

THE Ecologist

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RETHINKING BASIC ASSUMPTIONS

MARCH 2001



SPACE TO LET



AMERICA'S PLANS TO CONTROL OUR SKIES

WITHIN REGION
Bringing politics
back home

BEAGLES ABOUT
Inside Huntingdon
Life Sciences

CASTAWAY?
A BBC islander
spills the beans



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YOU'RE TALKING OUT OF URANIUM

The ongoing debate surrounding the use of depleted uranium in war has taken the British and American governments beyond their predecessors. The lies are perfectly normal, but the manner with which those lies have been delivered is worryingly new.

For uranium is not the only commodity to have been depleted. The other, it seems, is the thin veil of respect that has masked most previous governments' contempt for their electorates. Lies are always hard to digest, but at least there's a degree of flattery in those that have been elaborately crafted. What we've heard during the past few weeks has been, on the contrary, an insult. Making zero effort to paint official routine denials of wrongdoing as the truth, it is as if our leaders don't even care if we believe them.

When the last British government took it upon itself to misinform the public over the perils of beef, it bent over backwards to persuade us that the problem was a myth. Images of former agriculture minister John Gummer stuffing meat down his daughter's throat still haunt the Conservative Party. But at least he tried. I don't see Robin Cook munching on DU pâté. 'Our medical advice has told us,' said an MoD spokesman, 'that DU is no more radioactive than for example a household smoke detector'. 'Scientist after scientist after scientist,' said Mark Laity of NATO, 'has been coming out saying they do not see a link between leukaemia and depleted uranium.'

Meanwhile, Geoff Hoon, our trusty defence secretary, assures us that 'there are no risks associated with the use of DU, and certainly no proven link between its use and any illness'.

The fact that official bodies have not bothered to seek that evidence might have something to do with its not being found. Testing urine samples of soldiers – the method used by the US and Germany to support their 'no risk' hypothesis – is like using a metal detector to track down a rat. The truth is, our official experts are deliberately twisting what they know to be the truth. NATO officials, for instance, have been wandering around Brussels carrying lumps of depleted uranium to reinforce their point, despite the fact that when blown up, DU ignites and turns into tiny hard particles, small enough to remain airborne. When inhaled, the DU dust can easily enter a person's bloodstream to be transported through to the bone, lymph nodes, lungs or kidneys where it can remain for long periods of time emitting low-level radiation indefinitely. 'If officials really want to convince us,' challenged the *New Scientist* magazine, 'let them inhale a pinch of DU dust, as they are asking the people of Kosovo and Iraq to do.'

Deliberately looking in the wrong places for bogus evidence to justify routine madness is nothing new. And if that was where the matter ended there would be no real surprises. But the story is still unfolding, and what is beginning

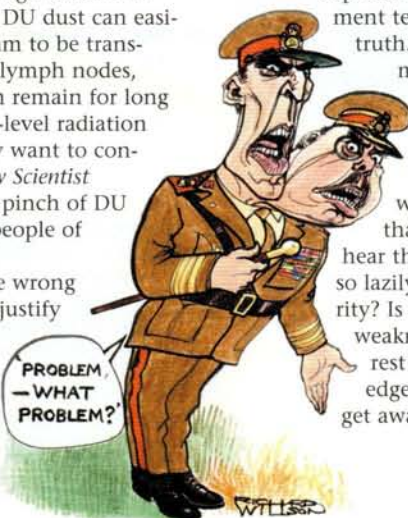
to emerge is a rather more sinister picture. For both the British and American governments have conducted proper research into the effects of DU, and both have concluded privately that there are serious problems involved.

Back in 1997 in an unpublished report, MOD medical experts warned that 'all personnel should be aware that uranium dust inhalation carries a long term risk... [the dust] has been shown to increase the risks of developing lung, lymph and brain cancers'. Perhaps the same MOD's Geoff Hoon had not been advised of these warnings when he announced the absolute safety of DU. The same cannot be said of the US military, according to Professor Doug Rokke, ex-director of the Pentagon's Depleted Uranium Project. 'Since 1991, numerous US departments of defence reports have stated that the consequences of DU were unknown. This is a lie. They were told. They were warned. DU is the stuff of nightmares. It is toxic, radioactive and pollutes for 4,500 years. It causes lymphoma, neuro-psychotic disorders and short-term memory damage. In semen it causes birth defects and trashes the immune system. The US and British military personnel wilfully disregarded health and safety and the environment by their use of DU, resulting in severe health effects, including death. I and my colleagues warned the US and British officials that this would occur. They disregarded our warnings because to admit any correlation between exposure and health effects would make them responsible for their actions wherever these weapons have been used.'

If the UN is correct, then the recent flurry of humanitarian wars have been about as humanitarian as Saddam's use of the Kurds in the front line. Even the usually meek UN has said that the Kosovo mission 'has created a new type of complex humanitarian emergency,' such is the state of their environment and health.

Indicative of the depths to which we have allowed our leadership to sink is the fact that the mainstream media makes very little effort to counter these obvious lies. So commonplace is this approach by modern governments to serious issues that it has come to be expected that whatever the government tells us is the opposite of the truth. And no one seems to mind.

On the contrary, lying is accepted as the norm. But why should we allow these people to have their say, when their say is worth less than the time it takes us to hear them? Why should we settle so lazily for this dishonest mediocrity? Is it not a sign of our own weakness that governments can rest comfortable in the knowledge that they will get away with it?



ZAC GOLDSMITH

THE Ecologist *contents*

VOLUME 31 NO 2, MARCH 2001



COVER STORY

If you thought that Mankind's adventures in space were all about moon landings, heroic astronauts and the noble pursuit of knowledge, think again. For plans are afoot in the US to dominate the night skies as America has dominated the Earth. The US military wants to 'control space' for its own purposes; which range from laser-guided space weapons to mining planets for useful minerals. Meanwhile, commercial corporations are talking of giant moon-sized billboards orbiting the night skies, bringing the wonders of global consumerism to every part of the Earth. The question is: who gave them permission to do any of this? Who consulted any of us about some of these potentially lethal plans? Who owns space?
Page 34.

Original cover photograph: Corbis

FEATURES

26 Do-it-yourself money and the new alchemists

All over the world, local currencies are proving that there are alternatives to the global economy, as David Boyle reports.

30 Seeing is believing

The recent outcry about animal experiments at Huntingdon Life Sciences began when Zoe Broughton secretly filmed their mistreatment of beagles. Here, she recalls what it was like, and the effect it had.



34 Disgrace into space

Karl Grossman reveals what is really going on up in the heavens.

40 There's no place like home

What is 'bioregionalism', and could it be the answer to the world's problems? Kirkpatrick Sale puts forward his case.

COMMENT

44 Colin Hines

'Protectionism' should not be a dirty word. In fact, it is the way forward.

46 Paul Kingsnorth

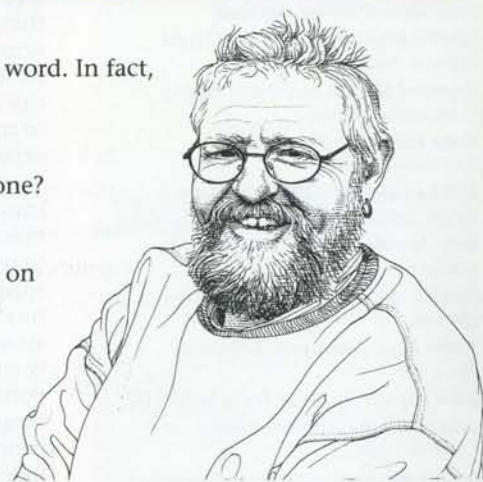
Where have all the road protesters gone?

47 Peter Jowers

One of the BBC's 'Castaways' reflects on whether the project was worthwhile.

48 Denys Trussell

Modern art is a reflection of modern society – so what does this say about today's world?



The Ecologist special issues

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PROFILE

24 **The Good, the Bad and the Ugly**

Continuing our series which takes a questioning look at the heroes and villains of our time. This month: missing rainforest hero Bruno Manser and George Bush's new anti-green Interior Secretary Gale Norton.



REPORTS

52 **Control freaks**

You probably haven't heard of Cargill. But, as Greg Muttitt reveals, the world's biggest grain company probably controls what you eat.

54 **Digging for victory**

Britain's allotments could be an ideal way forward in switching to local food production. But, as Michael Wale reports, they have to be fought for.

56 **A force for good**

Margaret Casey remembers cancer campaigner Tina Cooke, who died in January.

58 **Danger islands**

The Solomon Islands are no paradise. As Nicola Baird reports, rising sea levels and political turmoil threaten this south sea island group as never before.



p54

NEXT MONTH

David Attenborough: one of the world's most famous naturalists talks exclusively to *The Ecologist* about guilt, parakeets and the dangers of globalisation.

For the first time, we put a figure on the number of deaths caused worldwide by the nuclear industry. Prepare to be shocked.

Nappies are a huge environmental problem. Don't believe it? Join us in April.

REGULARS

6 **Letters**

Readers have their say.

8 **News**

The latest events and stories from around the world.

14 **Campaigns**

Find out what's going on, where, when, and how to get involved. Plus, bone up on the latest, and best, Internet-based campaigns.

20 **Debate**

Do animals have rights? Philosopher Roger Scruton thinks not. AnimalAid director Andrew Tyler begs to differ. We open a new chapter in this vital and sensitive debate.



V



51 **Doctor's handwriting**

Lynne McTaggart on autism, the MMR vaccine and the precautionary principle.

60 **Reviews**

What's best to see, visit and read – plus, the first of our new cartoon series by Kate Evans.



66 **The Crow**

It's amazing what bureaucrats will take up as a challenge.

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LETTERS

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Please attach your name and postal address, even when sending by email. The editor reserves the right to shorten or edit correspondence where necessary.

CANCER FEEDBACK

Martin J Walker is inaccurate in his facts regarding Breakthrough Breast Cancer (*Your Money and Your Life*, Vol 30 No 7). Breakthrough Breast Cancer was established in 1991 by Bill Freedman and his family, who had lost his wife and their mother, Toby Robins, to breast cancer. We have established the Breakthrough Toby Robins Breast Cancer Research Centre – the UK's first such dedicated centre – at the Institute of Cancer Research (ICR), Fulham Road, London. The ICR was chosen by Breakthrough for its reputation and well-documented scientific infrastructure.

