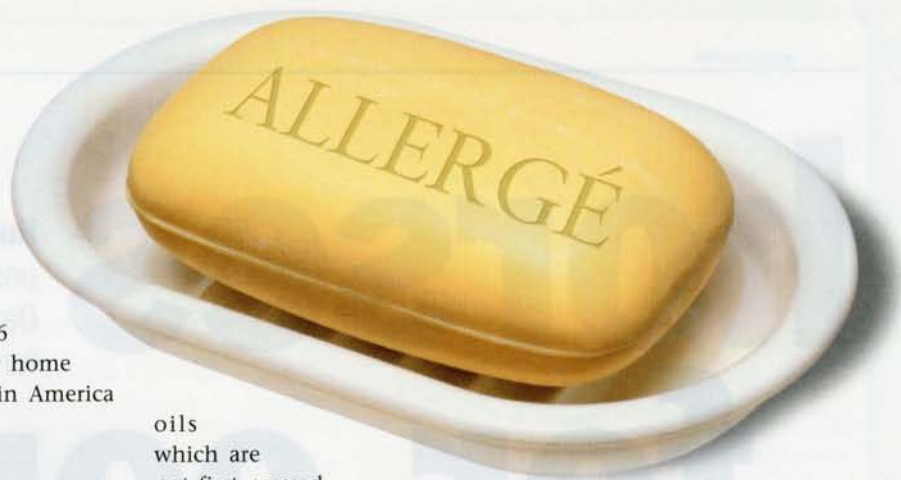
Americans put an estimated 62.7 million lb (28.5 million kg) of pesticides and 278.5 million lb (126.6 million kg) of antimicrobials (disinfectants) into their home each year.⁴⁸ In the mid 1990s, it was estimated that in America pesticides killed about 10,400 people.⁴⁹

The rest of your dinner plate

Unfortunately, pesticides are not the only pollutants in foods. As you sit down to dinner, reflect upon the fact that all processed foods contain additives which are toxic in varying degrees. Over 200,000 tons of these additives are added each year to food in Britain.⁵⁰ Most processed foods also have quantities of hidden sugars or salts in them, which can add up to considerable amounts. Excess sugar interferes with insulin functions and essential fatty acids functions.⁵¹ In some foods, of course, sweeteners are not sugar but artificial sweeteners. It has been suggested that one artificial sweetener, aspartame, used in many soft drinks might be implicated in the formation of brain tumours [see *Sweet Talking*, *The Ecologist* Vol 30 No 4].

Fats in food play an important role in health, and for many years, different types of fats have been suspected of causing a range of illnesses, including cancer. Hydrogenation changes essential fatty acids, which are nutritional necessities, into 'trans-fatty' acids. These are found in margarine, shortenings and partially hydrogenated vegetable oils. Trans-fatty acids are widespread in food: in breads, cakes, biscuits and junk food.⁵² The absorption of trans-fatty acids has been shown to raise the risk of cardiovascular disease, increase abnormal sperm, correlate with low birth weight in babies, interfere with liver enzymes necessary for detoxification, increase cholesterol.

Fats also become toxic when they are fried. Research shows that fried fats cause cancer and hardening of the arteries.⁵³ Finally, all



oils which are not first pressed virgin olive oils have been treated by a number of chemical processes which leave them not only with a different colour and consistency but containing toxins. They are degummed with a corrosive cleaner used to clean clogged kitchen sinks, they are refined with acid, bleached, and finally deodorised.⁵⁴

Taking stock

What conclusions can be drawn from this depressing array of facts? Some seem clear: regulation of chemicals is not working. 'Experts' in various fields cannot apparently be trusted to protect the public from potential poisons. Many of our new and resurgent diseases increasingly appear to be a result of such laxity. If a person's home was once his castle, it will, while these issues remain untackled, increasingly become a chemical dump. ♦

Next month: Martin J Walker examines the health risks of everyday life beyond the front door. References on page 66.

*Martin J Walker is a writer and researcher, author of **Dirty Medicine** and five other books. He is presently writing about alternative cancer treatments in Britain since the 19th century. Any information on this subject, or on Dr Franklin Bicknell, will be gratefully received. Contact him at Slingshot Publications, BM Box 8314, London WC1N 3XX.*

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horses for courses

Hugh Warwick investigates the unseen trade in wild ponies, from Dartmoor to the New Forest – and turns up some shocking facts.

How much is a pony worth? In traditional slang: £25. But how much would you pay for the life of a wild pony, like those found traditionally on Dartmoor or in the New Forest; one that has been rounded up and is now standing bedraggled in thick mud? Answer: 35 pence.

Even in these times of hardship for farmers, how can this be possible? And after being sold; what then? And why is it that at a time when the trade in horse meat is on the rise, thanks to BSE, that the bargain basement offer of 'three ponies for a guinea' still stands?

Going to market

The answers to these questions can be found, at least in part, at pony markets across Britain. A pony market can be a pretty grim affair. Some are outside, like the one in the New Forest. The ponies are rounded up in a 'drift' by the Commoners of the Forest. Men on quad bikes force unbroken animals into pens. Before first light they are moved, muddy and wet, to the corrals across from the small railway station of Beaulieu Road, to wait in mud and water for the market to begin. Other stalls appear, selling tack and army surplus clothing, clustering under the trees. The burger van rolls into place.

New Forest Ponies are a remarkable breed. Hardy and easy to train, they are also supremely well-adapted to their habitat. It had originally been thought that they came across with the Celts, but it is now considered likely that they have existed wild here since the last ice age.

Since the creation of the New Forest by William the Conqueror in 1079 as an area where 'beasts of the chase' could be protected for the pleasure of the monarch, there have been attempts made to 'improve' on the native wild pony. But now efforts are being made to preserve some of the original integrity of the animal.

Dionis McNair of the New Forest Pony Society explains: 'The forest is dependent on the pony and the pony is dependent on the forest.' The reason that the New Forest maintains its characteristic mix of flora and fauna is because of the ponies. Their grazing and browsing prevent the pasture woodland reverting to dense, less diverse, forest. Given their vital role in the Forest, and the fact that they can make an ideal animal to learn to ride on, it is a shock to find that the prospective buyers at the market include a six-year-old boy who has saved up for a pony. These ancient, wild beasts have become pocket-money pets.

The common good

While the animals live and look 'wild', they are all owned by Commoners of the Forest. And in these tough times, the economics are stacked against the animal. A 4-year-old pure-bred New Forest Pony can fetch over £1,000, and there are now studs all over Europe and North America breeding them. Yet, at the market, wild foals from the New Forest can scarcely be given away. And this is the key difference. The value is in the New Forest Pony; but not necessarily in ponies



from the New Forest.

The price of land in the New Forest is such that owners cannot afford to rear the ponies, and the price that they fetch doesn't encourage the owners to spend money on veterinary bills. Also, the local rules designed to protect their welfare insist that ponies under the age of four cannot be ridden.

So what is a Commoner to do? There are already concerns that the population of ponies in the Forest is too dense, in particular with animals of poor stock. These suffer the double disadvantage of being worth little for sale and being less well-adapted to the harsh conditions. The Verderers, the New Forest legislative court established in the early 15th century to ensure that the local population and its animals did not interfere with the deer and its food, stipulate that a certain number of animals must be removed each year to try to maintain the ecological balance. Seemingly, in the current climate, the only option for the pony owners is to sell the animals for as much as possible. But as all the Commoners are desperate to sell, it is a buyers' market.

If the ponies are going to continue to be bought and sold, then at least it should be done in a respectful manner, with animals treated well. But what has horrified the pressure group Compassion in World Farming (CIWF), amongst others, is that even the most basic rules governing the treatment of the ponies are being flouted.

Horsing around

The provisions of The Welfare of Horses at Markets Order, 1990 are explicit. Ponies must not be dragged along the ground by their neck or tail. They must not be punched and kicked. They must not be kept in overcrowded conditions, and mares with foals must be separated from other ponies. Yet all of these laws are being continuously broken at market – in front of witnesses from CIWF.

'Sue' (who doesn't want her real name used, for fear of recrimination) has been monitoring markets such as this for CIWF, and manages to combine a rigorous understanding of the law with a practical knowledge of animal welfare. 'As the men get tired and fractious, so their treatment of the animals deteriorates and the animals become less easy to manage,' she says. 'The mud is thick and slick, so they have difficulty in keeping their feet.'

On one occasion when Sue had seen blatant lawbreaking, the police arrived. But they were not there to take action against the market workers who had broken the law. They came to question Sue. Who was she? Who did she work for? Why was she watching the market? Why was she filming? After receiving a polite but non-committal response to her queries the policewoman questioning Sue returned to the organisers of the market.

New Forest's Beaulieu Road market is not an exception. There are other markets that trade in wild ponies. One of the most notorious is Hallworthy in North Cornwall. It takes place under cover and, unusually, is on private land. Here, they are even more concerned about unwanted attention.

For example, local campaigner Margaret Gibbons has now been banned from entering. On her last visit she was threatened; 'Market workers came towards me brandishing sticks and trying to block my exit from the car park', she says.



'As I attempted to take photographs of the ponies I was threatened and told to leave.'

'There are just a few dealers, exploiting the desperate need of many farmers.'

Down from the moors

Being inside is no advantage to the ponies, which have come from Bodmin and Dartmoor. The wild animals are herded together on a concrete floor that is slick with urine and faeces. And changes have been made to the market recently – this is the improved version. Such changes are largely thanks to people like Margaret, who have continually highlighted abuses of the law. The market owners know that they have been the focus of undercover investigations by a number of animal welfare organisations. 'There is more respect shown to the animals as a result,' explains Margaret Gibbons, 'but it can never be perfect. These are wild, unhandled animals straight from the moors. The change has only come about because [the marketeers] are paranoid about hidden cameras. There has been no real change of heart.'

At the market earlier this year, the animals were particularly unkempt, having come straight from a winter on the hills. This was the first time in the 20-year experience of one RSPCA inspector that Hallworthy had held a market at this time of year. He thought that it was due to a BSE-induced increase in demand for horsemeat on the continent.

But if this is the case, why were some of the ponies being sold for as little as 35p? It seems that this is because there are just a few dealers, exploiting the desperate need of many farmers. There is a problem with over-breeding; there are too many ponies for the environment to support. So farmers in Cornwall, Devon and the New Forest take them to the market needing to get rid of them. The dealers take advantage of this. They are in a strong position, having access both to the few abattoirs available and to the international market, so they can exploit the increased demand from the continent.

Don't ask questions

It proved impossible to find out for certain whether this was the case, however, as all attempts at questioning the dealers at Hallworthy came to nothing. They refused to speak to me when I visited, and as I attempted to take photographs of the ponies I was threatened and told to leave the building.

The dealers had been conducting their own deals after the auction was finished. Animals that failed to reach their reserve price were cor-doned off and then sold privately, saving the dealer the auctioneer's cut. Seeing that this was happening caused one of the RSPCA inspectors (who also didn't want to be named) to comment that the RSPCA 'would never buy or sell anything at this market'.

Pony tracking

The story surrounding these ponies, whether they are from Dartmoor or the New Forest, does not end at the market. There are a few who have been bought as pets, which is fine for the animals as long as the new owner is realistic. It may only cost 35p to buy, for example, but a colt will cost a further £120 to be castrated.

Most are destined for the slaughterhouse. But before they get there they may face even more ordeals. After being bought by a dealer, the ponies lose their status as animals and become just another commodity. Ponies are turning up at markets with other markets' stickers still glued to them. 'This means that they have already been through the process at least once before,' explains the RSPCA

inspector. 'So after being sold at a market, rather than being taken to the abattoir, they are transported to another market where they are sold again at a slight profit.'

This is a practice that has come to light during the Foot and Mouth disease outbreak; it is sheep being transported around the country from market to market that have helped to spread the disease. Treating animals as commodities, it seems, rebounds on everyone.

When this 'horse-trading' has finished, the ponies face another journey. There are only 12 abattoirs in the UK licensed to kill horses. So this means that these wild animals can face many hours crammed into lorries. CIWF investigators have followed these lorries. For example, they trailed a consignment of 52 tightly-packed ponies from the New Forest to a slaughterhouse in Nantwich, Cheshire. During the arduous seven-hour journey, two of the ponies had fallen and been unable to regain their feet. When the investigators tried to intervene, the driver called the police. This time the police were more impartial, agreeing that something needed to be done, and allowing a vet to be called to supervise the unloading.

Horsemeat

What then happens to the ponies is not clear. According to the transporter, some are going to the continent for human consumption. And this is a market that has been expanding. Customs and Excise figures show that 12,000 horse and pony carcasses were exported from Britain to France and Belgium in 1999; a 100 per cent increase on the 1994 figure. CIWF think that this trend will continue, as the fear of BSE remains.

The rest go to the pet food trade. This is not as simple as it may seem. According to the New Forest Pony Society, there used to be many options for getting rid of unwanted animals via the pet food industry. But now that industry is in the hands of just three multinationals, which demand a regular supply of a predictable product. And there is just one dealer left, who has a virtual monopoly. He claims to have retired, but was boasting of his work at a market in Cornwall at the end of 2000, and was seen threatening the CIWF investigators who had the temerity to follow one of his lorries.

He trawls the markets of the South West and the New Forest, buying up the cheapest animals. These are then kept in Derbyshire, on land far cheaper than the New Forest, enabling him to present a regular supply to the industry. It is thought that the animals are taken from Derbyshire to Cheshire Equine Services, in Nantwich.

Despite the incongruous name, this company runs the Red Lion Abattoir, one of the 12 licensed to kill horses.

There is another side to the market; widely suspected, but yet to be conclu-



sively proven. The market for British horseflesh on the continent has doubled over the last five years. But this would be even higher if the trade was allowed to include live animals, a practice currently banned under the Minimum Value Order which prevents the export of live animals sold for less than £250. However, an investigation by CIWF has identified a gaping loophole in this legislation. This loophole may have allowed the trade to carry on unhindered and unreported for years.