Under the direction of Professor Alan Ashworth, the Breakthrough Research Centre currently funds research into gene regulation, the role of oestrogen and cell death. Breast cancer is a complex disease with many forms and causes. It is well-known that environmental factors such as diet and lifestyle are likely to play a role in breast cancer. That's why Breakthrough is also funding work in this area.

Breakthrough has provided administrative support for the All-Party Parliamentary Group on Breast Cancer (APPGBC) since 1997. The group is formed of interested MPs and Peers to ensure that breast cancer issues remain at the top of the political agenda. Their agenda is set by the officers and secretary of the group (four MPs) who receive letters from organisations and support groups from across the country with an interest in breast cancer.

AstraZeneca has provided some finance for the APPGBC but it is not a major sponsor. Its donations to the group have amounted to £9,500 over two years. In addition, AstraZeneca is not consulted on the group's agenda or attached conditions to its donation – the only acknowledgement they receive is their name listed on the back of the group's newsletter.

Breakthrough has never conducted trials with tamoxifen (manufactured by AstraZeneca). The only donations received by Breakthrough from AstraZeneca totalled £4,500 (from 1996 and 1997). Breakthrough's annual income is in excess of £5 million. Breakthrough does not, and cannot, in any way, grant drug companies access to politicians.

DELYTH MORGAN

Chief Executive, Breakthrough Breast Cancer

CLIMATE OF DEBATE

Roger Franklin suggests (*Letters*, Vol 31 No 1) that we all need to stop toeing the orthodox line over climate change, discard the 'simplistic nonsense' of the enhanced greenhouse effect theory and instead put global warming down to solar variability. As a research student in the atmospheric physics department of a leading university, I have some awareness of the work of those of my colleagues who are involved in climate modelling. To suggest that the hundreds of climate specialists on the IPCC do not have the collective wit to include possible solar variability in their climate models is to severely underestimate their competence and thoroughness as scientists. They are aware that solar variability may play a role in climate change, but it is not sufficient as a single explanation, and by no means discounts anthropogenic forcing.

Possibly one of the reasons that the enhanced greenhouse effect theory is so

readily dismissed is that, unlike the immediate threat of disease or impoverishment, its effects are not personally experienced (for the time being) by large numbers of people, but only corroborated by the collection and analysis of data on a fairly non-intuitive level. Those that perform this analysis are only human, but their fallibility is minimised by utilisation of the meticulous standards common to all sciences.

Economics, on the other hand, is a discipline based neither on unfailingly systematic laws, nor on the possibility of conformation through repeated experiment, yet it is impossible to imagine a unanimous forum of top economists being repeatedly dismissed. That the enhanced greenhouse effect theory has stood up to both the most well-informed unbiased scrutiny, as well as the most partisan hostile criticism, is testimony to its rigorous foundations.

HELEN JOHNS *Staffordshire, UK*

Martin J Walker replies: Delyth Morgan's letter fails to make clear the inaccuracies which he says he identifies in my article *Your Money and Your Life*. The core of his criticism seems to be that I have misrepresented Breakthrough's role as administrative support for the All Party Parliamentary Group on Breast Cancer (APPGBC).

We are invited to believe that 'administrative support' is a neutral function. In fact groups like Breakthrough with their pharmaceutical and genetic response to cancer research and their industry backing have an ideological perspective which is clearly at odds with those who wish to see greater emphasis on cancer prevention and would, for example, pursue more persistent and punitive regulation of carcinogenic chemical producers.

It is because of this perspective that I say that Breakthrough Breast Cancer controls information on breast cancer to MPs. In fact, Mr Morgan tells us, AstraZeneca's role in supporting the APPGBC is a little more than neutral, entailing the granting of £9,500 over a two-year period. This is the company whose most marketable drug, tamoxifen, has been sold to the NHS for breast cancer treatment.

Mr Morgan seems completely unfazed by his admission that a drug company is funding a parliamentary group, via his charity. An analogy of Breakthrough's role in this would be for the Association of Automobile Retailers to provide administrative support to the All Party Parliamentary Group on Transport, with funding from Ford.

Nearly all information on cancer in this country is controlled by the cancer research charities, which are in turn often controlled by industry money. In the case of breast cancer it would clearly be more democratic if those who gave administrative support to the APPGBC consisted of women's groups, campaigners on chemical carcinogens, holistic cancer therapists, general practitioners, researchers on the qualitative views of patients, as well as orthodox oncologists and independent scientists. If this were the case, I wonder whether AstraZeneca would be so keen to pitch in with its £9,500.

Delyth Morgan says that Breakthrough has never conducted trials with tamoxifen; my article actually says that the Institute of Cancer Research conducted trials.

In choosing to emphasise genetic manipula-

tion as a way of solving the cancer problem, all the cancer research charities are protecting carcinogen-producing industries and diverting attention from one of the primary health problems of modern society: environmental pollution.

NICE AND NASTY

I am compelled to write to rectify the grossly misleading and inflammatory portrayal of the European Union offered by Peter Shore (*Hands up if you voted for Europe*, Vol 31, No 1). Shore maintains that the Treaty of Nice would 'remove most of the remaining obstacles to those determined to achieve the goal of political unification'. Yet the primary obstacle to such a goal is the complete lack of political will for it amongst the member states. Far from 'removing obstacles', the agreement made deepening integration more difficult, and the smaller states and the Commission fought against the Nice deal precisely because it will place control of European decision-making in the hands of a blocking minority comprised of Britain, France and Germany.

Shore's descriptions of the EU policy process are also barely recognisable. Commission officials (who, incidentally number fewer than officials in the UK's Department of Education) only initiate proposals, frequently drafted at the request of member states or as a response to the public agenda. These become law if – and only if – the elected representatives of the governments of Europe agree.

Unlike members of the House of Lords, all members of the Council of Ministers are elected politicians, they are not appointees; turnout for European elections in Britain is uniquely low, but how much of this is due to the trashy europhobia and misinformation peddled by the British media, as well as Shore and his ilk?

Shore rightly argues that international negotiation is needed to tackle problems such as the environment, yet this observation sits uncomfortably with his disdain for EU representation on the world stage. Individual countries – excepting the (federal) USA – are unable to influence the outcome of collective action problems like climate change. As a bloc, however, the differences between group members can be reconciled beforehand, and this common interest can be advocated externally.

Despite its flaws, compared to most of the rest of the world Europe is a bastion of freedom, rights, social welfare, good health, prosperity, and above all, environmental protection. Working together we can strengthen these qualities within Europe and help prevent further social inequalities and environmental destruction as capitalism creeps into countries without such pro-

tection. Not every member of the EU agrees what the mix of priorities should be. The system does tend to neglect the voice of the citizen. But a co-operative politics and informed debate about these issues is a damn sight better than the nationalistic divisions and fractious imperialism which have shaped our recent and bloody past.

MORGAN KILLICK

Researcher, Politics Dept, Sheffield University

PUTTING THE CON INTO CONFERENCE

I've just noticed that climate change conferences are humbug. Is it just me or are there others who've had the wool pulled over their eyes? Politicians for many decades should have been making the polluter pay and have always had the capacity to legislate, without 'international agreement'. Conferences enable them to appear positive and wiggle off the hook of their cowardice and craven immorality in failing to put 'business as usual' in its place. Perhaps we should applaud the Americans' lack of hypocrisy, seen in their relative lack of righteousness.

REGINA CULLEN Cambridge, UK

CALL OF THE WILD

Last night and Saturday, I heard the wild geese go overhead. I wondered with some apprehension why they were travelling north so early, but soon realised they were in fact travelling south! Mid-January? Their normal migration time is October. That means within a few short weeks they will have to turn around and undertake their migration back north. All I can do is fume at the visionless imbeciles who are running environmental matters – particularly our own New Labour government since I know more about them – the bought-and-sold power brokers who court and curtsy to the transnational conglomerates whose rabid appetite is draining the planet.

This theme, I know, is a familiar one with *The Ecologist*, but like many people I

feel the wild geese are something special. They symbolise a lot more beyond themselves, and when they are threatened there is much more at stake for the rest of us.

BARBARA LANGFORD Monsegur, France

A FRESH APPROACH

Gauling behaviour (Vol 30 No 9) hits a rather easy target with Professor Tubiana – a progress maniac in the great Gallic tradition of Le Pétomane, who could fart continuously on stage for two hours. Tubiana's farts glorify the great cancer treatment industry that 'creates wealth', allowing us to buy more engines that fart pollution.

So far so good. But one expects more than an argument on pollutants in an article on cancer prevention. In the old steam age, soot and engine oil were ubiquitous as occupational carcinogens, but there was much less cancer. The coal smogs caused lethal bronchitis rather than cancer – I saw that bronchitis killing people a mere 40 years ago. Surely modern pollutants are rather to be attacked for their multifarious effects on humans and ecosystems.

But the major component of cancer may have an ecological dimension too. TB peaked in the 1830s but ran on for decades, taking out susceptible people often before procreation, thus altering the genetic balance of society. This sharply reinforced TB's decline before modern drugs, and the fall in TB coincides with the rise in cancer and heart attacks. Could it be that the appalling centuries-long European TB epidemic closed off some options for the human race, and that we have lost an important aspect of genetic variability during the long industrial and urban build-up?

I mention all this to show how desperately complex the causes of cancer may be. We need a project to find out more about cancer, staffed by people with open minds and no axes to grind. Difficult to find such people, but worth trying.

ROBIN OAKLEY-HILL Sevenoaks, UK

JUST A QUICK WORD...

CLONE DANGER

I think I first heard about the idea of cloning endangered animals in *New Scientist* magazine. When I first heard about this, I was thrilled. Now I've read your article (*Bessie and the gaur*, Vol 30 No 9). I never realised that by cloning endangered animals, that we will most likely continue being destructive. This is very logical. This placed a whole new outlook on cloning. What a horrible thought.

PAUL DALE ROBERTS California, US

MATERNAL FEELINGS

The already gross overpopulation of the planet is hardly likely to be lessened with New Labour's current proposals for a huge increase in maternity benefit. Since we pay farmers to set aside part of their land in order to lower production would it not be more sensible to phase out maternity benefit altogether and reward the childless?

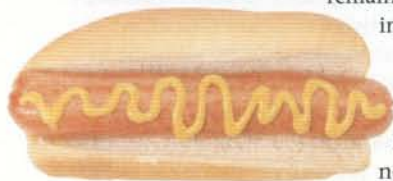
TONY HILLS Devon, UK



BSE GOES FULL CIRCLE

Thanks to dodgy exports, Mad Cow Disease is going global.

In July 1988, Britain banned the feeding of cattle with meal containing the ground-up remains of cows, in order to halt the spread of BSE.



For the next eight years, however, British feed makers legally continued to export tons of potentially infected meat and bone meal made from pulverised cattle parts. As 'mad cow' worries sharply reduced demand for this feed supplement within the EU and prices fell by over half, UK companies increased their exports beyond the EU; primarily to Asia, but also to Eastern Europe and Africa.

Naturally, feed exporters deny that they were dumping the meal. 'It's trade. We don't hold a gun to their head,' says Robert Peck, director of David T Boyd, a London feed merchant. The effects of such attitudes, however, are worse than bullets. It is no coincidence that even the UN Food and Agriculture Organisation (FAO) has strongly warned four regions of a significant Mad Cow risk – they include all three mentioned above, plus India.

As BSE is going global, it is also likely to be going 'full circle'. Consider this example: the spread of BSE all over Europe has prompted Rollover, Britain's largest hot dog producer and distributor, which imports about 20 million pounds of sausage a year, to shift its import source from Germany...

to Korea! Think that one over.



CHLOE KENNEDY/ART 2000

LOOK INTO MY (GLOWING) EYES

Brace yourself for the latest vital scientific breakthrough.

Forget about coloured contact lenses to suit a favourite outfit – they're out of fashion. But there is hope, for the famous glowing jellyfish gene has leapt from the test tube and is tickling entrepreneurs' imaginations – and there is no end to those.

It all started back in 1994, when Professor Martin Chalfie from Columbia University inserted the fluorescence gene of a jellyfish into his favourite creepy-crawly – the *Caenorhabditis elegans*. There were glowing results: the worm's nerve cells shone bright green. Today, things glow that were never intended to do so: cancer cells, zebra fish [see last issue], potatoes, mice, cute bunnies and even a monkey named ANDi. Scientists hope that the fluorescence gene will shed new light – in more than just the true sense of the word – as an aid in cleaning polluted

waters, discovering how food poisoning spreads, and perhaps even creating Christmas trees that light up on their own.

It's not a joke. In a competition sponsored by the British Biotechnology and Biological Research Council last year, a team of post-graduate students proposed the creation of a Christmas tree that lit up on its own. They described how to genetically modify a Douglas Fir, and even included a business plan for a company to produce and market the glowing tree.

Scientific creativity knows no bounds, it seems. The latest news is that, with the help of that jellyfish gene, scientists have produced a frog whose eyes glow in the dark. Might come in handy for those frogs who want to cross the road at night. And come to that, if a frog can have glowing eyes, why can't we? Considering that it all started with a tiny worm, the future is looking bright.



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

'I say things because I believe them'

D'OHBYA!

'Redefining the role of the United States from enablers to keep the peace to enablers to keep the peace from peacekeepers is going to be an assignment.'

Interview in the New York Times, January 14

'I'm hopeful. I know there is a lot of ambition in Washington, obviously. But I hope the ambitious realise that they are more likely to succeed with success as opposed to failure.'

Interview with Associated Press, January 18

'I do remain confident in Linda [Chavez]. She'll make a fine labour secretary. From what I've read in the press accounts, she's perfectly qualified.'

Austin, Texas, January 8

DONATIONS AND REPRESENTATION

He who pays the piper gets the new racetrack – on prime countryside.

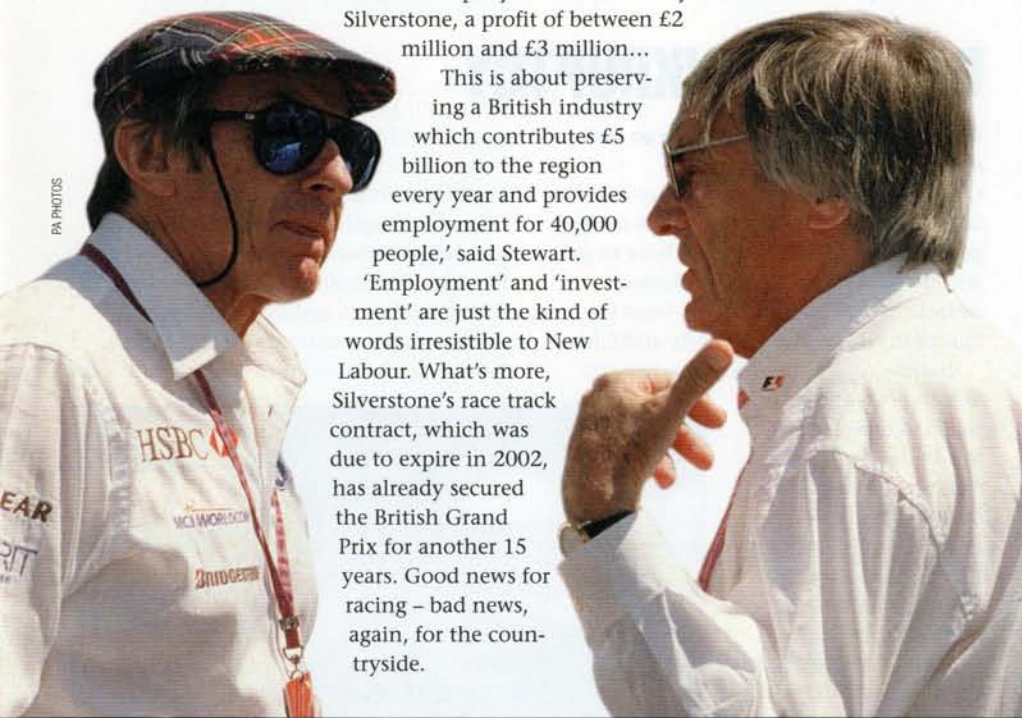
Since big donations to Britain's political parties have become the norm, maybe it's time to consider some of the consequences. Here's a possible precedent: an article in the *Northampton Chronicle* might just explain why Bernie Ecclestone, (below, right), gave that hefty donation to Labour's last election campaign.

According to the paper, racing legend and British Racing Drivers' Club president Jackie Stewart, (below, left), held top-level talks with both Tony Blair and Sports Minister Kate Hoey to secure half of the multi-million pound bill for a radical overhaul of Silverstone race track. Proposals included a new pit lane, a paddock complex and car parks. Work on the A43 bypass to improve access started in January, all to the detriment of prime, open countryside.

According to Whitehall insiders, Stewart will probably get as much as £25 million, with some National Lottery money thrown in as well. The £45 million which Stewart is looking for would match funding already put together from private sources. The BRDC is investing £15 million and a further £15 million has been put in by FOM, Bernie Ecclestone's company, together with yet another £15 million from Octagon, a sports marketing and entertainment company.

'Ecclestone's company will make money from Silverstone, a profit of between £2 million and £3 million...

This is about preserving a British industry which contributes £5 billion to the region every year and provides employment for 40,000 people,' said Stewart. 'Employment' and 'investment' are just the kind of words irresistible to New Labour. What's more, Silverstone's race track contract, which was due to expire in 2002, has already secured the British Grand Prix for another 15 years. Good news for racing – bad news, again, for the countryside.



FREE SEX CHANGE? MOVE TO IDAHO

The Columbia river is so polluted, its fish are changing sex.

Here's a thought for any men trapped in women's bodies: move to the Columbia River and take a daily bath in its potent waters.

Here's the story: zoologist James Nagler from the University of Idaho went fishing. Being a zoologist, he decided to take a closer look at his catch. Guess what he found: 84 per cent of the now obviously female salmon had been male at birth. The fish could lay eggs and looked like 'real female' salmon. They had

however, a trait that only males have; they had one X and one Y chromosome. Nagler believes that this might be one of the reasons why the salmon stocks in the Columbia River are dwindling so fast.

Although the Columbia river flows through the pollution range of the Hanford Nuclear reactor, Nagler thinks that the likely cause for the sex change lies in the substantial rise in water temperature which in turn is caused by the dams along the river.

At any rate, an 84 per cent success rate has to be worth a try.

NOTES & QUOTES

'The scientific consensus presented in this comprehensive report on human-induced climate change should sound alarm bells in every national capital and in every local community.'

Klaus Toepfer, head of UNEP, on the new IPCC Report

'Let us be clear; if you are going to have a single market, you have got to have a single market in energy as well. I think the pressure for liberalisation is growing.'

UK chancellor, Gordon Brown

'They are the sort of problems you would expect when everybody finally has to face the truth and confront the dramatic changes in behaviour that will be required across society and government. No country in the world can escape.'

Michael Meacher, UK environment minister, on the breakdown of the climate talks in The Hague

'We have to produce what is healthy, not just what can be sold. The BSE crisis has made it compellingly clear... it's high time that we changed the course of agriculture. We want food safety through appropriate farming methods that are good for the environment.'

German chancellor, Gerhard Schröder

'By understanding rice we have a virtual genome map for all the others.'

Steven Briggs, head of Syngenta, on their new map of the DNA sequence of rice

'If we don't implement drastic measures now there will be no fish left next year.'

Georg Kreuzhuber on the EU cod fishing ban

'Once you start attempting genetic engineering in monkeys, humans can't be far behind.'

Professor Lori B Andrews of the Chicago-Kent College, who studies new reproductive technologies

'Globalisation must go beyond commercial relationships to embrace strengthened political and civil-society ties between diverse nations if we are to avoid a shared catastrophe.'

State of the World 2001

continued on page 11

FREE TRADERS TARGET ASIA

Traders and corporations want a new trade deal between the US and Asia.

Several major trading partners of the United States in Asia and the Pacific are pushing the new Bush administration to build an expanding network of 'free' trade agreements in the region. Australia, Singapore and Japan all intend to negotiate bilateral deals in the 'fast track' manner of opening markets to 'restore stability' in their region which has recently suffered a serious loss of investor confidence.

Australian and Asian officials report that members of the new Bush team have signalled interest in negotiating with like-

minded trading partners to liberalise goods, services, trade and investment. In mid-January, Robert Zoellick, the US trade representative, said that negotiations of bilateral and regional free trade agreements should proceed hand in hand with efforts to move ahead with stalled negotiations on a wide-ranging new round of global trade talks. During the presidential campaign, Zoellick said that the Republican administration 'should



propose free-trade agreements with either individual countries or regional groups' so that the United States can 'link up Latin America and the Asia-Pacific region'. According to Mark Vaile, Australian trade minister '... there's a big attraction in this for Australia because we can't afford to sit still on the trade front. So if we could crack the US market and negotiate the wind-back of tariffs and agricultural support, it would put pressure on the European Union to do the same.'