Loopholes

Their investigators have followed ponies from the markets in the south of England to Scotland and the port of Stranraer. It is thought that the animals are then trans-

ported across to Northern Ireland, a totally legitimate journey. The loophole that exists is the absence of any restrictions on the movement of horses and ponies across the border to Eire. From Eire it then becomes a simple, and legal, matter of loading the ponies onto ships bound for the continent. This could include the arduous crossing to Bilbao in Spain, which takes over 40 hours. Proof of the rules being circumvented in this way will only come from more investigations.

It is not just CIWF who believes that this is happening. An inspector from the RSPCA also states that he is sure ponies are being exported this way.

Better ways

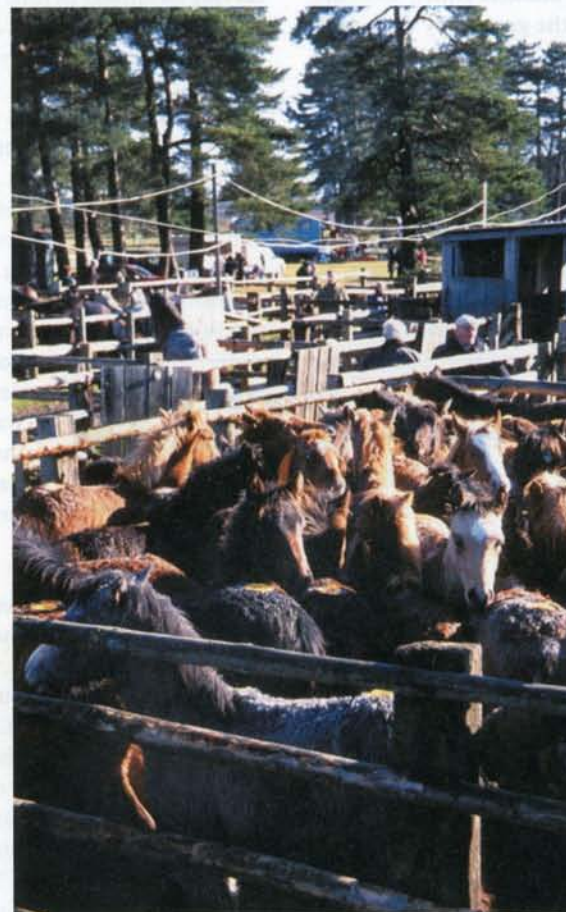
There are better ways in which the value of these remarkable animals could be realised. If they were allowed to reach their potential as a good 'first horse' for those learning to ride, their owners would make enough money to ensure that they were well cared for, but this would require land on which to graze them. A suggestion made by the New Forest Pony Society is that ponies be allowed to run on 'set aside' land. This would help in the maintenance of the ecosystem of the forest as well as provide income for the commoners.

But, more fundamentally, there needs to be a rethink as to how ponies are kept in the Forest as a whole. CIWF is calling for a public inquiry to investigate, and the implementation of breeding restrictions so that there are fewer animals available for slaughter.

Meanwhile the ponies themselves are treated as a commodity, bought and sold for a few pence. And they will undoubtedly continue to be abused at markets before being sent on a terrifying journey to end up as pet food. Until and unless something is done.

Hugh Warwick is a freelance journalist, and editor of Splice.

For further information about the pony trade, and the campaign to stop it, contact Compassion in World Farming on 01730 264208. www.ciwf.co.uk



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A NEW HUMAN STORY

WE DESPERATELY NEED NEW MODELS, SAYS JAKOB VON UEXKULL, TO REFLECT OUR TRUE COMMON GLOBAL VALUES.

TWENTY YEARS AGO I founded the Right Livelihood Awards (the 'Alternative Nobel Prizes') to honour and encourage those who have dared – sometimes at great personal risk – to think the unthinkable, to break the taboos that prop up unjust systems and empower others with new ideas and opportunities. Over the past two decades, almost a thousand individuals and organisations, working in many areas in most of the world's nations, have been nominated for, and over 80 have received, the Right Livelihood Award.

One thing this has convinced me is that something different is needed if we are to change course in time to avoid the collapse of our planet's life support systems, and what the historian Lewis Mumford calls the 'barbarisation from within' of society.

What we need is a new paradigm; for the present paradigm will not release its hold until a new one becomes and remains more clearly visible. We need to tell a different human story, for the present one can have no happy ending. To do this, we first need to understand our society's values.

THE OLD STORY

Our current human story describes a world created by chance, where the material level is the ultimate reality and morals are mere 'emotions'. This (post-) modern story sees all other human stories as fairy tales. We are 'robot vehicles blindly programmed to preserve the selfish molecules known as genes' (Richard Dawkins). Previous cultures have been 'wrong, always wrong' (E O Wilson). We have elevated increased consumer 'choice' to the highest societal goal. Yet this goal is in direct conflict with the task of maintaining a liveable planet.

The story is cynical about everything except cynicism. It substitutes markets for politics, ethics and faith. The world has become a Western theatre where this dismal play is performed daily, supported by all the skills and billions which Madison Avenue can muster. The status quo triumphs, for no moral argument against it can be taken seriously.

The result is paralysis – at a time when we can least afford it. Never has the gap between short-term thinking and long-term consequences been wider. Restoring environmental security is by far the most difficult challenge we have ever faced and the most morally compelling issue of our time. Yet the 'minimum which is environmentally and scientifically necessary is more than the maximum which is politically feasible or even thinkable' (Al Gore).

We need to deconstruct the modern myth which has brought us to this impasse, deeply wounding both our outer and inner environments. This myth has several parts, but one of the most powerful is the fallacy of wealth creation.



THE PRESENT PARADIGM
WILL NOT RELEASE ITS
HOLD UNTIL A NEW
ONE BECOMES MORE
CLEARLY VISIBLE

THE FALLACY OF WEALTH CREATION

The Japanese have savings of \$90,000 per capita. From 1990-98, real wages increased by 15 per cent, while they fell in the US (OECD). Manufacturing output exceeds that of the US. Japan's current account surplus grew in the 1990s at twice the rate of the 1980s. Net external assets increased in the same decade from \$294 billion to \$1,153 billion, while the US deficit and liabilities grew even faster.

Yet the story we now hear is that the Japanese economy 'collapsed' in the 90s and the country is an economic basket case. Why? Because its citizens, having decided that they are rich enough, are 'dangerously' low consumers. Living in an ageing society with a weak social net, a large public deficit and a polluted environment, they sensibly prefer to save. Yet their frugality is now lambasted in the Western economic media for endangering the global economy.

Meanwhile, the US – the supposed model for us all – is collapsing. Since 1979, the income share of the bottom 80 per cent of society has fallen – the poorest losing most – while the richest 1 per cent have gained the most. According to government statistics, most US workers now earn less than in the 1960s and 1970s, but work longer

hours. Fossil fuel use is still increasing but the government will do nothing 'to jeopardise the American lifestyle' – as the US representative at the Hague Climate Summit put it.

We need a new story, and we can learn from Japan – but not from its previous 'success'; from its failure. We need to know how our economies can be rebuilt so that frugality is experienced as a bonus, not a threat. This involves, for example, looking at the environmental and social effects of current discounting, accounting and tax regulations. Our new story needs to include the externalised 'takings' of our economic success stories – and the absurdities and costs of a 'wealth creation' built on the depletion of nature and ethics, 'selling the family silver' and the monetarisation of non-market wealth.

The new story needs to challenge the naïve nonsense of market populism, portraying us all – from workers to corporate raiders – as daring rebels against governments who want to take our money. We need a story which prepares us for the huge structural adjustments required in the rich economies and societies so that we can cut fossil fuel use by the necessary 70 per cent. Denial of natural limits – despite the mounting evidence – has cost us over half our global forests and species in the last 50 years. We cannot afford to keep pretending.

And yet we do. Nothing better illustrates our hubris than the claim that you cannot stop 'progress' or 'turn the clock back'. The



past is full of examples of extinct (mono-) cultures. Shortly after the Roman poet Juvenal declared that 'wealth is our divinity', the clock was turned back to such an extent that some technologies widely used in ancient Rome were lost and not re-introduced in Europe for over a thousand years.

BUILDING ON COMMON VALUES

Yet pessimism can be countered. There is ample evidence that a global citizens' community with common values already exists. Research by the Institute for Global Ethics and others has found a remarkable global convergence, and even consensus, on common values. This basic consensus overrides diverse worldviews. It is shared by religious believers and non-believers of very different social backgrounds and in very different countries.

Of course there is diversity in how values are interpreted and implemented. For the poor, the most important human rights are economic. War and peace, tradition, climate and geography will also influence our priorities. But that is a far cry from the story of irreconcilable Western, African or Asian values. When examined, the claimed disdain of Asians and Africans for political and civil rights reveals itself to be a convenient excuse for local dictators and their Western backers reluctant to grant democratic rights which might endanger their economic privileges. Significantly, the only Africans and Asians to accuse me of not understanding their different values have been the representatives of the former Nigerian and Indonesian dictators, complaining about Right Livelihood Awards given to human rights activists in their countries.

In fact, the main values gap today is not between most Europeans, Americans, Asians and Africans, but between all of us and the values of the ruling economic fundamentalism – which even in democratic countries is presented as sacrosanct and without alternative. Our problem today is not a 'values vacuum' but that widely-agreed human values are not acted on. Indeed, they have often been rendered invisible by the refusal of commerce and finance to accept that they should be restricted by the values of the societies in which they operate. As a result we become less confident about our moral judgements.

CONSUMER OR CITIZEN?

It is a sign of the trivialising effect of our soundbite public debate that the distinction between our value judgements as citizens and our preferences as consumers is hardly ever articulated. It is simply assumed that the latter govern the former, that our overriding value is competitive greed. This is not so. In *The Economy of the Earth*, US Professor Martin Sagoff describes his students' reactions to the decision by the US Forest Service to lease a wilderness in the middle of a National Park to Walt Disney Enterprises to develop a ski resort. Asking his students how many had visited or would visit this wilderness as it was, he received only a few responses while many responded positively when asked if they would go if the area was developed in the way Disney planned; 'The class got really excited'. The consumer demand was clearly there.

Sagoff went on to ask his students if they thought the government was right in giving Disney a lease to develop this wilderness. 'The response was nearly unanimous. The students believed that the Disney plan was loathsome and despicable, that the Forest Service had violated a public trust by approving it, and that the values for which we stand as a nation compel us to preserve the little wilderness we have for its own sake and as a heritage for future generations'.

This is not an isolated example. Questioned in depth in a recent international study about current priorities and future preferences,

large majorities in the USA – as well as other industrialised countries – wanted less emphasis on 'economic opportunity' and more on cultural and educational opportunities, emotional and environmental security and the 'spiritual dimension'. (*Journal of Human Values* Vol 5 No 1, 1999).

Citizen values come a poor second to consumer preferences when policies are set on the national level. On the global level, where more and more decisions affecting us are now taken, citizen values are seen by the corporate globalisers as an undesirable impediment to trade. But global corporations who insist on the right to penetrate every area of life, cannot then expect to be shielded against the ensuing responsibilities. Global values of honesty, compassion, fairness, community etc apply to everyone; and especially to those benefiting from the huge privileges of incorporation and limited liability. If forceful international agreements are possible to protect the values of commerce, then they are also possible to protect more fundamental human values, including the right to protect diversity against the threat of a global monoculture made in Washington and Hollywood.

NEW GLOBAL STRUCTURES

We urgently need global structures which articulate our common global values. That is why I have proposed a World Future Council, giving a voice to our common future. Council members would be 50 to 100 respected and open-minded individuals from various countries, backgrounds and beliefs. While they would serve on the Council in their personal capacity, the aim will be to include recognised political, religious and civil society leaders as well as representatives of business, the sciences and so on who have shown an awareness and understanding of global values.

The World Future Council would not claim to 'represent' others, but rather to express and manifest common values and goals – as citizens taking responsibility for the future. The Council would aim to be a catalytic force that crystallises and manifests universal concerns and formulates value-based responses. Its power would be moral. It could stimulate the creation of regional and local councils who would bring their issues and propositions to the

World Council for debate and promotion.

The responses I have already had to this proposal have convinced me that it is an idea whose time has come. And I invite anyone thinking or working along similar lines to consider joining forces to ensure that 'globalisation' does not mean the worldwide imposition of the values and interests of a small privileged minority. For the most serious threat to us all today is not the (impossible) continuation of 'business as usual'. It is the collapse of our societies, as our leaders lose their credibility and are replaced by preachers of intolerance and obscurantism, leading the reaction against market radicalism. Even local diversity needs a global voice to speak up for its values.

The alternative is terror on a global scale – not just by a few fanatics but by the many hundreds of millions who see their livelihoods and lands destroyed, their families and futures threatened by the West's unwillingness to change. If we wait too long, then the West may be confronted with very different global values as the poor majority lose their patience and decide 'the time has come for destroying those who destroy the earth'. (Revelations 11:18).

Jakob von Uexkull is a writer and translator who specialises in environmental issues. A professional philatelist, he sold his rare stamp collection in 1980 to create an endowment for the Right Livelihood Awards. Annual awards are now worth US\$230,000.

OUR PROBLEM TODAY IS
NOT A 'VALUES VACUUM'
BUT THAT WIDELY-
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PLAYING FOR TIME

JAY GRIFFITHS SAYS THAT WESTERN SOCIETY'S FEAR OF IDLENESS IS PART OF OUR MODERN MALAISE.

LET US PLAY. Against the grey backdrop of a jobbing sky, play is the rainbow. Play is freedom, is creation, is energy, is wicked flirtatiousness, is the helplessly laughing, the leglessly laddered, the god of Things Which Brimmeth Over, the pint down the pub, the resplendently unnecessary and the one-too-many which make the whole damn thing worthwhile.