'It requires no great logical leap to link Pacific free-trade agreements with NAFTA to create a trade bloc of quite imposing weight', said John Edwards, chief Australian economist at the HSBC Sydney. 'Chances for a Pacific free-trade agreement are brighter today than for many years.'

830 MILLION ARE HUNGRY

A new UN report has documented the true extent of global hunger.

A recent report published by the UN World Food Programme claims that hunger now afflicts 830 million people and that the main causes are 'natural' disasters, grinding poverty and armed conflicts that consign the poor to chronic malnutrition.

Those considered 'undernourished' by the report subsist on 1800 calories a day or less. Although the data collected covers the period 1995-97, officials said that their research showed the scope of the problem had not improved and in some cases was getting worse.

Of the 830 million undernourished people, 791 million live in 'developing' countries, and 200 million are children under the age of five who are underweight due to lack of food. In more than 20 countries, hunger was caused by drought, which affected 100 million people last year alone. In sub-Saharan Africa, 180 million people – the equivalent of one third of the population – are undernourished. In Asia, the number is 525 million. In Latin America and the Caribbean, 53 million people lack enough food. In Eastern Europe and the former Soviet Union, the transition from communism to a free market economy has caused suffering for people who cannot afford to eat properly. 'Unfortunately we see a potential for that to continue or even increase in 2001,' said Catherine Bertini, the agency's executive secretary.

BANANA BANKRUPTCY

Chiquita bananas says it is about to go bankrupt. Hmmm...

Chiquita Brands International, the world's largest producer of bananas, says it cannot pay its debts and will probably have to go into bankruptcy because the Clinton administration was not able to force the European Union to trade 'freely and fairly'.

Surprisingly, the corporation was still able to find funds to sue the EU Commission for the \$519m in damages it claims to have suffered during the past two years. Chiquita contends that European quotas against bananas grown in Latin America, as Chiquita's are, have cost the company \$200m a year. Europe has been a crucially important market for Chiquita for years, and before the import restrictions were put in place in 1992, the company said Europe accounted for half of its sales. Fortunately though, for Chiquita, governments tend to be sympathetic to its plight. When the EU imposed their barriers on bananas, Chiquita sought help in Washington, and people there listened. Over the last year, Carl Linder, the company's CEO,

contributed \$550,000 to the Republican Party and at least \$270,000 to the Democrats. When European ministers offered to drop the colonial preferences, and assign import quotas, Chiquita rejected the deal. The company has been struggling with a weak euro and over-ambitious expansion plans and maybe, just maybe, Europe can be brought to pay that bill.



NOAH'S ARK REVISITED

The cloning of extinct species is continuing apace.

Once upon a time – last year, actually – a mountain goat named Celia was wandering through the Pyrenees. Then a tree fell and crushed her to death. Gone was yet another species, for Celia was the last remaining bucardo; a goat known for its

extravagant horns. Hunting, habitat destruction and landslides were the main causes which drove these beautiful creatures to extinction. But now, US and Spanish researchers are preparing to create a new Celia by cloning one of her cells and implanting the cloned embryo in the womb of a common ibex. Advanced Cell Technology of Worcester, Mass., has already cloned an endangered animal: the gaur, a humpback relative of the cow from Southeast Asia. Noah the



BBC/MA

cloned gaur was born healthy to an Iowa farm cow in mid-January, only to die two days later from a bacterial infection.

Was Noah's death fate, divine intervention or scientific miscalculation? Oliver Ryder, a geneticist at San Diego Zoo, points out that Noah was reproduced from a gaur bull that had never mated. So all eyes and hopes now rest on Celia; whether she ever mated or not should become evident shortly after her birth – unless, of course, God dares to intervene.

NOTES & QUOTES₂

'Liberalising trade in the face of opposition from special interest groups isn't easy. For some people in rich economies, the transition cost can be high. But governments have the means and obligation to help adversely affected groups to adjust to such difficult changes.'
Nicholas Stern, chief economist and senior vice president of the World Bank

'The work we do at the World Economic Forum may not have the romantic allure of a street demonstration, but it does, in concrete ways, make the world a better place in which to live. So yes, there will be a moral high ground in Davos... But not in the streets.'

Klaus Schwab, founder and president, and Claude Smadja, managing director, of the World Economic Forum in Davos

'There is a sense of denial here.'
Professor Jagdish Bhagwati on the World Economic Forum in Davos

'Scientists are perverting science, and society is simply sitting back and allowing them to do as they please.'
Dr Andre Menache, Doctors and Lawyers for Responsible Medicine

'The 200 richest people in the world have more assets than the 2 billion poorest – and, according to the World Bank, the ranks of the most impoverished people have increased by 200 million since 1987... While foreign investment has increased seven-fold in the last two years, 70 per cent of it is going from one rich country to another, with another 20 per cent going to just eight developing countries more likely to be dictatorships than democracies. The remaining sliver of investment is being divided among 100 nations, many of them the poorest.'

John J Sweeney, president of the AFL-CIO the largest US federation of workers

A recent survey by Entec revealed that 45 per cent of directors and chief executives of major businesses across the UK had not heard of sustainable development.

According to the Union of Concerned Scientists antibiotics used non-therapeutically in American livestock have increased to 11.2 million kilograms per year; as much as 50 per cent higher than it was in 1985.

JUNK LIFE

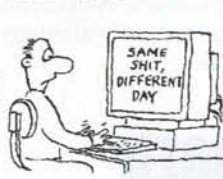
JUNK FOOD...



JUNK T.V...



JUNK JOB...



JUNK LITERATURE...



JUNK MUSIC...



JUNK NEWS...



JUNK TRANSPORT



QUALITY FUNERAL.



STAN AT EASE by Stan Eales



A FAREWELL TO FORESTS?

A new study shows how quickly Europe's forests are vanishing.

According to the Worldwide Fund for Nature (WWF), some 64 acres of the world's forests – roughly the size of 37 football pitches – are lost every minute because of logging, land clearance and forest fires. In Europe alone, less than 2 per cent of forests are left in their original state and there aren't any open areas large enough to support a complete ecosystem.

Trees are being planted, it's true, but they are mostly empty rows of conifers rather than the woodlands that would have existed in a more natural state, with their diversity of flora and fauna. According to the United Nations Environment Programme, one-fifth of Spain's land is already so degraded that it is turning to desert, and the WWF says that almost 85 per cent of Mediterranean forests have been lost. As a result of deforestation, much of Europe's soil is being degraded at an unprecedented rate, and swathes of agricultural land have become fruitless without the addition of massive amounts of fertilisers.

In return, the removal of tree cover diminishes the soil's ability to store and regulate water supply and experts agree that recent massive floods are a direct result of deforestation. Britain for example, which recently experienced the worst flooding in 300 years, has one of Europe's worst records in maintaining tree cover.

EU forestry policy is heavily industry-related, but the industry has not even been able to agree on a single set of standards to assure the public that forests are being properly maintained for long-term sustainability.

Although the European Commission claims that with the insatiable and growing demand for timber and pulp, Europe's tree cover is actually increasing, environmentalists argue that fast-growing fir and eucalyptus plantations are not an adequate substitute for real forests. 'Unfortunately, the economic cycle thinks only in shareholder periods, while the forest obeys some very different cycles,' observes Christoph Thies, who monitors forests for Greenpeace.

INDIA GETS SHORT-CHANGED

Britain has promised more aid to India if it globalises faster.

Visiting India in mid-January, Blair babe Clare Short, everybody's favourite international development secretary, offered to step up 'development aid' if the South Asian nation in return raises living standards by increasing its reliance on globalisation.

The offer is to nearly triple government assistance to India to \$500m annually by 2004 if India makes progress on 'poverty reduction through globalisation'. India, Short urged, need not be defensive in taking forward the globalisation agenda, since 'a WTO which proceeds by consensus cannot ignore the interests of developing countries who form the majority of its

membership'. WTO director general Mike Moore made a similar appeal, saying 'The whole world recognises India's unique position economically and politically. We need your advice, leadership and enthusiasm if we are to advance on all fronts and achieve the sort of progress needed in this new year'.

Moore and Short both pressed for India's support for a new round of WTO negotiations, arguing that this would free up trade in the information technology (IT) sector in which the country has a big stake. 'Throw in the prospect of freer trade in agriculture and cuts in industrial tariffs and the case [for a new round of negotiations] becomes all the more compelling [for India],' said Moore.

NEWS IN BRIEF

WTO ANNOUNCES NEXT MEETING

Wire news services announced in late January that the next WTO Ministerial has been set for 5-9 November at Doha, Qatar. During an 'informal session', the WTO General Council approved Qatar unanimously. 'The WTO can't avoid public protests by holding a meeting in a country that doesn't allow public protest. That would send the signal that it's okay to build the global economy on a foundation of repression,' said Kenneth Roth, executive director of Human Rights Watch.

SEE NOT, HEAR NOT, SMELL NOT

Octagon Energy and Alkane Energy, two specialists in extracting gas from abandoned mines, have submitted evidence that the UK government has 'grossly underestimated' the impact of methane emissions on the environment and affected communities. Their checks showed that at least 300,000 tonnes of methane were escaping from disused mines every year. The official government report on that subject says that net methane flow would be 'negligible' a few years after shut-down. According to Octagon, coal mine methane alone was contributing up to 10 per cent of the UK's total greenhouse emissions.

BUSH TO PUSH ARCTIC DRILLING

President Bush intends to move swiftly to implement his new 'national energy policy', which will open the Arctic National Wildlife Refuge to oil and natural gas drilling. 'We'll push ahead to develop 8 per cent of the Arctic National Wildlife Refuge,' said Ari Fleischer, White House spokesperson, referring to the 1.5m-acre coastal plain between Alaska and Yukon. The drilling is fiercely opposed by environmentalists, and David Anderson, Canada's minister for the environment, has also expressed his opposition. However, Canada will be reluctant to jeopardise its relationship with the new administration over this matter. Email President Bush on www.savearcticrefuge.org urging him not to open the refuge to oil and gas drilling.

THE BNFL ROADSHOW

Two BNFL ships carrying Mox fuel produced by Belgo-Nucléaire are expected to arrive in Japan in mid-March. New Zealand ministers have lodged formal protests with the Japanese, French and UK

governments. Both ships are carrying security forces from the UK Atomic Energy Authority Constabulary, a specially trained anti-terrorist force set up to protect nuclear material in the UK. Following the falsification of quality data by BNFL and the (in-)consequent moratorium imposed last year, this is the first shipment to Japan. For the first time in two years, BNFL has also been granted a licence by German authorities to import spent nuclear fuel into the UK.