Play is harvest, is abundance, is generosity; the harvest of pleasure after work, the excess and the gusto, the more-than-enough, the gifts, the spirit of exchange. To play a game is, in German 'ein Spiel spielen,' and the spilling-over abundance of play is mirrored in that brimming-over phrase; spill it, spiel it twice just for fun.

Take some examples. In a huge harvest-ready field in Oxfordshire the world's biggest maze was made in a maize field. The pun was intentional; a play on words for a play on earth; a happy *jeu d'esprit* and a play on the spirit of harvest. Take the word 'giggling.' A one-word harvest of play's superfluity, its liquid, lovely over-indulgence, it has g's to spare, (g: the funniest consonant. You want proof? Gnu. Gneed I say more?) and it fills the gaps with 'l' – the quickest, wittiest, trippiest and lightest-hearted of all the vowels. Sheer play.

A sense of play – serious play – in Indian mythology, is the deepest energy in creation. As Vandana Shiva describes it: 'All existence arises from the play of creation and destruction. The manifestation of this energy is called Nature – Prakriti... Prakriti is also called Lalitha, the Player, because 'lila' or play, as free spontaneous activity, is her nature.' Aristotle said 'Nature requires us not only to be able to work well but also to idle well'. Jung remarked: 'Civilisations at their most complete moments always brought out in man his instinct to play and made it more inventive.' Johan Huizinga, author of *Homo Ludens – Mankind at Play*, argues that culture itself 'arises in the form of play'.

Traditionally, many indigenous peoples do not have a designated word for work, and do not work for more than four hours a day: the length of time Bertrand Russell suggested in *In Praise of Idleness*, reducing both overemployment and underemployment. He also argues that 'there is far too much work done in the world, that immense harm is caused by the belief that work is virtuous'. Leisure, by contrast, 'is essential to civilisation'. The play ethic is far more, well, ethical than the work ethic.

Westernised society, (urbanised, denatured and ferociously work-orientated) is scared of this pan-playism, frightened of its subversive, anarchic, liberated nature. Play is considered to be a puerility to be passed ('playtime' is not for grownups), a subject to be studied (there is a Professor of Leisure Studies at Pennsylvania



'LEISURE' IS PROMOTED,
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PARADOXICAL BEAST THE
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State University) or a religious problem to be solved (idle hands making work for the devil). 'Leisure' is promoted, but only as commodity, from that paradoxical beast the 'leisure industry'. Free leisure, free play, is ignored, since it doesn't contribute to any GNP. (In Bhutan, in the late 70s, the king coined the phrase 'Gross National Happiness' to emphasise that Bhutan would not be bullied into measuring wealth in purely materialist terms.)

The battle between the work ethic and the play ethic is a vivid example of the 'politics of time'. It was Britain which started it; Britain which first decreed that 'British' time, GMT, be made a single, universal time and Britain which made this mono-time the first global export, one time imposed on all the diversity of Times across the world. And it was Britain which first pounded out the Time-values of Punctuality, Efficiency and Hard Labour.

Britain once had its days of cakes and ale, and a week which began with a day off: honouring 'St Monday' – effectively the patron saint of hangovers. And Britain once had a year decked with carnival; days of unbridled play but with serious purpose, for carnival is a political animal, reversing the established status quo; in medieval and Tudor times,

the directors of carnival were the 'Lords of Misrule' whose buffoonery levelled the usual lords of rule. Festival time, traditionally, bound communities together and were rites of commonality, in three senses; customs of the common people, customs sited on common land, and customs marking common time.

But these customs disappeared, up and down the country, as a result of one thing: enclosures. The rites of commoners disappeared when the rights to the commons were taken away. Before enclosures, festivals were vigorously convivial; they were 'off-licence' times, drunken, licentious and rude, from midsummer ales to apple-tree wassailing, to May Day's liaisons.

And the Victorian middle classes hated it. Just as land had been literally fenced off and enclosed, so the playful spirit of carnival-time was metaphorically enclosed, repressed and fenced in by Victorian morality; no drinking, no bawdiness, no sex. The common – very vulgar – character of festival was increasingly outlawed so the mean spirit of enclosure suppressed the broad, unenclosed, unfettered, unbounded exuberance of the vulgar at large; the spirit of serious play was crushed.

The whole machinery of the Industrial Revolution was a massive attack on the spirit of play, altering the experience of time more dramatically than any other. Work, work, work, was the whip word, and though the middle classes pretended that productive time-use was about morality, it was actually about class

politics and class power. For the middle classes spouted that vicious little lie 'Time is Money', without ever answering the question: whose money was being made out of whose time? As landowners made their wealth by stealing the common people's land in the enclosures, so new capitalist timeowners made their wealth by stealing the common people's hours in the factory-enclosures of time. Time was changed forever. The economics of capitalism combined with the Protestant work ethic, class politics, Puritan 'morality', new urbanisation, Christianity's hell-now, heaven-later accountancy of time, and the rise of synchronised mechanical time in factories.

Newton (a misanthropic alchemist from Grantham), offered the intellectual justification for mechanical time which so despised human time, saying that Time was absolute and uniform; factory time in overalls. Time was Granthamised. The Victorians loved him, inaugurating, at Saint Peter's Hill, Grantham, in 1858, a statue of him; two tons of Granthamite misery for two centuries of hard time. To maintain the time of factory machines, many workers' holidays were outlawed by the Victorian middle classes.

It was of course under Margaret Thatcher (a misanthropic chemist from Grantham), very much heir to Newton's factory time, and a banger-on about middle-class Victorian values, that May Day, the traditional workers' holiday, was threatened with abolition.

What was lost? Time varied, curly, elastic and coloured. Time seasonal, mischievous, haphazard, red-lettered and unpredictable was gone. Time was colonised. Mapped. Levelled. Privatised. Enclosed. Counted in and accounted out. Factored in and factoried out. Working people were cut off from nature's time, for in factory time each hour was the same as any other. Days of equal width, hours of equal length replaced the variable hours and stretchy seasons of times gone by. Also, crucially, people ceased to own their 'own' time; the workforce had to demarcate time which 'belonged' to an employer.

There were protests. With eloquent violence, workers in Britain smashed the clocks above the factory gates, the loathed symbol of a new world order which had stolen their time, that quintessence of true individual freedom. Trade Unions took on first the abuse of time. Karl Marx highlighted time's role in capitalism, warning of the 'overconsumption' of workers' time. And Charles Dickens wrote his blistering portrait of such a world, with its Gradgrinds and Bounderbys, in *Hard Times* in 1854.

Across the world, the colonisation of time happened as surely and as devastatingly as the colonisation of land. Traditional indigenous carnival-times were banned from Burma to Brazil; Christian calendars were imposed and the spirit of play was crushed. Columbus, on first meeting the Tainos people, in the place that we now call San Salvador, was convinced the people should be 'made to work, sow and do all that is necessary and to adopt our ways...' Colonists enslaved people in the 'work camps' of the rubber barons – concentration camps by any other name – making their money out of the very life times of indigenous peoples. Few ever survived. Potosi, the 'mountain of silver' in Bolivia, was 'discovered' by the Spanish in 1545. In total, 8 million people laboured and died for the leisure and wealth of white people and to literally finance the capitalism under which they would suffer for the next 500 years.

The majority of work done today, even more so than when Bertrand Russell wrote, is destructive, profiting big business and harming both nature and social justice. Arguably, it benefits few enough people even in the north, as the cycle of overwork, overspend, overmortgage, overconsume and overwork all over again is acknowledged to be destructive. The protestant work ethic has been countered in part by a protesters' play ethic; from the hippy 'drop-outs' of the 1960s onwards to today's downshifters who, in the US, comprise between 5 and 10 per cent of the workforce. The politics of carnival, meanwhile, has been richly dramatised by the May Days of recent years; confronting the industrial with a ludic revolution.

Nature is 'the Player', Shiva commented. Today, though, nature must be put to work: the free, wild and self-willed inter-play of nature is managed at best, exploited at worst. The effervescent shimmer of the rainforest gives way to the dull thud of logging as the Amazon must pay its way to finance South America's external debt and money from the south goes to countries of the north

whose sons and daughters, enleisured by neoliberalism, wreak cultural and environmental havoc going out to play 'global tourism'. Having stolen the real childhood of real children in sweatshops of the world, grownups now try to recreate for themselves the fake confectionery-childhood of tourism, fatuous adults playing in the artificial playgrounds of the world.

At the heart of play are ideas of autonomy, spontaneity and freedom above all. At the heart of modern work are ideas of subjection, clockwork time-discipline and unfreedom – to the point of slavery. The psychology of work is that by enslaving someone's time, you enslave their minds, for free-thinking demands unfettered time, it demands the integrity of hour on hour untouched by the hands of someone else's clock. Play, lively, light-hearted and free, has been colonised all over the world, which is, if you don't mind my saying, a deadly serious business.

Play's freedom is connected to ineffable diversity. The worst of work is connected to ineluctable monoism, the assembly line, factories, sweatshops, work camps and concentration camps. But the dominant political systems of today reverse these truths, offering instead the lie that through work – not play – is liberation. The liberation of working to buy vacations; the liberation of labouring to buy labour-saving devices. These systems silently define all time as work time, so people are encouraged to work to 'buy' back some of their own 'free' time (and to work to buy the commodities that will fill that free time).

And then the lie is exported, through TV, tourism and consumerism, to persuade people of the 'Third World' that they too can earn a similar (vacant) liberation if they will only work hard enough. That they can liberate themselves from the yoke of the 'Third World debt' – if they only work hard enough. The liberating power of work has been written, metaphorically, over the gates of Downing Street, at the White House, at every G8 meeting, it is on the letterheads of the World Bank and the IMF; an idea testament to the inherently fascistic tendencies of big business and neoliberalism: Work Makes You Free – 'Arbeit macht frei' – as the gates of Auschwitz proclaimed.

Jay Griffiths is the author of *Pip Pip: A Sideways Look at Time*, published by Flamingo.

THE WHOLE MACHINERY OF THE INDUSTRIAL REVOLUTION WAS A MASSIVE ATTACK ON THE SPIRIT OF PLAY

AT THE HEART OF PLAY ARE IDEAS OF AUTONOMY, SPONTANEITY AND FREEDOM ABOVE ALL

BAKA BEYOND

CENTRAL AFRICA'S BAKA PYGMIES, SAYS ROBERT NURDEN, ARE SUFFERING FROM 'DEVELOPMENT' AND WELL-MEANING ATTEMPTS TO HELP THEM.

BOUKOU LAURENT SITS on a log under a grass-mat awning at the centre of the compound. As chief of Kougoulou village he has pride of place: everyone else squats. He is also the only Baka pygmy in his clan to be wearing a Manchester United shirt, currently a de rigueur fashion item in Cameroon.

What he doesn't know is that the player whose name is stitched into the red cloth – McManaman – has never played for Manchester United. The shirt on his back is a reject from the sweatshops of Thailand where a seamstress had got her names and clubs muddled up, and the shirt had joined other rejected items on a shipment to Africa's poorest countries. It seems that even when these traditional hunters and gatherers are lured by Western paraphernalia, they get foisted off with second-best.

A roar comes from the single-track road and a lorry with five huge tree trunks laid out on its 50-foot trailer sweeps past, scattering children and dogs. It lifts a cloud of brown dust that eventually settles on the existing film of dirt that covers the bushes and trees on either side of the road. Boukou doesn't even look up: he sees the trucks every day, each cargo eating further into the Central African rainforest. 'It's them, the logging companies, that are ruining our life,' he says.

For southeast Cameroon's 150,000 Baka pygmies, the last 15 years have been devastating. When, in the mid-1980s, the country underwent a severe economic downturn, brought on by a slump in the price of cocoa and coffee, a cash-strapped government looked for other means of earning foreign currency. Its virtually unexploited rainforest tracts provided the answer.



One tree can fetch thousands of pounds in Europe. While the bulk of the profit poured into the coffers of government and business interests, ordinary Cameroonians gained little. And the Baka, who know the forest better than anyone else, but are at the bottom of the economic ladder, were never consulted. Now they are the losers in every conceivable way.

For centuries they have gathered fruit, nuts and honey from the forest, caught fish, and killed and eaten indigenous species such as antelope, porcupine, monkey and duiker. Theirs was a symbiotic relationship with their environment, and stocks were replenished as part of the natural cycle.

The 19th century evangelising invasion had minimal impact on the Baka. But while Western missionaries failed to make inroads, their fellow Africans, the Bantu, did. They moved in from surrounding areas, slashed and burned forests and started farming. In no way can they be described as prosperous but, compared to the Baka, they live like kings.

The Bantu operate a market economy and the Baka, despite being used to bartering rather than currency, were lured, in the hope of prosperity, to the Bantu roadside habitations. But the supposed riches never came their way. For the privilege of living in their traditional grass huts crammed in at the edge of villages, the Bantu forced them into virtual slavery. The Baka – particularly the women – had to work the land, usually without payment. And thousands still live like that today.

So when, 15 years ago, the loggers arrived, the Baka were already experiencing the downside of market forces. Since then,



it is estimated that Cameroon has lost over 90 per cent of its frontier forest, and almost all of the rest is now under threat from European (mostly French) and Asian logging companies. Just five European timber groups account for half of the production and export of Cameroon's tropical timber.

For every tree extracted, at least 20 others will be felled and left to lie on the forest floor. The logging companies use bulldozers to reach their prize, flattening virtually everything in their path. The Bantu know the forest well too, and it is largely they who direct the companies to the prized trees. But, in recent years, the Baka have been lured by cash bonuses and have taken to being tree guides. The catch is that they do not get the same financial rewards as the Bantu – often receiving as little as a tenth.

'How can my people sell themselves and the forest in this way?' says Boukou. 'The old ways have gone. And no one in my clan knows how to climb 40 metres up a tree to smoke out a bees' nest for honey any more.'

But there are severe knock-on effects, too. Logging companies need sawmills to turn trunks into planks. In 1998 the logging company Hazim bulldozed a whole Baka village – including its graveyard – near Lomié to make way for a sawmill. And now there are so many mills, and jobs dependent on them, that trees are being cut illegally just to provide employment. Even the Baka are working as sawyers, but their wages are pitiful, way below any other group's.

In addition, the noise from electric saws frightens away the fauna for miles around, emptying the forest of life. And the vegetation that springs up in the empty spaces left by bulldozers is of no use, and so the forest never recovers.

Well-meaning development projects tend to do more harm than good. In 1996, a community forestry programme tried to give local people control over their environment and the chance to negotiate concessions with logging companies directly. This has worked quite well for the Bantu because they own land. The project forgot, however, that the Baka are, for legal purposes, landless. So logging companies have ridden roughshod over Baka forests.

In order to win concessions, companies often shower gifts on villagers, but the Baka receive a minimum share compared to their Bantu counterparts. Even hand-outs, it seems, are discriminatory.

Virtually every logging company exceeds its quota and its designated area of

operation. The 'Vente de Coupe' concession system is the most devastating for the Baka. It is estimated that 90 per cent of these licences operate illegally. Here a company is given carte blanche to cut everything in a given area. Then the timber firms disappear, leaving the legacy of destruction for the Baka. The 'polluter pays' principle is rarely applied.

The hunting of animals by the Baka posed no threat to the sustainability of the natural species inhabiting the area. But with the influx of vast numbers of loggers, the eating of bushmeat has escalated. It is now the staple diet for thousands of itinerant workers. As Rob Barnett of Traffic, the wildlife monitoring arm of WWF, says: 'What was once subsistence use of these animals is becoming a commercial trade.'

'For every tree extracted, 20 others will be felled and left to lie on the forest floor.'

The demand for animals has become so great that to say it is causing wholesale slaughter is no exaggeration. 'We do not see some animals in the forest now,' said Etienne, another Koungoulou villager. 'They are disappearing fast.'

Each market has its bushmeat area where flesh mountains of animals like gorilla, civet and rat are sold. They provide sustenance for the loggers, drivers and others enjoying the opportunities that the exploitation of timber creates. But the trade in wild meat is spreading beyond the confines of the forest. For posh diners in urban centres such as Yaoundé and Douala these threatened species are a delicacy. The rarer the breed the higher the price. It is estimated that about two tonnes of bushmeat arrive in Yaoundé every day. Some Baka, seeing the money that the Bantu are earning from the bushmeat trade, are now hunting for profit, too.

As Rob Barnett points out, 'Commercial hunters are only able to access deep into the forests because of the logging roads and the timber trucks that can transport meat to urban markets.' Drivers earn good money for transporting carcasses in the back of their cabs.

Responsibility for this mess lies not only with the logging companies and misguided local desire for development, but this time squarely with the EU which funded the upgrading of the road from Abong-Mbang to Lomié. Even the African Development Bank and World Bank refused to fund the road project because of

the 'profound changes [which would be caused] to the Baka pygmies living in and around Lomié'.

Development groups such as CIAD (Centre International d'Appui au Developpement Durable) are now training the Baka in how to become farmers, in order to provide them with an alternative source of income. What they forget in their altruistic zeal is that in the rainforest the recycling of nutrients takes place above ground, and the soil quality is poor. After two years' exposure, it loses what little fertility it had. Agricultural experiments like these have, for the most part, been failures.

In another part of Cameroon, near Kribi in the southwest, groups of tourists are taken on 'ethnic' tours of pygmy villages. The Baka are primed for the visit and instructed to perform traditional tasks to the accompaniment of a farrago of flash cameras. They get paid a pittance for their troubles.

Many of these pygmies face yet more disruption from a pipeline that will stretch from Lake Chad in the north for 600 miles through rainforest to the coast. The project, planned by Exxon, Shell and Elf, will cost \$3.5bn.

Again, development agencies are playing a key role: the World Bank is likely to provide \$240m in loans and is claiming the project will alleviate poverty by creating oil revenues in Chad and Cameroon. The project anticipates an influx of 2,500 construction workers.

The destruction of the Baka's natural habitat and their subsequent economic marginalisation are not, of course, without wider consequences. Their traditional clan organisation with its democratic culture and nomadic history is disappearing in favour of a more sedentary way of life. They are being thrown into larger communal units with which they are unfamiliar. Bantu influence is creating a more structured 'pyramid' society – and chiefs like Boukou don't like it.

The changing economic situation is creating growing conflict between Baka and Bantu. The Baka are losing their forest existence but nothing is replacing it. As the richness of the forest disappears they are becoming yet another disenfranchised community: landless in a property-owning world.

Another truck sweeps by and Boukou's red shirt becomes coated in a film of brown dust. This time he can't even be bothered to brush it off.

Robert Nurden is a freelance journalist.

SEEDS OF CHANGE

SUE BRANFORD REPORTS ON HOW BRAZIL'S LANDLESS PEASANT MOVEMENT IS GOING ORGANIC.

A BITING WIND blows straight across the rolling open fields of Brazil's southernmost state, Rio Grande do Sul. The sun is shining but it is bitterly cold. Adriana, a 15-year-old girl, is spraying rows of onion seedlings with *biofertilizante*, an organic fertiliser. She works methodically, carefully, because she is helping her parents to 'purify' seeds. After two harvests tended only with natural products, without chemicals, they can be classified as organic and her parents, who live on the Conquista da Fronteira settlement, run by Brazil's Landless Movement, the MST, will be able to sell them to the movement's own organic seed producer, Bionatur.

The *biofertilizante* is homemade. Gilmar Paulo Zanovelo is mixing his in a plastic drum in a shed behind his wooden house. 'About 20 ingredients go into it,' he says. 'Cattle manure, calcium, phosphate, milk, sulphur, honey; all natural ingredients. It only costs about 20 reais (£7) to produce 200 litres, so it's much cheaper than a chemical fertiliser. Plants that are fed with it grow slowly but sturdily. They become very resistant to disease.' The Bionatur company was set up in the south of Brazil because the cold, dry climate makes it an ideal region for growing seeds. The biotechnology companies, including Monsanto, also run all their seed operations from here.

Bionatur's production is still small, but it is an important step in the landless peasant movement's slow, often hesitant, move into *agro-ecologia* – sustainable farming. After a long battle with the authorities, the MST, founded in 1985, has won land all over Brazil for the people it represents. Today it runs about 1,200 settlements, where around 100,000 families live. Without the MST, these families would have been forced to migrate to shanty towns in Brazil's cities, or to try to survive as seasonal labourers on the big farms.

Winning rights to the land was an enormous achievement for the MST. At first, the families thought that, in comparison, farming it would be simple. All they would



have to do, they thought, was copy the farming methods used by the big farmers. They couldn't have been more mistaken.

Claudemir Mocellin who, as a child, went with his father on one of the first land occupations organised by the MST, is today a qualified agronomist and passionate supporter of organic farming. Shutting the door of his office so that he can escape from the horde of settlers who have come to talk to him, he says that in the beginning the MST got it wrong. 'We reproduced the system. We wanted the most modern hybrid seeds. We used the most lime, the most fertilisers. We wanted to have the biggest machines and the largest harvests.' But it didn't work. 'Families found that, as their soils got exhausted, they were spending more and more on fertilisers and pesticides. Their purchases on these modern inputs started absorbing 60, 70 per cent of the price they got for their crop. It didn't make any sense.'

'We got very worried by what was going on around us,' says José Armando de Oliveira, an agronomist at CETAP (Centre for Alternative Technologies), one of the main centres of organic farming in Rio Grande do Sul. 'Small farmers, including MST settlers, were moving into soyabeans in a very big way,' he adds. 'They were using a lot of pesticides. We could see it was ruining their land and damaging their health, but for a long while they wouldn't listen to us. The propaganda in favour of chemical farming was so strong that people didn't believe that an alternative model was possible.'

The pressure for change, says Claudemir, came from the families themselves. 'We didn't wait for the MST leadership to alter its policy. We started to do the sums. If a family plants 10 hectares of soyabeans, it might produce 400 bags, which sounds a lot. But then it has to use the proceeds from 200, or even 300, bags to cover all its costs. It might have just 100 bags left. That would bring in 1,500 reais (£500). How can a family of four or five people live on that for a

year? Especially if it has to buy all its food? I was getting really worried about the ecological problems – farmers were applying five litres of poison for every hectare of farming land. Imagine what that was doing to the soil! But what made people start changing were the economic arguments. People began to realise that they didn't necessarily get any better off by having a bigger crop, if they were spending a lot on their inputs.'

The MST's switch into ecological farming has the full support of one of Brazil's leading environmentalists, José Lutzenberger. He, like Claudemir, believes that peasant farming is the agriculture of the future. 'What we call modern agriculture is totally unsustainable,' he says. 'It works with resources that do not grow back. It uses absurd amounts of energy; more energy in the inputs than it fixes in the photosynthesis, and it causes tremendous social and ecological havoc all over the world.'

Lutzenberger is giving courses in sustainable farming to MST settlers. 'It's not really a case of teaching them new things, but of recovering knowledge they had in the past; techniques like painting fruit trees with whey from cheese-making to prevent fungus,' he said. 'It's been very good to see the change in mentality in the MST,' he added. 'It's encouraging but not enough. We need to forge a much broader alliance to stand up to destructive modern farming.'

Sue Branford is writing a book with Jan Rocha on Brazil's Landless Movement to be published by the Latin America Bureau in spring 2002.

THE ETHNO-ECOLOGIST REVEALED

HERBERT GIRARDET REVIEWS THE EXCEPTIONAL LIFE OF THE ANTHROPOLOGICAL CAMPAIGNER DARRELL POSEY.

DARRELL POSEY WAS a truly monumental figure in the world of anthropology and 'ethno-ecology'. Born in 1947 on a farm in Kentucky, he earned his PhD from the University of Georgia in 1979 doing field work with the Kayapo tribe in the State of Para; part of the Brazilian Amazon.

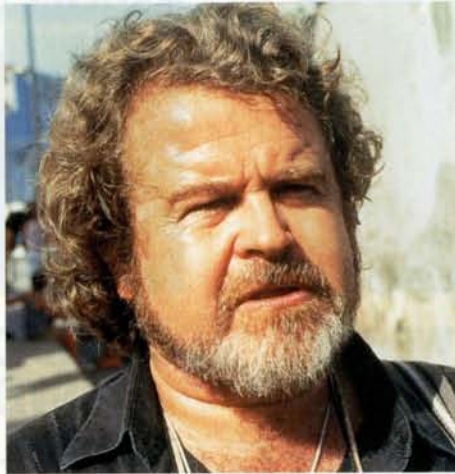
Here he found an ancient tribal culture of astonishing exuberance and complexity, with a language system fully reflecting the vast biodiversity of the Amazon, and with rituals intimately linked to this environment and the cosmos. He learned Kayapo cosmology, forest management and the use of medicinal plants from two village shamans, Beptopup and Kuruka, for whom he developed a deep reverence and who, he said, had taught him more than anybody ever did at university, including Professor Eugene Odum, his mentor at the University of Georgia and a founder of experimental ecology.

In his writings, Darrell described the knowledge system the Kayapo had developed, categorising them under ethnobotany, ethno-zoology, ethno-pharmacology, ethno-pedology, ethno-forestry, ethno-astronomy and ethno-agriculture. It added up to ethno-ecology in the broadest sense of the term.

But he also saw a culture under gravest threat – from logging, dams and *queimadas*, the vast infernos used to clear the forests to convert them into cattle ranches. The idea of simply standing by and watching this world being destroyed seemed impossible; he felt compelled to forego his academic impartiality and participate in the Kayapo's epic struggle to protect their world.

In 1987 Darrell took two young Kayapo chiefs to visit the World Bank in Washington to campaign against a series of hydro-electric dams that would flood their land. The visit became headline news. The Brazilian government was not amused and, upon their return, detained the chiefs and Darrell.

Only slightly shaken, he carried on with his work, trying to prove that tribes like the Kayapo make more efficient use of rainforests than modern cattle ranchers. The research found that the Kayapo enrich rather than impoverish their rainforest habitat, by introducing food plants and



DR DARRELL ADDISON POSEY

born Henderson, Kentucky 14 March 1947,
died 6 March 2001 of a brain tumour.

fruit trees into their forest gardens. He and his co-researchers concluded that the great variety of the Amazon rainforests was due, in part, to the Amazonian forest tribes.

In 1989 Darrell helped organise the Altamira Gathering, the first ever get-together of the Amazonian tribes to protest against the destruction of the forest. This astonishing event was attended by hundreds of journalists, film-makers and environmental campaigners from around the world. It resulted in the cancellation of major dam construction projects – though these are now being proposed once again by the Brazilian government.

In his professional work Darrell was sometimes given a bumpy ride by colleagues who frowned upon his active involvement with the people he was meant to study as a detached observer. Also, 'ethno-ecology' was quite a new research focus when Darrell came on the scene. Even today, academics find it hard to cope with the idea that tribal people, 'naked savages', can teach us much about the world's most diverse environments and, more specifically, about their food and medicinal plants. Darrell was, above all else, concerned to show that long-established knowledge of environments should be regarded as sound basis for dealing with them in the future. He argued that Brazil's strategy for 'developing' the Amazon, primarily by removing the forests wholesale, was one of extraordinary folly.

Darrell went on to found the International Society for Ethnobiology, which has since grown into a major international forum for indigenous people and academics and aims to enable tribal cultures all over the world to draw attention to their great ecological knowledge.

In the last decade of his life, the protection of the intellectual property rights of indigenous and traditional people became the primary focus of Darrell's work and he wrote many papers and attended conferences on this subject all over the world.

Darrell played a central role in having these perspectives included in the Biodiversity Convention, agreed by the world's nations at the 1992 Rio Earth Summit. There he also instigated the Earth Parliament, bringing together tribal people from all over the world to speak about their plight and the significance of their cultures. After Rio, Darrell made his home in Oxford, but here his views were often felt to be a threat by other academics more concerned with their own professional advancement than genuine scientific innovation.