CLONE AWAY

Professor Severino Antinori, an Italian pioneer of *in vitro* fertilisation (IVF) plans to clone the first human being in an attempt to give sterile men whose wives don't want artificial insemination by a stranger's sperm a chance to have babies. The doctor and his team will carry out the first operation toward the end of this year in an unnamed Mediterranean country, where authorities have already given their consent to proceed.

GMOS IN RUSSIA

Environmental organisations have revealed that field trials for GM crops are taking place throughout Russia, and that GM foods are being approved for human consumption in the absence of any procedures. At least 18 notifications for deliberate release of GMOs, including field trials and processing, have been granted. Monsanto leads with 8 notifi-

cations for deliberate release of potatoes resistant to the Colorado beetle, currently tested in 18 regions of Russia. Meanwhile, a study undertaken by the Max-Planck Institute has revealed that the planting of genetically modified potatoes results in changes to the bacterial communities in the soil. The long term consequences of these changes in soil bacterial communities and their implications for biodiversity have so far, as the Russian example exemplifies, been left undealt with.

UPDATE: STARLINK IN JAPAN

The Japanese Health and Welfare Ministry has confirmed that genetically modified 'StarLink' corn, banned for human and animal consumption in Japan, has been mixed with corn used for brewing beer and making processed food. Officials estimate that around 28,000 tonnes of the 38,000 tonnes of corn imported from the US were blended with StarLink. Meanwhile, Aventis Crop Science, the creator of StarLink, has agreed to pay compensation to US farmers and grain elevators for the expenses they incurred when the corn wound up in the food chain. Estimates of the cost to the company range from \$100 million to \$1 billion.

UPDATE: THE POLITICS OF AIDS

Glaxo SmithKline plc, and more than 40 other drug companies, are suing the South African government, seeking to stop the uncontrolled

import or manufacture of cut-price versions of patented AIDS drugs (*The Ecologist*, Vol 31 No 1).

UPDATE: ARCTIC CLEANUP

Chris Patten, the EU's commissioner for external relations, has called for a cleanup of the around 300 nuclear reactors – about 20 per cent of the world's total – and thousands of nuclear fuel rods dumped in the Russian Arctic (*The Ecologist*, Vol 30 Nos 7&9). The risk of large scale radioactive contamination from the reactors of abandoned submarines are an immediate danger to Russians and Europeans alike, and Patten warned that 'the lack of adequate storage or disposal facilities for spent fuel and radioactive waste from the reactors of nuclear vessels is a sword of Damocles hanging over all our futures'.

UPDATE: SHUT UP AND EAT

Customers have started to shun McDonald's, the largest buyer of agricultural commodities in Europe, amid fears that its burgers might be infected with BSE. The fast food company blamed the European BSE crisis for a 10 per cent decline in regional sales and a first drop of profits for more than two years. Quarterly profits fell by \$34m to \$45.2m in the last three months of the year. McDonald's has been particularly badly hit in France, Germany, Spain and Italy. Italy's first reported case of suspected mad cow disease was reported at a slaughterhouse owned by the Cremonini company, the exclusive meat supplier to McDonald's in Italy. Over in the US, the picture is equally grim. Merrill Lynch and Salomon Smith Barney cut their earnings forecast for the stock, citing concern over the company's international business. As a result of pressure from Greenpeace, McDonald's has announced that, from April 2001, all its restaurants in the UK, Sweden, Germany and Denmark will serve only chicken raised on GM-free feed.

SODA POPS ALL ROUND

The European Union and the World Bank's Multilateral Investment Guarantee Agency (MIGA) have announced collaboration to provide a \$23.3 million guarantee for an investment by Coca-Cola Beverages. Forming part of a partnership to promote foreign investment in Bosnia and Herzegovina, the five-year guarantee insures investors against expropriation, war, civil disturbance and risks of currency transfer restriction. According to the Bretton Woods Update, the project is supposed to rehabilitate and modernise the industry and give a positive signal to other multinational companies.



RAS-PUTIN GETS BOLDER

A bill sent by Russian president Putin to the Duma, the lower house of the Russian parliament, during the Christmas recess may well shake-up Russia's democracy. It proposes allowing only parties with 10,000 members to compete in national and regional elections. In addition, registered parties would have to maintain branches of at least 100 members in at least 45 of the country's 89 regions. During the last elections in December 1999, 26 parties and alliances contested and all but a handful are now likely to disappear.



CAMPAIGNS

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

ECUADOR CLOUDS OVER THE FORESTS



Conservationists have long been concerned about the ongoing destruction of Ecuador's unique forest habitats. Now, a multinational consortium is proposing to build an oil pipeline through an area of supposedly protected prime forest habitat.

As ever, it's all about economics. Both the World Bank and the IMF have been heavily involved in the 'dollarisation' of Ecuador's ailing economy, forcing the government to accept a number of drastic measures in

return. The consequences for the forests could be disastrous.

Oil exports account for 40 per cent of the government's income, and in Ecuador, oil and minerals belong to the government, not to land owners. The government can therefore issue concessions to whomever they choose. And the World Bank/IMF nexus has, naturally, been pushing for an expansion of the country's mineral and oil production.

As a result, a consortium of multinational companies led by Occidental Petroleum, Alberta

Energy and Chase Manhattan Bank is proposing to build an oil pipeline through pristine cloud forests in the Mindo valley of northwestern Ecuador. The project would destroy a habitat of incredible beauty that is home to over 450 species of birds, as well as a host of endangered plants and animals, including the endangered Spectacled Bear and the endemic and critically endan-



gered Black-breasted Puffleg hummingbird.

The government has already approved two of the proposed routes to pump heavy crude oil from the Amazon to Ecuador's Pacific coast. The northern route, which is the more costly of the two, is estimated to cost \$594 million, and will carry up to 350,000 barrels of crude oil a day. But the area through which the pipeline will go is a ticking time bomb. The proposed route traverses steep, forested ridges in an area of frequent earthquakes. Volcanic activity occurred there only two years ago when the Volcano Pichincha above the Mindo valley erupted.

Local Landowners, over a hundred NGOs and other environmentalists and professionals have formed a committee to fight the northern route. The Ecuadorian Congress carried out impeachment hearings against Energy Minister Pablo Teran on charges of corruption related to his approval of the consortium proposal. He was acquitted by the majority who voted to support the pipeline construction 'no matter what the consequences'.

MAKE A DIFFERENCE

Campaigners in Ecuador believe that international pressure is now the only way to save their forests. Write to the multinational companies demanding that they stop this illegal and destructive plan. Visit www.theecologist.org for a sample letter, or fax Stephanie on +44 (0)207 351 3617 for more details.

INDIA IT'S ALL MINE

In December, during a meeting of villagers opposed to the development of a bauxite mine and aluminium plant in the Kashipur region of Orissa, armed police stormed in and opened fire. Three innocent people were killed.

This is what you get for opposing this vast project, at the forefront of which is the corporation Utkal Alumina, owned by Canada's Alcan and its subsidiary Indal. Norsk Hydro is the other partner. A decision to go ahead with the project is likely to be made in mid-2001. It is estimated that the Utkal project will require 1,750 hectares of land for mining and an additional stretch of land for conveyor and corridor maintenance. The ore will be mined from plateau tops in the Baphimali Hills and transported 20km to the refinery at Doraguda.

The environmental impact will be vast.

Hills will be razed to the ground and the heavy rains will sweep the silt into a huge reservoir that provides water for the drought-prone region. Even the engineer in charge of the irrigation project has warned of the impact of mining on the reservoir. Millions of tons of solid effluents such as 'red mud' from bauxite processing will be stored in tailing ponds. What's more, the mine will be 'open cast', leaving a gaping pit.

As a result the Proja and Kondha tribal people will lose their livelihoods. Three villages will be completely destroyed, and over 100 will be irreparably damaged. And because most of the land is not officially registered, the peoples' ownership rights are rarely recorded. The government insists that the land transfer has been made to the company and that the people will have to move. Utkal Alumina insists that it has title to the tribal lands.

The people say otherwise. They have organised an anti-mining movement calling for the cancellation of the Memorandum of Understanding (MOU) of the government with Utkal Alumina and for the withdrawal of the police force from Kashipur.

MAKE A DIFFERENCE

Please write expressing your support for the peoples' demands to: The Chief Minister and the Governor of Orissa; both at fax: +91 674404695; Jacques Bougie, President & CEO, Alcan Ltd. Fax: +1 5148488115; John Manley, Minister for Foreign Affairs, Canada. Fax: +1 6139951534; Egil Myklebust, President & CEO, Norsk Hydro. Fax: +47 22532725. Please copy your letters to MiningWatch, Canada. Fax: +1 6135695138

UK LAST ORDERS

'When you have lost your inns,' wrote Hilaire Belloc, over 60 years ago, 'you will have lost the last of England.' It's probably a good job he's not around today as the British local pub, an essential part of the nation's character and landscape, is under threat as never before from vast brewing conglomerates, identikit chain pubs and that old chestnut – market pressure.

Of the country's 65,000 pubs, 6,750 have been put on the market by major breweries. Most of them are situated in rural areas, where they are a vital part of community life. A recent survey showed that 81 per cent of adults agree that a rural pub is as important to a rural community as a shop or post office. But between January 1999 and January 2000 alone, up to 20 pubs were closing every month – and the future is looking grim.

Up to 20 per cent of Britain's pubs face being sold, as big breweries concentrate on slick city bars, faceless theme pubs and hotels. It is likely that many rural pubs will be bought by large corporations, then sold on for development or turned into trendy bars. Whitbread has announced the sale of 3,000 pubs for £1.5bn, Bass aims to get about £1bn for the sale of about a third of its 3,000 pubs, Scottish & Newcastle is ditching almost half of its 2,315 pubs, and Wolverhampton & Dudley are expected to sell almost 1,750 of theirs. Bass, for example, intends to focus on theme-bars like 'Harvester', 'All Bar One' and 'O'Neill's'.

There has been a dramatic decline in the number of pubs owned by regional brewers. In 1979, brewers owned 49,000 pubs; by 1999 the number was down to 20,400. For various reasons, sales in pubs have slumped to a 20-year low and alcohol bought back from across the channel now accounts for about a fifth of beer consumption. Whilst uniform theme bars are quickly coming to dominate every high street, people in the country might well find that, soon, there is nothing on offer.