Darrell was a truly great man, and has had widespread influence through his lectures at conferences, and the writing and editing of some 160 books and papers. In 1993 he was awarded the US Sierra Club 'Chico Mendes Award' for Outstanding Environmental Achievements. His most recent book, *Cultural and Spiritual Values of Biodiversity*, which he edited for UNEP in 1999, is testimony to the extraordinary breadth of his interests and contacts.

Darrell also completed a collection of his writings, *Ethnoecology and the Kayapo Indians*, which will be published soon. Sadly, however, his autobiography remains unfinished.

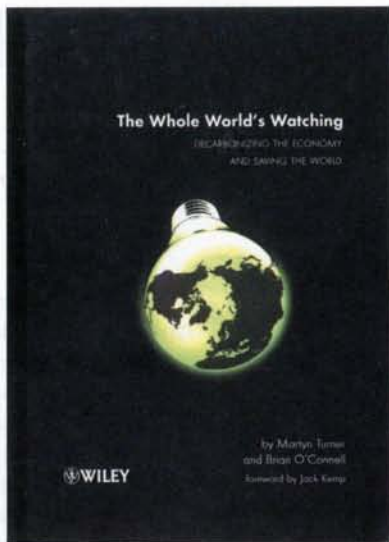
Darrell was great fun, too. I will always be able to conjure up his ringing laughter, enjoying his own very good jokes and those of others. Even in dark moments, Darrell could come up with wonderfully zany jokes and anecdotes. He was never self-important, yet he was conscious of the considerable importance of his work. He will be deeply missed by many people all over the world.

Herbert Girardet is chairman of the Schumacher Society, UK.

We are capitalists,' is the revelation of Martyn Turner and Brian O'Connell on page one of 'The Whole World's Watching'. But Aubrey Meyer can match that. 'I've never been anything other than a musician,' he declares at the start of 'Contraction and Convergence'. Two new books; two proposed solutions to humankind's greatest ever challenge. Both claim to be founded not on environmentalists' fantasies but on harsh realities. Which one has the answer?

Both books start from the premise that global warming is real, and that it is already happening. 'I am not being alarmist,' says Meyer. '[But in] the worst case scenario, the survival of all but a tiny minority of the human race comes into question.' This is not simply because of the increasing amounts of CO₂, methane and other greenhouse gases that humans are still pumping into the atmosphere, but because the earth's natural regulating systems are themselves in danger of being knocked out of kilter. In a recent model, the UK-based Hadley Centre found that warming temperatures would kill tropical rainforests in Brazil – turning vast swathes of Amazonia into desert and grassland, and pouring still more carbon into the atmosphere. Several more 'positive feedbacks' threaten to have just as much of a catastrophic effect.

So can Armageddon be averted? Yes: if we stop listening to environmentalists, and start talking the language of capitalism, say Turner and O'Connell. Greens are great at diagnosing problems, but when it comes to proposing solutions – forget it. And don't worry either about the whole messy Kyoto Protocol business, because the US isn't playing ball. 'The possibility is not realistic, even if snow became a distant memory in Alaska and the state of Florida became an underwater theme park.' With the Democrat and Republican parties representing ideologies which are essentially the same, even a total global meltdown won't convince Americans to get out of their sports utility vehicles and



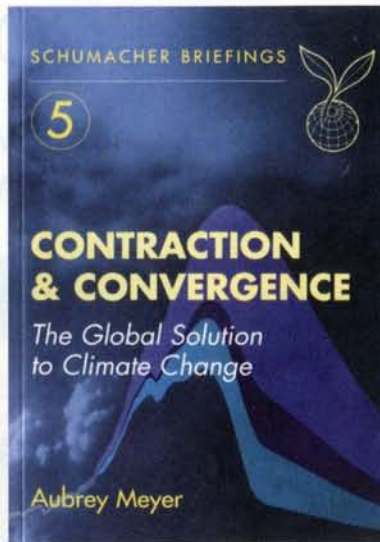
THE WHOLE WORLD'S WATCHING DECARBONISING THE ECONOMY AND SAVING THE WORLD

by Martyn Turner and Brian O'Connell
JOHN WILEY AND SONS 2001
£17.99

take to their bikes. So there's only one option left – to harness the power of technology, industry and finance to shift the US and the world onto a no-carbon economy.

Fair enough, you might think. But here things start going a little weird. 'Windmills... are impractical, uneconomic and environmentally unfriendly. They may produce no greenhouse gases, but the saving represented is so minimal that it barely merits mention.' Huh? 'Biomass is a classic example of a good idea gone horribly wrong.' Hello? 'Solar power is the stuff of romantic books and fairy tales.' Hang on a minute. If renewable energy sources are going to be so thoroughly dismissed, how are we ever going to reduce carbon dioxide emissions? You guessed it – we're back to nuclear power. Read on with mounting dismay as Turner and O'Connell go on to point out that Chernobyl and Three Mile Island weren't nearly as bad as we all thought and that nuclear waste, 'if stored properly, does not pose any danger to mankind.'

After voicing such shrill complaints about the subsidies at last going into wind power, it seems a little cheeky for the authors to plump for nuclear – surely the most bloatedly subsidised industry of all time. And after condemning renewables as unproven and uneconomic, it seems even more surprising that the book finally touts some new 'pocket' South African reactor for



CONTRACTION AND CONVERGENCE THE GLOBAL SOLUTION TO CLIMATE CHANGE

by Aubrey Meyer
GREEN BOOKS, SCHUMACHER
BRIEFING 2001/£5.00

principles, it's really very simple. The Earth's biosphere only has the carrying capacity to absorb a certain amount of carbon per year – and humans have to cut their emissions to a safe level within it. That's 'contraction'. Within this carbon 'budget', every human being on the planet has an equal right to the use of the atmosphere, so countries which emit more than their per-capita fair share must reduce their emissions, whilst those which emit too little are allowed an increase. That's 'convergence'. In a world where 4 per cent of the world's population, in the US, are able to emit 25 per cent of its CO₂, this brings the concept of equity – fairness, basically – to the fore.

For many, equity is a moral standpoint. But it also acts at the level of realpolitik – bringing into the climate process those heavily-populated countries like India and China which are planning to dramatically increase their fossil fuel consumption in the near future. Remember: even if the Kyoto cuts are implemented in full (which they won't be), world carbon emissions are set to increase anyway by some 30 per cent, mainly because of the 'developing' world. Why, runs the argument, should these countries deny themselves electricity, heat and transport simply to support the profligate consumption of rich Europeans, Australians and Americans? In contrast, by recognising these countries' per capita emission rights, and even allowing them to acquire a tradeable

large-scale power generation and far-off fuel cell technology for cars as heralding the long-awaited green panacea. Controversial?

Definitely. Thought-provoking? Absolutely. But maybe Turner and O'Connell, who are both financial analysts, should stick to what they do best – figuring out the rather tedious intricacies of a global carbon trading market.

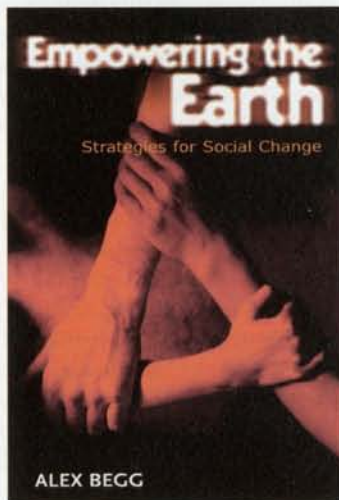
Thank God, therefore, for Aubrey Meyer. 'Contraction and Convergence' was never the most catchy title (imagine it on a banner: 'Contraction and Convergence – now!'), but hidden within this short book is a proposal which could and should alter the course of history. In its essential princi-



market value, Contraction and Convergence establishes an incentive for clean development. (There is a legitimate argument about whether this kind of emissions trading can be conducted fairly or whether it could end up representing 'carbon colonialism', but we won't go into it here.)

In short, these books both present us with a choice. Is tackling climate change so urgent that we should use all means at our disposal, even ones that promote corporate power? Or can the global warming crisis not be solved anyway, except through the establishment of a fairer and more ecological society? We can't all duck this thorny question forever. And both books are a valuable contribution to the debate.

Mark Lynas



EMPOWERING THE EARTH STRATEGIES FOR SOCIAL CHANGE

by Alex Begg
GREEN BOOKS 2000
£10.95

Lying somewhere between an academic treatise, a biography of an eco-activist, and a guidebook for Green campaigners, Alex Begg's *Empowering the Earth* is a truly remarkable book. Written with sincerity, honesty, and from personal experience, and in a sharp critical analytical style, Begg has produced a 'must read', inspirational book. As an (academic) author myself, I can only envy Begg's capacity to deal with difficult and complex analytical issues of power and social change with ease, explaining abstract issues clearly, often with the help of his own experiences. He manages to integrate critical analysis with personal reflection in an engaging and imaginative way, which con-

nects theorising about social change to the activity of organising and supporting it.

Begg begins by taking a view of power as productive and necessary, and not something intrinsically 'negative' and to be 'eliminated'.

This view is based on a combination of his own insights and those of Foucault, systems theory and science, the green movement and theorists of green politics, and a bit of 'green spirituality' (though thankfully not enough to turn this reader off). Power for Begg is relational, and not a property possessed by some over others. As he puts it: 'We must accept that power is inherent in all human relations, to a greater or lesser extent, and that there is no possibility of a world "free from power". This means that we cannot simply regard power as a bad thing: it is what makes our lives possible.' Begg's distinction between two types of power (power-over and power-to), and the relations between them, form the major theme of the book.

What is particularly interesting is that Begg's view of Green social change does not require the abandoning or rejection of all that exists in the present industrial order. A quote from Glen, a member of the Exodus Collective, illustrates this point: 'We've got to find a different way of living – something spiritual, without all this greed. But that doesn't mean we can't eat Sugar Puffs'. Begg suggests practical and radical alternatives, all of which can deliver real, tangible benefits to people now, rather than relying on people supporting radical change on the basis of wonderful things promised 'after the revolution'. From alternative, convivial technology, to LETS schemes and various co-operative enterprises, Begg outlines the ways in which radical change can 'spread' and flow throughout society.

Since we cannot escape the dominant systems of power-over, especially the capitalist economy, Begg's analysis offers a realistic assessment of the shifting line/s that may be drawn and redrawn between the 'industrial/consumer' world and its ecological alternative. This means that the sense of guilt and hypocrisy many feel in, on the one hand, disagreeing with the dominant culture, yet at the same time enjoying its benefits, is less of a problem – we are all complicit to different degrees. This helps break down the real or perceived barriers between those engaged in radical politics and those living in consumer society – while there are obviously real differences, there is also an underlying and important shared fate of being implicated in the system of power-over.

As Begg puts it, 'There is no place where a line can be drawn – everything is connected

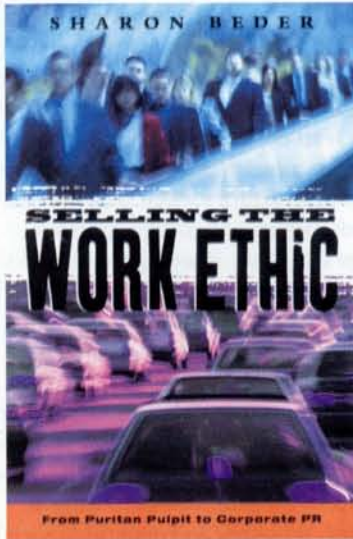
to everything else'. The important point Begg makes is that it is only by providing people with a viable, attractive alternative, and one that is not so alien from their lives and views that it is an object of suspicion to them, that the Green movement will persuade people within mainstream society. 'The first shift towards gaining and practising a social change skill, then, is seeing a step from the familiar to the unfamiliar that is consistent with the learner's motivation... for most the motivation must come from a tangible, immediate gain.'

Adopting and applying a systems theory framework to the analysis of power makes for not only a very interesting, but a powerful (excuse the pun) way of looking at, studying, initiating and organising social change.

Taking this view of a relation between two systems of power means that, for Begg, the activist for social change cannot avoid getting involved with the dominant political and economic institutions of power-over. Explicitly criticising those for whom the only ethically pure strategy is to reject the dominant system of power-over, Begg (correctly in my view) states that: 'At the end of the day, the question is not whether or not to sup with the devil, but rather whether the spoon is long enough.' The real issue for radical social change, according to Begg, is the assessment on a case by case basis of the 'terms of trade' of any 'ethical compromise' one makes between the two systems of power – that is, is the overall impact of the compromise to increase, strengthen the system of power-to and/or weaken the system of power-over?

It is above all his refreshingly realistic, candid assessment of the possibilities for radical social change that for this reviewer makes this an excellent book. 'There is no "middle way" when one side in the contest is so dominant. There is no way to remain above the grubby worlds of politics and commerce when to abstain from power altogether is to cut oneself off from the means of life. Connections have to be made... It is not about being in the mainstream which gets results, nor about being revolutionary; it is the connection between the two, the ability to have a foot in both camps and your heart in empowerment.' In light of the recent debate between two prominent green activists in *The Ecologist* (Vol 30 No 6), Begg's 'both/and' strategy as opposed to the 'either/or' dichotomies that often characterised the exchange between Jonathon Porritt and George Monbiot, is something to be applauded and for which the Green movement should be grateful. It deserves to be read widely.

John Barry



SELLING THE WORK ETHIC: FROM PURITAN PULPIT TO CORPORATE PR

by Sharon Beder
ZED BOOKS 2001
£15.95

'Why do we all work so hard?' is one of the resonating questions at the start of the 21st century. How refreshing it is to have found a book that has a convincing and radical answer to this question.

According to Sharon Beder, an Australian academic who has already dis-

sected multinational manipulation of scientific reality in her book *Global Spin*, our excessive work habits are the result of ideological pressure by a range of elites who profit from our labours – from selling the work ethic. More importantly for readers of *The Ecologist*, her objective is to explain how the cultural imperatives for production and consumption at the core of capitalism, reinforce lifestyles and behaviours that are damaging to people and the environment.

Her story of the work ethic begins with its invention in 17th-century Puritanism and the enthusiastic publicity it received from the early capitalists because of its role in creating a diligent and self-disciplined workforce. From being a Christian duty, work became associated with God's blessing, particularly if accompanied by the accumulation of wealth; a development which reached its apotheosis in the American Dream and a society where status and wealth, especially wealth accrued through personal toil, are inextricably linked.

Behind the veil of the work ethic, the robber barons of capitalism's heyday justified the accumulation of their vast wealth, JD Rockefeller even claiming that 'God gave me my money'. The ideology provided a parallel justification for the gross inequalities this economic system generated: the poor became, by definition, lazy, work-shy and undeserving. Maintaining this myth is the only possible explanation for the continuing political commitment

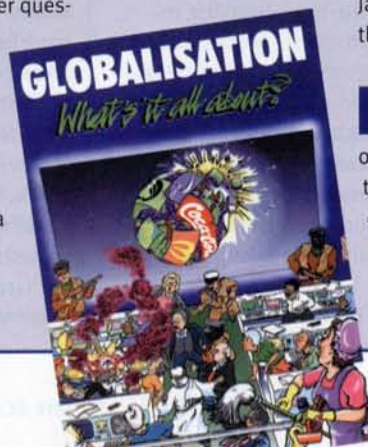
to full employment, a concept which technology has long since rendered obsolete.

FW Taylor, whose scientific management techniques further dehumanised the workplace, turns out to have been another product of a Quaker-Puritan background strongly imbued with the work ethic. His methods reinforced the failing work ethic, which had, ironically, been undermined by the severe alienation caused by capitalist production methods, and were backed up by the manipulation of social scientists such as Elton Mayo, and his notorious Hawthorne studies, characterised as 'cow sociology' because it aims to make the workers content and satisfied so they will produce more.

Beder's history of the work ethic explores how an increasingly complex and technological economy threatens its own ideological underpinnings. In the era of downsizing and portfolio careers, work no longer provides a secure economic or social identity. Here, her thesis would have benefited from greater emphasis on the postmodern analysis that identity is now a function of consumption rather than production, lessening the need for a work ethic and with the consequent burgeoning of identity-based advertising. Beder emphasises instead the stigmatising of the unemployed and ideological assault on welfare that has emanated from the States and been eagerly grasped by Anglophone politicians elsewhere. The interplay of this apparently secular thinking and the supposedly defunct Puritan ideology that pre-

WORTH READING

Globalisation for kids – now there's a thought. Many of our corporate friends, of course, have thought of it already – think of the adverts plastered all over American schools; the Coke machines in every corridor; the Channel One TV propaganda aiming to turn those teens into rampant consumers. So it's nice to see some effort from the other side of the fence, in the form of a new booklet for teachers, *Globalisation: What's it all about?* produced by a group called Tide – 'Teachers in Development Education'. This great little publication is a resource for geography and citizenship teachers, and it aims to get pupils thinking about some of the harder questions behind the globalising agenda. Is it about the spread of ideas and cultural exchange? Is it about corporate rule? What are the implications for democracy? With case studies, lesson plans and exercises, this is a valuable resource. If you're a teacher, take a peek. It's available from Tide at 998 Bristol Road, Selly Oak, Birmingham, B29 6LE, UK. Tel: 0121 472 3255.



The opposite to globalisation, of course, is localisation, and if you thought that was a woolly idea with no basis in reality, a couple of new books might change your mind. *Living Lightly*, by Walter and Dorothy Schwarz (Jon Carpenter press, UK) is subtitled: 'Travels in post-consumer society'; and is the result of just that. It's a compendium of case studies from around the world of communities and people doing it for themselves; from the new peasant of Tinker's Bubble in England to co-housing communities in Canada; from community agriculture in the States to the world's first permaculture village in Australia; from Japanese food co-ops to Indian 'international cities'. Worth a look for those in need of practical inspiration.

From the new to the old: *Food For Thought*, by Bertus Haverkort and Wim Hiemstra (Zed Books, USA) is a compendium of the experiments of traditional rural communities around the world as they struggle with the modern age. It strikes a fine balance between romanticising the traditional and lionising the new and is, again, a good collection of examples of real action, by real people at local level to make their lives work and remain free.

Paul Kingsnorth

ceded it – particularly in the UK where so many Labour (sic) politicians share a Calvinist family culture – deserves further thought.

Despite Beder's acknowledgement that 'The compulsion to work has clearly become pathological in modern societies', the individual damage it causes merited further discussion.

While we are told that work is good for us and our bodily survival depends on it, its damaging consequences for our psychological and physical health urgently requires further research. In support of

'It is rare for a book to so neatly resolve a paradox, while simultaneously providing data for the reader to make the same case to others.'

this, the valuable contribution of Canadian physicians Eyer and Sterling, who in 1967 showed that many of the so-called diseases of age are in fact occupational diseases, should be replicated,

perhaps especially in Japan, where the prevalence of work-related ill health has led to the creation of the word *karoushi*, meaning death from overwork.

It is rare for a book to so neatly resolve a paradox, while at the same time providing sufficient data for the reader to make the same case to others. If you have ever felt an affinity for the lilies of the field, or have already made the seemingly so difficult decision to step off the work-consumption treadmill, then this is the book for you.

Molly Scott Cato

TRUST US, WE'RE EXPERTS: HOW INDUSTRY MANIPULATES SCIENCE AND GAMBLES WITH YOUR FUTURE

By Sheldon Rampton and John Stauber
PENGUIN PUTNAM 2000/US\$24.95

Do you think that a study conducted by a prestigious university is ipso facto unbiased? Or that non-profit organisations just give away their product endorsements? Do you believe all grassroots action groups to be what their fancy names imply, or that, if a scientist says so, it must be true? If you do, the team of Rampton and Stauber is prepared to rob you of your illusions.

In the latest book by the authors of *Toxic Sludge is Good for You* and *Mad Cow USA*, the two investigative reporters disclose some of the insidious methods commonly employed by industry to influence opinion and mislead the public, through the use of bogus experts and doctored data. In a series of shocking case histories, the authors reveal how corporations and their PR lackeys are constantly coming up with deceptive new ways of exploiting your trust and persuading you to buy whatever they have to sell. They accomplish this by letting a supposedly impartial third party, like a university professor, research scientist, or phoney watchdog group make their sales pitch for them.

The problem is that the work of these academics is often dependent on grants from the same corporations that they are supposed to be monitoring. Similarly, the alleged 'watchdog groups' are held on a short leash by their corporate sponsors, who hide their identity behind deliberately misleading labels. There are dozens, if not hundreds, of these nefarious organisations, of which the following five, all established for the purpose of asserting that 'Global Warming is Good for You', are fairly typical:

The Global Climate Information Project (GCIP), launched by some of the US's most powerful trade associations to sabotage the Kyoto Treaty, by claiming that it would raise petrol prices by 50 per cent, leading to higher prices.

The Coalition for Vehicle Choice (CVC), a front group for automobile manufacturers that also blasted the Kyoto climate talks as 'an assault on the US economy'.

The National Center for Public Policy Research, a think tank which lured people into sending treaty-bashing emails to the US President with the prospect of winning \$1,000, and 'offered assistance to journalists seeking interviews with leading... policy experts on global warming'.

Information Council for the Environment (ICE), a PR front group for fuel companies attempting to 'reposition global warming as theory (not fact)'.

The Advancement of Sound Science Coalition, which viciously attacked such legitimate scientific institutions as the American Geophysical Union and the American Meteorological Society.

In the chapter 'Attack of the Killer Potatoes', the authors describe the attempted character assassination of Dr Arpad Pusztai, the Hungarian-born British research biologist, who was among the first to raise a warning flag against GM foods. As one who had been instrumental in laying the scientific foundation for the development of GM foods, Dr. Pusztai overnight became a pariah, whose only defenders were 'organic food freaks', 'ecological extremists', and stalwart opponents of biotech.

The battle between environmentalists and the biotech food industry promises to become one of the most contentious high-stakes struggles of the new millennium. While many of the world's largest chemical companies are shifting their investments from industrial chemicals into agri-business, pharmaceuticals, and food, public opposition to so-called 'Frankenfoods' is growing. In this context, the authors refer to an impeccable source: Robert Shapiro, the former CEO of Monsanto, who is quoted as saying that 'there have been [many] precedents when humanity has at best muddled through the application of a new technology in ways that are frightening, nuclear technology being the most obvious example'.

While *Trust Us, We're Experts!* may not contain much factual information new to readers of *The Ecologist*, it performs a valuable service by making a wider public aware of the corporate use of smoke and mirrors to confuse both the media and we consumers. The book is a wake-up call to the world, and a must-read for anyone concerned about the future of our fragile planet. To paraphrase economist J K Galbraith – an early critic of profligate consumerism – 'If you laid all the 'experts' end to end, it wouldn't be a bad idea.'

Gard Binney



WORTH SEEING



We're taking a road trip this month. Escape from the cities and take yourself out, past the pits of burning livestock, down to Cornwall, where you might well enjoy the Newlyn Art Gallery, perched on the seashore. The work of Rona Lee (pictured left), exhibited until 9 June, draws on the sea and its landscapes (particularly lighthouses) to look at the role of light and the silhouettes of people finding their place in the landscape and their own inner selves. The gallery also runs classes and

education courses. It can be contacted on 01736 363715.

Or perhaps, to escape the burning corpses altogether, you'd like to go abroad. Brussels, perhaps, where until 10 June you could visit the Marcel Broodthaers retrospective in the Palais des Beaux-Arts. I'll happily admit to never having previously heard of this 'influential Belgian conceptual artist', but the exhibition – installations, sculptures, street signs and the apparently 'famous mussels pot and egg shells' plays with ideas of space, place and possessions in an intriguing way.

Or if not Belgium, how about Hamburg, Germany, where Iranian artist Shirin Neshat is showing an unusual and powerful exhibition dealing with the current political situation in Iran, particularly the role of women in Islamic society, and the ever-present political repression. If it sounds like your thing, it's on at the Hamburger Kunsthalle – but only until 8 May, so get your skates on.

There's an intriguing new exhibition in London, though, if you can't afford the air fare. By the up and coming artist Sue Golden, *Showing Signs* is a series of circular images representing the artist's view of

mankind's current ills: militarism, biotechnology/genetic engineering, ecological abuse (shown below), domestic abuse, livestock industry, multinationalism and discrimination. 'For many years I have been trying to deal with the many global abuses, particularly in consumerism and marketing, that have such a terrible effect on human rights, ecology and sentient creatures,' she says. 'The mnemonic clarity of public information pictograms really interested me so I began to develop and create my own iconographic language in order to produce symbolic aide-memoire visuals to the atrocities around us. The final images are a manifestation, a world image.'

The simplicity of *Showing Signs* is deceptive: each is portrayed as a wheel of fortune, yet the kaleidoscopic montage of images contained in the entire collection will allow each viewer to make their own associations and see their own patterns of human behaviour within. In addition, an eighth image – *The Bigger Picture* – is a combination of the various influences and degradations found in the other seven.

There's some powerful thought in this exhibition; see it for yourself at the Loading Bay Gallery, Dray Walk, off Brick Lane, London E1 from 9-13 May. For further information, see www.suegolden.com or call Sue on 020 7681 7516.

I repeat my plea to readers at this stage: any information you have about art or artists out there – or just things you think *Ecologist* readers might want to see, please send them along to me.

Paul Kingsnorth

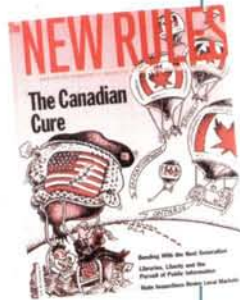


MAGAZINE RACK: Worthwhile reads you won't find in the shops.

THE NEW RULES

The Institute for Local Self-Reliance, 1313 5th Street SE, Minneapolis, MN 55414, US.
www.newrules.org

Exploring community, mobility, scale and trade by addressing some of the very best ideas of what should be done to move forwards; towards self-reliance.



DOWN TO EARTH

International Campaign for Ecological Justice in Indonesia, 59 Athenlay Rd, London SE15 3EN, UK.
www.gn.apc.org/dte

In need of case studies proving that trade and development drive people into poverty, away from their homes and deprives them of the very resources they need in order to survive? This is where to look.



SCIENCE FOR DEMOCRATIC ACTION

The Institute for Energy and Environmental Research, 6935 Laurel Ave, Suite 204, Takoma Park, MD 20912, USA.
www.leer.org

Published by one of the finest experts on nuclear energy; this publication is a real treasure of reliable facts, figures and arguments on the 'real cost' of nuclear power.



PESTICIDES NEWS

Pesticide Action Network UK, Eurolink Centre, 49 Effra Road, London SW2 1BZ, UK.
www.pan-uk.org

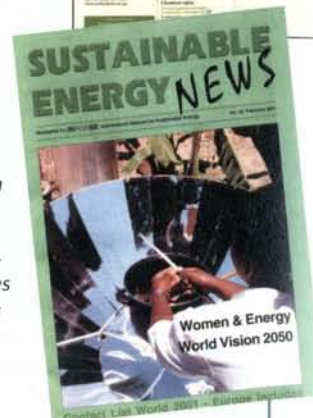
One of the finest magazines in circulation; relentlessly campaigning for a pesticide use reduction and closely monitoring the environmental and health effects of pesticides all over the world.



SUSTAINABLE ENERGY NEWS

International Network for Sustainable Energy, Bledamsvej 4 B, 2200, Copenhagen N, Denmark.
www.inforse.org

Reporting on renewable energy initiatives all around the globe; this magazine gives much more than just hope.