MAKE A DIFFERENCE

Write to Hilary Armstrong MP (House of Commons, London SW1A 0AA, hilary-armstrong@detr.gsi.gov.uk) the minister for local government. Urge her to extend mandatory rate relief to village and rural pubs on the same basis as village post offices and stores. Stress the importance of village pubs as a community amenity. Please copy your letter to your local MP and to the Campaign For Real Ale (CAMRA), 230 Hatfield Rd, St Albans, AL1 4LW, fax: +44 (0)1727867670

CAMPAIGNS DIARY

1-9 March 2001

Kathmandu, Nepal.

Solar Sister Programme

A seminar aiming to improve women's situations by introducing affordable solar lighting systems to communities; incl a two-day installation training workshop. Visit www.hlf.org.np or call +977 1418203

4 March 2001

Switzerland.

Swiss Referendum following the 'Yes for Europe' initiative

5-16 March 2001

New York, NY, USA.

Inter-Sessional Meetings for DCS 2001: 9th session of the Commission on Sustainable Development

Session scheduled for 16-27 April on atmosphere, energy, transport etc. Visit www.un.org/esa/sustdev/ or call +1 2129638811

5-18 March 2001

UK.

Fairtrade Fortnight

Annual national campaign to promote a better deal for third world producers. Contact the Fair Trade Foundation on +44 (0)2074055942 or visit www.fairtrade.org.uk

6-8 March 2001

Washington DC, USA.

Hydrogen – The Common Thread

12th Annual US Hydrogen meeting of the National Hydrogen association. Call +1 2022235547 or visit www.hydrogenus.com

7-9 March 2001

Katowice, Poland.

Interco 2001

XIIth International Fair of Ecology. Call Aleksandra Poleswka on +48 327999304

12-13 March 2001

Noordwijkerhout, the Netherlands.

2nd International Conference on recovery of phosphates from sewage and animal waste.

Call +31355262020 or email groenhof@groenhofpromotions.nl

13 March 2001

Global.

World Day of Action against Seal Hunting

Email caft@caft.demon.co.uk or visit www.caft.org.uk for further information.

14 March 2001

Global.

International Day of Action against Dams and for Rivers, Water & Life

Visit www.irn.org or call +1 5108481155 and find out what you can do

15-17 March 2001

Maharshi Dayanand University, Rohtak, India.

Indian Ayurveda Congress 2001

Visit www.worldofayurveda.net

16-17 March 2001

Canberra, Australia.

Conference on China and the WTO

Visit www.wtowatch.org or www.wto.org

18 March 2001

London, UK.

March for liberty and livelihood

Annual march organised by the Countryside Alliance. Visit www.march-info.org or call a 24h hotline 09067881680

20 March 2001

Sofitel Hotel, Brugge, Belgium.

Nutritional Solutions for the changing needs of modern animal production

Contact Kemin Europa NV on +32 14286200 or email judith.eens@kemin.be

20 March 2001

London, UK.

The Human Genome Project: Will it discover what makes us human?

A talk on the worldview behind this subject as well as ethics of the new techno-eugenics. With David Heaf, UK co-ordinator of the International Forum for Genetic Research. Contact the Rudolf Steiner House on +44 (0) 207723440

22 March 2001

Global.

World Water Day – Water & Health

Visit www.worldwaterday.org

22 March – 1 April 2001

London Zoo, London, GB.

Primart – an exhibition investigating the world of primates through art

Call the International Primate Protection League on +44 (0)207 8330661 or visit www.ippl-uk.org

23-25 March 2001

Market Hall, Chesterfield, GB.

Green Party – Spring Conference

Call Joe Otten on +44 (0)1142660923 or email joe.otten@virgin.net

24-25 March 2000

Centro Sociale Leoncavallo, Milan, Italy.

European Meeting of People's Global Action

Visit www.yabasta.it or tel. +39026705185 & fax +39026705621

26-28 March 2001

Leeds, UK.

Wilderness Britain

A three-day conference on society, policy and the environment. Contact Steve Carver at the University of Leeds on +44 (0) 1132333318.

Help protect Britain's wildlife

LEAGUE
AGAINST CRUEL SPORTS



CAMPAIGNING
FOR WILDLIFE

www.league.uk.com

Since 1924, the League Against Cruel Sports has campaigned peacefully for legislation to protect wildlife and abolish cruel sports.

The League also provides practical help through its network of Wildlife Sanctuaries which will give wild animals a safe haven for many years to come.

Every year in Britain, thousands of wild animals are chased to exhaustion and then savagely killed ... *for fun!*

We believe all bloodsports are indefensible in modern Britain.

- Hunting with hounds is an extremely inefficient means of controlling foxes, mink and deer populations
- Foxes can sustain appalling injuries as they are savagely killed by dogs
- The hare population has declined dramatically, partly as a result of hunting pressure
- Hunting with dogs can push deer to an unacceptable level of suffering

With your support, the League is determined to gain legal protection for our wildlife and make this the last year of hunting in Britain.

In January of this year, an overwhelming majority of MPs voted in favour of a law to abolish hunting with dogs. This makes real protection for our wildlife closer than ever before. But, there are many obstacles to be overcome before we can claim victory and we are totally reliant upon supporters for our funding.

Your help is vital in providing us with the means to continue our work.

If, like the vast majority of British people you believe wild animals should be protected against being hounded to death for sport ...

Don't just sympathise - SUPPORT US!

RETURN THIS FORM TO: LEAGUE AGAINST CRUEL SPORTS, 83 - 87 UNION STREET, LONDON SE1 1SG

- ☐ **Yes, I want to support the League Against Cruel Sports' campaigning and conservation work**
- ☐ I would like to apply for membership of the League Against Cruel Sports. Please send me further information
- ☐ I would like to leave a legacy to the League Against Cruel Sports. Please send me further information
- ☐ I would like to set up a Bankers Standing Order to make regular donations to the League. Please send me further information
- ☐ Please accept my donation of (please tick) £10 ☐ £15 ☐ £25 ☐ Other: £ ☐
- ☐ Please accept my cheque for the above amount, made payable to **The League Against Cruel Sports**
- ☐ Please debit my VISA/Mastercard for the above amount. Card no.: exp. date:
- Issue no.: (switch) Cardholder's name: Signature:

(Mr/Mrs/Ms/Miss)* First name: Surname:

Address:

Postcode: Telephone: e-mail:

- ☐ Please tick only if you would like acknowledgment of your donation
- ☐ We would like to send you further information on our campaigning and conservation work. If you would prefer not to receive this, please tick here

League Against Cruel Sports. Company no. 2880406 Registered at 83/87 Union Street, London SE1 1SG

World-Wise Web: The five best websites

**www.gatt.org and
www.theyesmen.org/wto**

gatt.org is the spoof site of the Yes Men, an anti-free-trade group. Read what happened when organisers of a legal seminar on international trade sent an invite, thinking that this was the official WTO site!

www.promarinternational.com

Sample pages of Promar International's hot report on the true cost and effect of the StarLink GM corn fall-out for the food industry. 'The hope of the industry is that over time the market is so flooded that there's nothing you can do about it. You sort of surrender.!!'

www.edelman.com

A survey commissioned by Edelman Public Relations revealing, amongst other things, that NGO's are trusted nearly twice as much as government, media or corporations. NGO's such as Amnesty International and Greenpeace have greater credibility than corporations such as Monsanto, Nike or Esso/Exxon...

www.motherjones.com/news_wire/soda.html

Research is showing that soft drinks are even worse for kids' health than previously thought. Why, then, are a growing number of schools signing exclusive deals with drinks companies? Find out.

www.adcritic.com/content/john-west-red-salmon-bear-fight.html

It may only be an ad for John West salmon, but it's one of the funniest portrayals of man versus nature.

AND...

www.rafi.org

'Seed Industry Giants: who owns whom?'

EUROPE UNCAGE THEM!

Last April, the EU Commission published a proposal for a seventh amendment to the Cosmetics Directive, proposing to delete the sales ban on new cosmetics tested on animals established in the sixth amendment. The sales ban was then replaced by a ban on animal testing in the European Union.

However, the impact of a test ban alone is insufficient and will almost certainly not result in fewer animals being tested for cosmetics. It only means that the testing on animals will move

to countries outside the EU, while animal-tested products will continue to be sold

throughout Europe. So the problem is merely exported, not solved.

A sales ban is a vital incentive for the cosmetics industry to urgently develop alternative non-animal testing methods. The EU is bowing to the pressure from multinational cosmetic companies in jumping from one amendment to the other. The European Parliament will be voting – probably during its March Plenary session – on the report of MEP Dagmar

Roth-Behrendt which is calling for the sales ban to be maintained.



throughout Europe. So the problem is merely exported, not solved.

USA A WAKE-UP CALL

The US Navy has asked California's Coastal Commission for permission to operate a new extended-range submarine detection system in the Pacific Ocean that will blast ocean waters with noise billions of times louder than that known to disturb migrating whales.

The so-called Low-Frequency Active Sonar (LFA) presents a serious and wide-ranging threat to California's marine life. A single LFA transmitter generates sound in the range of 235 decibels, flooding hundreds of square miles of ocean with noise. A 160 decibel blast is known to harm divers. The sheer force of the LFA's 235 decibels will cause serious physical injury and even death to whales and other creatures with highly sensitive hearing systems unfortunate enough to swim near such a transmitter. Marine scientists are particularly concerned about the impacts that LFA could have on the behaviour of entire populations of marine mammals.

MAKE A DIFFERENCE

Please send a letter expressing your concern to Sara Wan, Chair, California Coastal Commission, 45 Fremont Street, Ste. 2000, San Francisco CA 94105. Copy your letter to the Natural Resources Defence Council, 40 West 20th Street, New York, NY.10011, fax: +1 2127272700, email nrdcinfo@nrdc.org

MAKE A DIFFERENCE

Write a letter to your elected representative at the European Parliament urging him to support a complete EU sales ban on new animal tested cosmetics, as well as to maintain the ban on animal testing in Europe. To find the name for your member of the European Parliament visit www.europarl.eu.int/home/default_en.htm and visit www.buav.org

World-Wise Web: The five best online campaigns

www.StopEUChemicalTest.com

A taste of what the EU Commission's new chemical testing strategy will mean for animals... act to stop it now!

www.ogiek.org

Send a letter urging Kenyan officials to stop the destruction of the Mau Forest and the continued harassment of the indigenous Ogiek people.

www.cbecal.org/actions/action120700.shtml

Send a message to Edward Lowry of California's Toxics Substance Control Department and help worried locals to have their blood tested for toxins from industrial pollution.

www.skiareacitizens.com

A campaign to prevent ski resorts from expanding into undisturbed forest, the logging of old growth, the degrading of water quality and the paving over of wetlands for real estate.

www.extinctionsucks.org/actioncentre/default.cfm

Canada still has no endangered species legislation; so send a message to Canadian prime minister Jean Chrétien urging him to keep his promise.