THE CROW

THE CROW family: collectors of fascinating trinkets, portents of doom; symbols of spirituality, emissaries across the flood. And if THE CROW should make wing to the rooky wood, then the world will be turned on its head. To see which way the wind blows, keep your eye on THE CROW.

RUNNING ON EMPTY

THE CROW laments our fast depletion of the planet's resources — through abuse and misuse.

My mother was a very level-headed lady. In contemporary jargon you might say that she kept her cool in most of life's minor crises. But there was one thing that always drove her to distraction: the sound of a dripping faucet. My siblings and I had a hard time understanding her obsessive preoccupation with such a seemingly trivial matter. For in our privileged existence, water was as abundant as the air we breathed — and often less polluted. If someone had told us that bottled drinking water would one day be a staple item in food stores, we would have considered him a dead cert for a one-way ticket to the funny farm. And if that someone had predicted that we'd live to see the day when film-goers would be willing to pay big money for a pint of filtered tap water, we would know that he was a nut case.

As we grew up, we gradually learned the source of our mother's paranoia. For her father, a young barrister from Manchester with dreams of becoming a gentleman farmer, had acquired a 70-acre property in southern California, on the outskirts of a tiny settlement near the Mexican border called San Diego. This was in 1888, when the US transcontinental railroad had recently been completed, mother was three, and the population of California was less than 1/100 of today's 34 million. Unfortunately, however, the property agent had neglected to inform my grandfather that it seldom if ever rained in the Sonoma desert, the sear site of his sprawling spread. And irrigation by diverting the Columbia River, which today makes California's Central Valley one of the world's most fertile food baskets, was but a glimmer in the eye of some eccentric hydrologist up in Sacramento, the state capital.

After the proverbial seven lean years, during which my mother learned to conserve every drop of water, grandfather's house burned to the ground with all its contents — except for a single silver spoon which inadvertently had been left in a dishpan, with just enough water to keep it submerged, out of reach of the greedy flames. Grandpa never recovered from the loss and died a broken man, but his wife eventually returned to England with her two surviving children. Mother lived to the ripe old age of 104, legally blind but sharp as a tack 'til her dying day, and never forgetting how precious our natural resources are.

Well, as the saying goes, 'What goes around, comes around', and today — more than 100 years later — the state of Florida, which sits on what used to be one of the largest aquifers in North America, is experiencing the worst drought since rainfall amounts were first recorded in 1895 — a drought similar to the one that afflicted California around that time. The worst part of the present peninsular scenario is that the damage to the Florida aquifer is irreversible; as we pump out the fresh water accumulated over millennia, it is rapidly replaced by infiltrating sea water. Perhaps Spinoza was right: 'Nature abhors a vacuum.'

But it is not the few remaining individuals of the Florida species of genus pantera who are consuming the once abundant water, any more than it is the dozen or so surviving California condors who are causing the recurrent brownouts in their state by bumping into power lines in their nocturnal hunt for prey. Rather, the environmental crisis currently afflicting both these coastal states is the direct result of an exploding population, unable or unwilling to see beyond the tip of its collective nose,

'If someone had told us that bottled drinking water would one day be a staple item, we would have thought him a dead cert for the funny farm.'

and seemingly oblivious to the fact that consuming in one century what it took nature one hundred centuries to accumulate comes with a heavy price — a price which our children and grandchildren will have to pay, due to my generation's deplorable dereliction of duty.

Personally, I find it a bit bothersome not to be allowed to wash my car or water my lawn — on penalty of a stiff fine — but as long as there's Perrier and Canadian spring water to be had in the supermarket, the prospect of dying of thirst is not uppermost among my health concerns. But, according to the World Health Organisation, one fifth of the earth's 6 billion people already want for safe drinking water, and the day will soon come when potable water will become one of the most highly priced commodities for all members of the human race, searching for sustenance and elbowing each other for space on a crowded planet.

Meanwhile, the silver spoon salvaged from a fire far away from my present abode more than a century ago, is now in my possession — a silent reminder to its new owner not to waste the riches that Mother Nature so generously has bestowed upon us human ingrates. And, just like its present owner, it has acquired the dull patina of a genuine antique!

Gard Binney

THE Exchange

The Exchange is a noticeboard for environmental and ethical services and needs, open to all. Entries are FREE for individuals and NGOs, charities and campaign groups. For businesses and educational institutions, the cost is £54 per listing, to include a year's free subscription to the magazine. Repeat listings are £20 per issue, £10 extra for a boxed ad. Please send entries – no more than 40 words long – together with cheques where necessary made payable to *The Ecologist*, to Sally Snow, The Ecologist, Unit 18, Chelsea Wharf, 15 Lots Road, London SW10 0QJ, or email sally@theecologist.org For more information, call Sally on +44(0)20 7351 3578. Free listings are allocated first-come first-served, and we reserve the right to refuse any entry.

APPEALS

The Commonwealth Collection – library for a non-violent world. An independent collection of over 11,000 books, journals and videos devoted to non-violent social change. We urgently need funds to secure our continued operation. Please consider a gift or monthly donation. Thank you. Email commonweal@bradford.ac.uk or telephone +44 (0)1274 233404.

World Voices, the initiative by young people passionate about exploring and demonstrating alternatives and solutions to replace our unsustainable forms of progress, is desperate for a small creative space as a London office. Visit our website www.worldvoices.org or telephone us on +44 (0)20 7372 7117.

The Sustainable Village Project, Miskolc, Hungary, winners of the Council of Europe Landscape Award 2000. Your donation will be used to establish a membership scheme to increase our capacity to protect the environment. Email us at okogomor@matavnet.hu or telephone +36 484 35016 for more information on our work.

CALL FOR PAPERS

Multiple Currents: Expanding the Boundaries of Transformative Learning. Hosted by The Transformative Learning Centre at the Ontario Institute for Studies in Education at the University of Toronto. Conference date: 1-3 November. Deadline for proposals: 15 May. For more information, visit the conference website <http://fcis.osie.utoronto.ca/~tlcentre/tlconference2001.htm>

CAMPAIGNS

Do you want to stop multinational companies damaging people and biodiversity in ruthless pursuit of profit? Join **Corporate Action**, an exciting, new email activists' network for people who care about the planet. Send your name and email to Hannah Griffiths, Friends of the Earth, 26-28 Underwood Street, London N1 7JQ or email her: hannahg@foe.co.uk

One million Agent Orange victims need your help! Our ongoing campaign is to raise funds and get the US to pay compensation. WILL YOU HELP? Britain-Vietnam Friendship Society. Contact LenAldis@compuserve.com

SAFeAGE (The South African Freeze Alliance on Genetic Engineering) is campaigning for a five-year moratorium on genetic engineering and patenting in food and farming in South Africa. To sign on, contact safeage@mweb.co.za

Get Active! Support Greenpeace Campaigns. Reading Greenpeace Group meets at RISC, 35-39 London Street, Reading, Berks at 8pm on the first Thursday of each month. Join us!

One World Week 21-28 October. Order your OWW Action Kit NOW! Exciting and unusual resource pack including information, stories, posters, photos, planning tools, games and activities – all you need to take part! £7.50 including p&p from OWW, PO Box 2555, Reading, RG1 4XW, UK.

CND needs your support. The US Missile Defence is driving a new nuclear arms race, threatening global security – we need your help to stop this. To join or donate, telephone +44 (0)20 7700 2393.

Letting people in other countries know about the

current environmental situation in your country increases worldwide awareness. Email Nick at bishopnich@scs.vuw.ac.nz to be a part of this.

IPPNW works to ban nuclear weapons, promote universal adherence to the Landmine Ban Treaty, and stop violence caused by small arms. Find out about our campaigns/resources at www.ippnw.org For further enquiries, email Liling Tan ltan@ippnw.org or telephone +1 (617) 868 5050, Ext 200.

A **Food Irradiation Campaign** is being launched by the Food Commission, to monitor and raise awareness of the introduction of irradiation as a treatment for our food supplies. Telephone +44 (0)20 7837 2250, email irradiation@foodcomm.org.uk for more information.

COURSES

SCHUMACHER COLLEGE is an international centre for ecologist studies that welcomes course participants from all over the world. The college runs short courses on ecological issues and a one-year MSc in Holistic Science.

3-22 June. **Thinking Beyond Development**. 4-23 November. **Farming for Better Food**: Solutions to the global crisis in agriculture.

For further information, please contact : The Administrator, Schumacher College, The Old Postern, Dartington, Devon, UK. Tel: +44 (0)1803 865934 Fax: 01803 866899 Email : schumcoll@gn.apc.org.

Alternatively, visit our website www.gn.aoc.org/schumachercollege where you can find prospectuses and application forms. Additional material such as student profiles, articles of related interest, scholarship, details and book ordering information is also available.

THE CLEAN CALGARY ASSOCIATION, ALBERTA, CANADA

Composting Workshops. Sign up for a composting workshop this spring and summer! Meet a Master Composter and get answers to all your questions.

Power to Change. A four-part energy education programme in Calgary. Become informed about your energy options and efficiency issues in the climate change age. For more information, call the Clean Calgary Association on +1 (403) 230 1443.

ORKNEY COLLEGE AND HERIOT-WATT UNIVERSITY are collaborating on a University of the Highlands and Islands Project degree designed for people facing the task of matching environmental protection with the development needs of sustainable communities. For more details, contact jim.chalmers@orkney.uhi.ac.uk

BCTV SCOTLAND is running a series of environmental training days based at Oatridge College, Broxburn. Charges start at £25/day or £40 weekend.

10 June – **Wildlife garden and design**
23-4 June – **Environmental education weekend**
For full details, telephone 01786 479697 or 01506 854387.

23 May, **Protected Species on Site** – Planning and Dormice. Cheddar, Somerset, UK. For more information about The Mammal Society and further workshops, please call Georgette Shearer on 020 7498 4359.

15-17 June. **Bat Detector Workshop**, organised by the BTCV, Hampshire, UK. For more information, telephone 02380 283944.

VOLUNTEERS

New website for global, grassroots volunteer projects. If you have details of volunteer projects to add to the site please contact Ed Bentham, Edb@serversthoron.ac.uk

Women's Environmental Network is looking for the following to join our team: clued-up volunteers to staff an information stall at Spitalfields Market (roughly one Sunday per month) and a Local Groups Co-ordinator, a volunteer to provide vital support to local groups throughout the country. Must be computer literate. Expenses paid. Contact Sophie, telephone 020 7481 9004, email info@wen.org.uk

Azafady, London-based charity working to protect the endangered ecosystems of south-east Madagascar. We are currently looking for volunteers to be part of the dynamic team, living in idyllic surroundings and working hard on established, award-winning projects. Contact Mark Jacobs, telephone +44 (0)20 8960 6629 or visit our website www.madagascar.co.uk

Volunteer web-editor needed to help edit and recruit for www.apprentice.org which links young people with small craft-scale businesses for long-term apprenticeships.

International Voluntary Service. We place volunteers on short-term projects in over 30 countries, mainly East/West Europe. For more information, visit our website www.ivsgbn.demon.co.uk or write to us at IVS, Old Hall, East Bergholt, Colchester, CO7 6TQ.

Looking to volunteer on food, farming and trade issues? We need volunteers for administration, and more interesting research projects too. Contact sustain@sustainweb.org or telephone 020 7837 1228.

Join the Wight Green Team. Enthusiastic conservation volunteers on the Isle of Wight. Please call the Centre on 01983 532121 for details.

Enthusiastic, friendly people required to join BTCV Swansea's volunteer group. Opportunities available in practical nature conservation, fundraising, publicity and working holidays. Why not spend your summer on the beach with BTCV? Email: west-wales@btcv.org.uk

ENVIRONMENTAL RESOURCES

MERCi is a new centre in Manchester for local community groups and anyone interested in finding out more and taking action on the issues of sustainable development. Telephone 0161 273 1736; fax 0161 274 4598; email: merci@gn.apc.org

Housmans World Peace Database. Definitive information on 3,400 (national and international) environmental, peace, human rights groups in 170 countries. In print, on labels, on floppy discs. For details, telephone +44 (0)20 7278 4474 or email worldpeace@gn.apc.org

EVENTS

29 April, London, UK. **Mass 'nose-in'** for the people of Iraq outside the Foreign Office. 'Pinnocchio' noses provided. End the lies, lift the sanctions! Contact Voices UK on telephone 01865 243232.

6 May, Leeds, UK. **Scientists for Global Responsibility Annual Meeting**. Part of the

International "No Star Wars" Conference. For more details, contact Kate Maloney sgr@gn.aoc.org, telephone 07771 883696 or visit our website www.sgr.org.uk

9-11 May, Stockholm, Sweden. **From Research to Action – Bridging the Gap**. Including the importance of scientific research for climate policy, health and opportunities for integrating the environment into the transport sector. For programme and updated information, visit www.bridging.environment.se

12 May, London, UK. **Communities Against Toxics** "Zero Waste Management in the 21st Century". Stephenson Hall, 85c Highbury Place, London N5 1VD. For more information, contact Ralph Ryder, telephone 0151 339 5473.

12-13 May, Petersfield, Hampshire, UK. **Introduction to Bat Wardening**. Telephone 02380 283944 for more information.

17-19 May, Bristol, UK. 2001 **A Waste Odyssey**, Community Recycling Network, Conference & Exhibition. For more information and registration forms, telephone Christie Anthony, 0117 908 1152.

19 May, London UK. **Human-scale Education Annual Conference**, Living Democracy in Schools, at the Charity Centre, London. For details, telephone +44(0)1275 332516 or visit our website www.hse.org.uk

22 May, Birmingham, UK. Hosted by **Green Government Magazine** in association with the DETR. All public bodies are under a duty to ensure that every penny of expenditure is fully environmentally appraised. This event offers a cost-effective way of finding exactly what this means and to put plans into practice.!!!! For all enquiries and registration, please contact Jeremy or Jan on 0800 542 9590 or visit www.govnet.co.uk/ggp

31 May, Manchester, UK. **The implications of climate change** for the industrial and professional sectors dealing with development and the built environment will be explored at a major national conference at The Lowry, Salford Quays, Greater Manchester. For conference and registration details, telephone 0161 834 8834 or email snw@snw.org.uk. Alternatively, visit our website www.snw.org.uk/smartdevelopment

5 June **World Environment Day** Birmingham, UK. ET2001. A high profile panel (including Michael Meacher, Minister for the Environment) will debate "Is current corporate practice diminishing the wealth of nations?" Free to all visitors to ET2001. For further information, call Catherine Iredale on 020 8651 7100 or email catherine.iredale@fav-house.com Visit www.et-expo.co.uk for details of ET2001, being held at the NEC Birmingham, 5-7 June.

4-10 June, London, UK. **Festival 2001**, encompassing World Environment Day. THE West London Festival is being held at Headstone Manor Ground, Pinner View, North Harrow, Middlesex. Including many zones and themes based on energy issues, nature conservation, waste and water issues, greener travel. For more information, contact Danae Meacock Mashir, telephone 020 8424 1913; email danae.meacock.bashir@harrow.gov.uk

9-10 June. **Eco Festival**, Oakville, Ontario, CANADA. Information on positive actions for every negative environmental issue!

Environmental products, services, organic farmers market, natural life practitioners. For more information, visit our website www.the-activist.org

17-24 June, Cuba. **Sustainable Development: Fact or Dream, Ten Years After the Rio Summit.** You can obtain detailed information on the agenda for this conference on the website www.cubaciencia.cu/hosting/3ra_conv/ind_ex.htm

14 July, London, UK. **Christian Ecology Link talk**, 'The Church, the City and the Environment' by Chris Brice, Director of CARIS (Diocese of London), Bloomsbury Central Baptist Church, Shaftesbury Avenue, London, 2pm. For more details, contact George Dent, telephone 01423 871616.

29-31 August, Kingston, Jamaica. **Solar & Wind Energy and Environment 2001.** This exhibition is a must for companies operating in the spheres of solar and wind energy and environment. For more information, email Peter Oerlemans procons@cura.net

21-28 October. **One World Week 2001.** We're on our way. Join local activists around the world celebrating, acting on and learning about issues of global justice. To find out how to take part, email us at enquiries@oneworldweek.org or telephone +44(0)118 9394933.

2-8 November, Port Elizabeth, South Africa. **World Wilderness Congress** (founder Dr Ian Player). The Summit will include leaders in politics, business, science, education, field management, NGOs and rural development. For details, contact Jo Roberts on +44 (0) 1245 227606, email jroberts@freenet.co.uk

JOIN

The Countryside Restoration Trust is an independent Charity working to restore the general countryside. It believes that profitable farming, wildlife conservation and landscape creation can, and must, co-exist. The CRT buys land that has been over intensively farmed and restores it. The CRT now owns 355 acres and has been supported by the Heritage Lottery Fund. The CRT began farming practically in 1993 and is the lead charity working in the field of conservation and practical farming. For more info tel Robin Page +44 (0)1223 870932.

The Noah Project. Jewish Education, Celebration and Action for the Earth. We promote environmental responsibility throughout the Jewish community through education, celebration of Jewish festivals and practical action projects. PO Box 1828, London W10 5RT. Tel: 020 8994 5988, Email: info@noahproject.org.uk

Involve. A local charity based in Bath that has been helping individuals, communities, schools and businesses to discover the benefits of living and working more sustainably since 1994. We have a public information library and exhibition area, and a Community Resource room available to local groups working on sustainability issues. Visit our website www.involve.co.uk or telephone us on 01225 787910.

Vaccination Liberation. Join Vaccination Liberation and get the documentation you need to feel confident in your decision to abstain from mass medical experimentation. For more information, email us: vaclib@coldreams.com "The Right to Know, the Freedom to Abstain".

Network for Alternative Technology and Technology Assessment. Provides information on renewable energy issues and developments, and produces a bi-monthly journal, *Renew*. £18 p.a. (£12 unwaged). Visit our website www.tec.open.ac.uk/eeru/natta/rol.html

World Information Service on Energy (WISE). Based in Amsterdam, The Netherlands, we are a

campaigning grassroots organisation working on nuclear energy, depleted uranium and connected topics. We publish a newsletter 20 times a year. For more details, visit our website www.antenna.nl/wise

Permaculture Association (Britain). We welcome all offers of donations, members, volunteers, organisational support and partnerships. We have an exciting development plan, can you help? Write to: BCM Permaculture Association, London WC1N 3XX, telephone 07041 390170/0113 2621718, email office@permaculture.org.uk or visit our website www.permaculture.org.uk

British Wind Energy Association. The BWEA is the professional body for the UK wind energy industry, representing companies and individuals interested in utilising the country's vast wind resource in the production of electricity. Telephone 020 7402 7102/3 or visit our website www.bwea.com

Sponsor a child through ActionAid and help provide children and families with safe water, healthcare and education. In return you'll receive field worker reports and messages from the child. ActionAid, Freepost, Chard, Somerset, TA20 1FR, telephone 01460 238080, email mail@actionaid.org.uk, website www.actionaid.org

The New Economics Foundation exists to promote economic initiatives for social inclusion and environmental sustainability. It operates internationally through research, advocacy and the development of practical initiatives and tools. The foundation has an exceptional record of social innovation, which includes: promoting local economic renewal, challenging and reshaping globalisation, innovating in participative democracy. Visit our website www.neweconomics.org

The Land Stewardship Centre of Canada is a not-for-profit, charitable organisation that promotes excellence in environmentally sustainable land use. To get inspired to take action in maintaining the ecological health of our landscapes, visit our website at www.landstewardship.org

HOLIDAYS

Scotland's Isles - Seven Ways to Experience the Magic of Island Life. For details of holidays to the beautiful islands scattered around the west and north coast of Scotland contact Bill Tinto on telephone +44(0)141 634 4876 or visit our website www.scotiatravel.com

Alternative Gomera, a guide to walking on La Gomera Island, near Tenerife, takes you around this paradise island, staying at a different pension each night. For details, visit our website www.gomera.org.uk

Whilst foot and mouth disease precautions remain, the **Time Out Book of Country Walks** has rejigged all its walks. See www.walkingclub.org.uk or order by phone +44 (0)20 8208 2853 for £10.99 including p&p.

ECO-BUYS

ORGANIC T-SHIRTS, HAND-PRINTED.

Retail/wholesale, printing service. For catalogue, send sae. to: Sunrise, Schoolhouse, Menmuir, Brechin, DD9 7RN. www.gn.apc.org/sunrise

The Healthy Flooring Network seeks to raise awareness of the links between fitted carpets, PVC flooring and health, asthma and allergies. www.healthyflooring.org

4sight aims to provide a practical framework to help organisations think beyond the traditional cycle of consumption and disposal. www.4sight.org.uk

Centre for Alternative Technology - promoting sustainable technologies and ways of living and

working. Buy Green by Mail offers a wide variety of books, gifts and craft ideas, household and gardening products. Telephone +44 (0)1654 705959 for more information or visit our on-line shop www.cat.org.uk/shopping

PUBLICATIONS

Get Sustain's 16 groundbreaking, illustrated, **Food Facts** reports, from beef, soya and apples to lettuces, chickenmeat and sugar. £5 each. Plus many other publications, including **Digest**, the quarterly update £75 subscriptions). For more details, visit our website www.sustainweb.org

Subscribe to **Encompass** Magazine! - an award-winning magazine dedicated to informing Canadians about important environmental issues. For your free trial issue or subscription telephone +1 800 884 3515 or email orders@pembina.org

The ACTivist Magazine for peace, ecology and human rights. Published 6 times a year. Visit our website www.the-activist.org

Green Futures magazine. For a planet with problems, Green Futures magazine is packed with solutions: news, opinion, features and cutting-edge examples of sustainability practice in the UK and abroad. For subscriptions, telephone 01223 564334 (£19 for individuals).

Nonviolent Action, the monthly publication from Peace News, for environmental, GM, peace, activists - your news, contacts, ideas, listings. Send information to (and enquire about subscribing): NVA, 5 Caledonian Road, London N1, or email worldpeace@gn.aoc.org

Green Events - a monthly magazine for London and the South East, which covers all the green, ecological and holistic happenings in the area and beyond. If you would like a sample hard copy of the current issue with a special subscription offer, please send your name and address to webmaster@greenevents.fsnet.co.uk Alternatively, you can view most of the listings on our website www.greenevents.fsnet.co.uk

ORGANICS

Fresh & Wild is the UK's leading specialist organic food and natural remedy retailer. We have 6 award-winning stores in London in Camden Town, City, Lavender Hill, Notting Hill, Soho and Stoke Newington. Visit our website www.freshandwild.com

Sundancemarket.com. Europe's largest organic and natural foods retailer is now online. We offer information, products and services encouraging a lifestyle that nurtures and protects our planet. Do your weekly shopping from your home and have it delivered to your door. Delivery next day throughout the UK. Take a look on our website at www.sundancemarket.com

Planet Organic. The original organic and natural food supermarket, the modern mecca for those seeking everything for a healthy lifestyle. A one-stop shop, we stock over 8,000 products, providing a comprehensive range of fresh, wholesome foods in a friendly space with helpful staff. 42 Westbourne Grove, London W2 5SH.

Fresh Food Company was founded in 1989 and is the UK's leading farm-based comprehensive nationwide organic food home delivery service. Visit our website www.freshfood.co.uk

VISIT

The Centre for Alternative Technology. Machynlleth, Powys, SY20 9AZ, UK. Presenting environmental issues in the context of their solutions. This is a visitor experience that will inspire all ages. The seven-acre site includes an exciting and educational range of displays, with children's theatre and guided tours at peak times. The centre is open seven days a week from 10am to 5pm all year round, except for a few days around Christmas and the New Year.

Terra Firma, Dorset, UK. World food licensed restaurant and venue, occupying a beautiful converted church in the centre of Shaftesbury. Local food, organic wines, teas and coffees. Also features a varied programme of events on Saturday evenings, and 'Only Organic Market' on Thursday mornings. For more information, telephone 01747 858883.

BOOKSHOPS

Housmans, 5 Caledonian Road, King's Cross, London W1. Almost the last alternative bookshop in London. Stocks *The Ecologist* and 200+ other green, peace, left, gay etc. magazines; plus cards and books.

WEBSITES

www.edmonds-institute.org

The Edmonds Institute invites you to read about environment and technology and especially about genetic engineering.

www.newint.org

At last count New Internationalist Online ran to well over 2,000 pages, and it's growing rapidly each month. But don't be daunted, it's all beautifully organised for easy access. Human rights, development, specific countries, environmental issues...

www.n-base.org.uk

N-Base Nuclear Information. Weekly Briefings on the UK civil nuclear industry e-mailed to subscribers and free website with 11,000 record searchable database, latest news and features.

www.vote-environment.org.uk

The website set up by leading environmental organisations to highlight the importance of environmental issues in the General Election.

www.begegnungszentrum.at

Centre for Encounter and Active Non-Violence. Classical texts, news, events, books (German, English) on ecology, anti-nuclear, economy, WTO, peace.

www.DoBe.org

Free on-line events magazine intended for every city in the world where you can post details of your participatory event, anything from walking groups to discussion salons.

www.brookes.ac.uk/eie

Environmental Information Exchange (EIE), a central source of information and support for environmental issues. Provides free information on recycling, energy and water saving, pollution, transport etc.

www.gn.apc.org/eco

ECO - The Campaign for Political Ecology. Explore the radical ideas of biocentrism on our website.

www.ratical.org/radiation/CNR

Committee for Nuclear Responsibility (San Francisco). Solving energy shortages without nukes, plus Professor John Gofman's evidence against any safe dose of ionizing radiation, against metabolic free-radical comparison, plus evidence that radiation causes heart disease.

www.edie.net

A free news, information and communications service for professionals in the environment sector.

www.corpwatch.org

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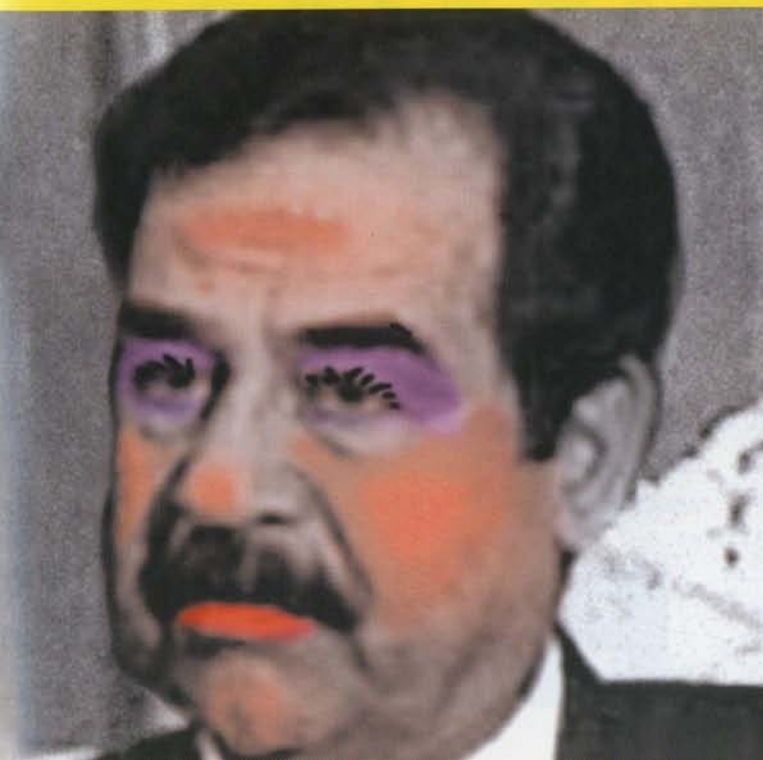
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