UK KEEP GM SEEDS OUT OF THE UK

Proposals released in January by the Ministry of Agriculture, Fisheries and Food indicate that the UK Government is intending to allow up to 0.5 per cent contamination of seeds by genetically modified varieties (see www.maff.gov.uk/inf/newsrel/2001/010116a.htm). This may well be a first step towards preparing the way for the introduction of unwanted GM foods, whose effects upon the environment and human health have not adequately been tested.

What's more, during this uncontrollable era of BSE, it would seem only logical to think twice about using a technology that blatantly violates well-established natural boundaries. Whilst customers have been clear and adamant in their demand for zero GM varieties in seeds, food ingredients and derivatives, it seems the government is trying to sneak in GM products through the back door.

MAKE A DIFFERENCE

Anyone wishing to comment on the seed purity proposal must do so before 10 April by writing to: George Saunders, MAFF – PVRO and Seeds Division, Room 21, White House Lane, Huntingdon Rd., Cambridge, CB30LF, Fax: +44 (0)1233342386, email: g.a.saunders@pvs.maff.gsi.gov.uk



NORWAY SAVE THE WHALE – AGAIN

Norway has announced that it will resume the export of whale meat to Japan, in defiance of the global moratorium on commercial whaling agreed by the UN's International Whaling Commission (IWC).

The decision was prompted by pressure from Norwegian whalers, who were planning to take their government to court in March, to argue that the continued ban on exports to Japan is illegal under Norwegian law and demand export licences for 130 tonnes of blubber currently in cold storage. Norway itself has no market for blubber, but fishermen have orders worth £630,000 from Japan. With freezers full to the brim, whalers cannot go to sea to hunt whales this spring.

According to a Norwegian university study, Norway's whale meat export market could bring in £3.9m. A Norwegian spokesman said: 'We believe in sustainable use of resources and our scientists tell us there are enough minke in the Norwegian Sea and north-east Atlantic for sustainable harvest.' Well, they would, wouldn't they?

MAKE A DIFFERENCE

Visit www.greenpeace.org.au and send a letter of protest to the Norwegian Prime Minister. Contact the Norwegian Embassy in your country and register your complaint. For the UK: Royal Norwegian Embassy, 25 Belgrave Square, London SW1X 8QD. Tel: 0207 591 5500, fax: 0207 2456993. Please copy your letter to the IWC, 135 Station Rd, Impington, Cambridge, CB49NP, UK.

PAPUA NEW GUINEA LOGS ARE ROLLING

Papua New Guinea (PNG) contains the largest intact tropical rainforest in the Asia-Pacific Region – the third largest in the world. But almost half of the country's accessible forests have fallen victim to industrial logging, and over 30 proposed timber projects are about to speed up the destruction of what's left.

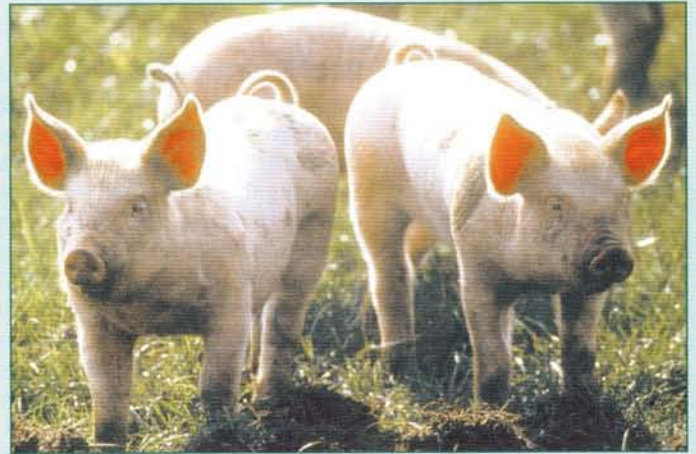
In 1999, the PNG government and the World Bank initiated attempts to slow the rate of rainforest loss. This project included a moratorium on new logging projects and a promise to support community-based forestry and conservation programmes. But now, in a startling turnaround, both the government and the World Bank have backtracked on these key commitments.

A World Bank loan to PNG requires a moratorium on new logging concessions until a full review is carried out. Yet although this review is not yet complete, the World Bank is preparing to make the final disbursement. Campaigners fear that once the PNG government has received the funds, it will simply ignore the ban and give way to new timber projects. The forests, however, provide the basis of livelihood and cultural life for as much as 80 per cent (about 3.6 million people) of the Papua New Guineans living there. Whilst the initial World Bank proposal included conservation programmes and regulation, these have now been removed from the World Bank's project altogether.

MAKE A DIFFERENCE

Write to the World Bank's president and to Papua New Guinea's prime minister. Express your concern that they are failing to honour their commitments to maintain the moratorium on new logging concessions and to develop alternative community-based forest management practices. James Wolfensohn, President of the World Bank Group, 1818H Street, NW, Washington, DC 20433, USA, fax: +1 2025220355, email: cunit3@worldbank.org
Hon Sir Mekere Morauta, MP, Office of the Prime Minister, PO Box 639, Waigani, Papua New Guinea, fax: +675 3277328, email: primeminister@pm.gov.pg

There's dirt....and there's dirt



The pigs on the left are being fattened in an average British pig factory farm. On concrete and slats. Covered in their own dirt. Their tails docked.

The pigs on the right are being reared free range. They can spend most of their time rooting in the soil. Natural dirt. Bodies intact.

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Card No: _____ Expiry date: ____/____/____ Switch Issue No: _____*

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☐ Please send me further information about CIWF campaigns to help farm animals and the environment

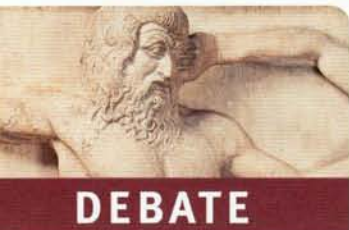
Compassion in World Farming, ASL, FREEPOST (GI/2198),
Petersfield, Hants GU32 3BR

Reg No 2998256 Website: www.ciwf.co.uk E-mail: compassion@ciwf.co.uk

¹ Livestock buildings are a major anthropogenic source of atmospheric pollutants, such as ammonia, nitrous oxide, methane and carbon dioxide, which contribute to soil acidification and global warming [C M Wathes et al., *British Poultry Science*, 38:14-28 (1997)]



campaigning
for farm animals



DEBATE



Roger Scruton is a writer and philosopher. He is author of over twenty books including *Animal Rights and Wrongs* and *On Hunting*. He farms a traditional pasture farm in Wiltshire.

NO

Dear Andrew Tyler

Many people now take the view that the human species is not entitled to the dominion that it has so far asserted over all other species. They express this by saying that animals, like us, have rights. Hence many of the things that we do to animals are morally indefensible. I find myself agreeing with the conclusion, but not with the premise. The attribution of rights to animals seems to me to be a radical departure from the norms of moral argument; if taken seriously it would undermine our ability to make the important decisions that we now must make if animals in general, and wild animals in particular, are to enjoy a sustainable future.

The debate is not a trivial one. Advocates of animal rights are currently attempting to bankrupt a firm (Huntingdon Life Sciences) which uses animals for medical research; they have succeeded in banning fur farming in Britain, and are now hopeful that they can ban hunting with hounds. They intend, if successful, to ban shooting and angling, and no doubt there are those among them who would like to impose a strict regime of non-interference in the entire animal kingdom, whether the rest of us want it or not.

This intransigence is an inevitable result of the belief in rights. If I believe that you are denying someone his rights – to life, limb, property or freedom – then I am absolutely entitled to interfere on the victim's behalf. Rights may be relinquished – but only by the person who possesses them, and only if his action is entirely voluntary. The purpose of the concept of a right is to establish, around each individual, a sphere where that individual alone is sovereign. Hence your right is my duty, and if I disregard your rights I both wrong you and also do what is wrong.

Why should we have such a concept? Surely, because we wish to live in a condition of mutual freedom and mutual respect. The concept of a right derives from legal ways of thinking, and serves as the individual's shield against oppression. All calculation stops at the threshold where you are sovereign, and it is to mark out this threshold that we deploy the concept of a right. Some philosophers believe that there are both positive rights – which are laid down by a legal code – and natural rights – which are inherent in our condition as rational agents. And it is this idea of a natural right that is invoked by those who argue for the rights of animals. Natural rights are those like the rights to life, limb and freedom, the violation of which is tantamount to a declaration of war.

DO ANIMALS

ROGER SCRUTON AND ANDREW TYLER

Let us suppose that animals do have rights; what follows? Surely, the very least that follows is that it is wrong to kill them, to eat them, to keep them as pets, to make them suffer in any way that is not to their individual benefit – and wrong in just the way that it is wrong to do any of this to a human being. That is what the activists say they believe. But do they really believe it? Are they prepared to say that my attempts to rid my barn of rats are tantamount to mass murder? That people who keep cats are complicitous in serial killing? That my keeping a horse in his stable is a case of false imprisonment? That my digging the garden involves the negligent slaughter of innocent worms, beetles and moles? Which activities involving animals would be permitted, and on what grounds?

But there is a more important consequence of rights-talk from the environmental point of view. To invoke rights is to accord absolute respect to the individual, and to give him precedence over collective calculations whenever his vital interests are at stake. Hence the sick, the deformed, and the genetically impaired have just the same rights as the healthy and the strong. If animals have rights you have no more right to kill a sick, wounded or genetically impaired individual than you have to kill its healthy companion. All attempts at managing wildlife populations by encouraging healthy breeding and eliminating the carriers of diseases would be ruled out on moral grounds. It would also be morally impossible to intervene in nature to re-establish the ecological balance – say by culling an over-abundant predator population, by controlling parasites and pests, or by capturing animals and moving them to favourable breeding grounds.

Of course, if we lived in virgin forests as hunter-gatherers (itself morally impossible for the animal rights activist), we could reasonably assume that the ecological balance would restore itself over our footsteps. But we do not live like that. The environment is now our concern, something to be managed and restored by human ingenuity, and no longer able to restore itself unaided. To believe in the rights of animals we should have to relinquish that task, and allow animal populations to find what niche they can in the human sprawl. Good for rats and crows perhaps; but not for apes or fish or songbirds.

Roger Scruton

Dear Roger Scruton

You betray some panic over the inroads made by animal advocates. You complain that taking seriously the concept of animal rights represents a radical departure from 'the norms of moral argument', as though those often sterile, centuries-old 'norms' adequately serve us now... or ever did. Your notion of the absolute sovereignty of the human individ-

HAVE RIGHTS?

TACKLE ONE OF TODAY'S MAJOR ISSUES.

ual is a picture book romance, a conceit that has as much substance as candyfloss. More on this later.

You're panicked about the campaign successes relating to Huntingdon Life Sciences (a morally, scientifically and near-financially bankrupt company); about the fur farming ban; and about further ambitions in the direction of bloodsports. These successes do not arise because animal rights people have doped the nation's drinking water – but out of a rational objection to pointless animal abuse and a rejection of the flimsy justifications offered by those who orchestrate those abuses. The successes have come, notwithstanding a national media that, in the main, ardently promotes the status quo and which characterises effective dissent as mad and dangerous.

In such a climate, animal rights campaigners cannot possibly impose anything on the majority. Yet recent opinion polls show that most people oppose bloodsports, that vegetarianism is increasingly popular and that even opinion about animal experiments is finely balanced, despite ceaseless promotion of vivisection by the powerful scientific establishment, backed by government.

These poll showings indicate incipient, rather than grounded, support for the rights argument. It is the ambition of people like myself to encourage people into thinking further and acting accordingly – for example, into foregoing the enfeebled products of intensive animal farming and voicing opposition to vivisection – a practice that is a scientific nonsense, as well as an abuse of power, given that research data obtained from animals cannot be reliably applied to human beings.

I referred earlier to your invocation of the absolute sovereignty of the human individual. You say that this 'sovereignty' can be relinquished only voluntarily by the holder and that we are collectively bound (as individuals) to defend each other's rights. Where in the world, ever, has this seminar-room notion ever been played out? Western armed forces recently bombed Baghdad, killing many innocents, because Saddam's regime wouldn't accede to inspections of its weapons facilities. I publicly objected. Did you? The street children of Rio are shot dead, with government complicity, because they interfere with the tourist trade. A multinational pharmaceutical company arranged for a number of children to stand in a field in Egypt and be sprayed with an experimental pesticide so that it could collect toxicity data.

These are not unrepeatable travesties. This is the way of the world. The status quo is corrupt. The mighty trample the weak. Greed is rewarded. Decent sentiments are ever present but they are not sufficiently nurtured and celebrated by those at the commanding heights.

Yes, the notion of rights for human beings does exist thanks to centuries of struggle by oppressed groups. But while they are sacrosanct in the minds of some philosophers and in worthy pan-national Declarations, they truly exist only for so long as, and to the extent that, the subject groups can defend them.

Though they are deserving of them, non-human animals have precious few rights, even in theory. In law they are property. There are certain rules about how we may exploit, kill and consume animals. But protection for animals stops at the point where we, as the exploiting species, are seriously inconvenienced or deprived of profit or pleasure.

The modern animal rights movement is concerned to address this situation and demonstrate that, just as commercial, cultural and intellectual life thrived in Britain after we gave up trading in Africans, so there is a positive future without exploiting animals.

You must appreciate that ours is a practical movement. Our heads are not up our fundament. We seek, first of all, to demonstrate what is often denied: that hundred of millions of animals every year in Britain alone are unwarranted victims of human commerce and culture – and that this occurs because animals have the status of mere objects. We promote ways of living that eschew the flesh, secretions and skins of animals. We repudiate the trade in 'pets' (give a home to a sanctuary animal instead!) and oppose leisure pursuits that depend on harrying and/or demeaning other species. While it is impossible in this imperfect world to live an immaculate life, the first principle should be: do as little harm as possible.

Let me now deal with this nonsense about 'human ingenuity' being needed to ensure a sustainable future.

This has come to mean scapegoating a range of 'alien' or commercially inexpedient species (from grey squirrels to badgers) for our own reckless excesses. The record shows that we fail when we try to poison and shoot our way to environmental harmony.

The record also shows that the only rational approach to take is to curb our own destructive appetites and to concede actual territory to non-human animals – not least to those from whom we are able to extract no obvious, or immediate advantage.

Andrew Tyler



DEBATE



Andrew Tyler

is the director of Animal Aid, the UK's largest animal rights group. He was formerly a journalist, writing on social, political, animal and bioethical issues for The Independent, The Guardian, Observer, New Statesman etc.

YES



'The notion of a right is an expression of the sovereignty that human beings claim over their own lives, and is only doubtfully applied to creatures who do not understand moral issues.'

Roger Scruton

Dear Andrew

The notion of a right, I suggested, is an expression of the sovereignty that human beings claim over their own lives, and is only doubtfully applied to creatures who do not understand moral ideas, and who have no conception of their duties. You dismiss this as a 'seminar-room notion', without, however, proposing any alternative definition. The only intellectual enlightenment that I can glean from your response is that animals have rights because you say so. But you don't tell me which rights, which animals, or what this permits or forbids us to do to them. I would ask you again whether the killing of a rat is murder? If not, why not?

You seem keen to attribute 'panic' to me, which makes it sound as though you were offering not arguments but threats. I am far from disputing the claim that people abuse animals, but if this is to give grounds for condemnation we need to be much clearer than you are prepared to be about the nature of moral judgement. You ridicule my reference to the norms of moral argument, but your reply would be a mere tissue of self-serving emotion if it did not have a moral base. By attributing rights to animals you are making a moral judgement: but I contend that you are making it in the wrong terms, and that the consequences of doing so are intellectual and moral confusion.

You say that it is 'nonsense' to suggest that human ingenuity is needed to ensure a sustainable future. But, however badly we have managed things up to now, there is still no doubt in my mind that the answer is not no management at all but better management. I believe that the animals on our farm are in a more sustainable equilibrium since we shot the magpies and crows that were eating the young of other birds, that the cows are more healthy since we got rid of the rats (not by poisoning, I hasten to add), that the voles and the carp have a better deal since the mink-hounds came. You may disapprove of these forms of management, but without them there would be very little bio-diversity here above the level of insect-life, and that too needs management. Even in your Vegan utopia, crops would have to be protected from pests, and bio-diversity maintained by intervention.

Of course, if animals have rights then everything I have just described is morally wrong – indeed, morally impossible. You may think that, but since you have given no argument for it, and since I believe that the consequences of *laissez faire* would now be bad not only for us but for animals too, I reject your conclusion. It is good to feel sympathy for animals, to protect them and to do what you can to provide for their needs. But this does not alter the fact that it is we who do these things, because we live in a world that we control. To relinquish that control is merely to opt out of our principal responsibility. And it will not benefit the animals, even if it makes us feel good about them.

Of course animals are not 'mere objects'. They are

sentient beings, towards whom we have real obligations. I sympathise with your aversion to the trade in pets, partly because I think it encourages people to see animals as persons, and so to degrade both themselves and their pets. And like you I would like to see more territory conceded to the animals. But this conceding of territory would be a form of management too, with people making all the important choices, and interfering to maintain things when pests, diseases or forest fires become a threat.

Roger Scruton

Dear Roger

How odd! I set out an unequivocal case for non-violence against people and animals and you suggest I'm offering you 'threats'. Perhaps you've been reading too many *Daily Telegraph* leader columns – or writing them.

The panic I detected seemed to be rooted in your unease at the way the world is changing beneath your feet. The old conceits are fast unravelling – eg that killing animals for pleasure, money, or out of expediency is somehow a noble project.

The rights I would accord non-human animals are the rights not to be killed by humans – except unwittingly or in self-defence. Also, freedom from torture and exploitation. Those rights would extend to all species, which on the balance of the evidence, are sentient. I'm not concerned to judge and police other species in regard to their dealings with each other. Those who attempt such things have shown they have neither the requisite competence nor the vision. Besides, while some animals might kill others, they don't have our species' capacity for grandly choreographed, industrialised destruction.

Is killing a rat murder? Rats usually proliferate because people provide unguarded food sources. I know many animal rights people who farm, run factories and other businesses and are able to discourage unwelcome animals by non-violent means. Killing is lazy and nearly always futile: the vacuum left by the slain animal is filled by another, unless preventive measures are taken. So yes, killing a rat is unwarranted and immoral. But apply the term murder and, because of cultural conditioning, people react rather than think. So I wouldn't use it. But consider this: if someone encourages another to kill my child, most people would see that as aiding and abetting a murder. But what if a person publicly endorses a policy of aerial bombing that kills children (all of them sovereign, according to your formulation) thousands of miles away. Is that also aiding and abetting? My answer is yes, but distance and cultural bubblewrap get in the way.

The case I've set out rests on a simple guiding principle, which I've already enunciated: do as little harm as possible. That is the test I would always apply, whilst appreciating that none of us can tread the earth without doing some damage.

The case you've set out against animal rights, it seems to me, rests on a pernicious conceit. It is that

the world's flora and fauna benefits from human beings' 'stewardship'. The stewardship you favour involves identifying various problem species and slaughtering them; and identifying other species as having utility (cattle, sheep, cows, chickens, pheasants) and producing them in vast numbers, then killing them for food or sport.

The world resulting from such stewardship is polluted, over-heated, and unequal. It is locked into an unsustainable food production system that produces diseased animals and has seen the death of forests, the uprooting of thousands of miles of hedgerow, the prolific use of toxic chemicals and the imperilling of numerous species of songbird, mammal and fish, as well as a host of wildflowers and other plant life.

One of your favourite themes is that animals are not part of a 'moral community'. They are undeserving of rights because they have no duties or responsibilities. Clearly, you have much to learn about the richness of animal culture – of animals' powerful social bonds, their capacity for grief and sensual pleasure, their ability to think strategically and work co-operatively. The magpie feels no duty towards you, but then why should he? You want him dead.

Andrew Tyler

Dear Andrew

Rights protect the individual, not the species. By attributing rights to animals, therefore, we tie our hands when it comes to the great environmental questions that now confront us. You think that our hands ought to be tied: since animals have rights, then all culling, even of the diseased and the dangerous, is morally impossible.

You believe that animals have the 'right not to be killed by humans', but you do not judge and police other species. Presumably therefore you don't believe that a mouse has a 'right not to be killed by a cat'. I take this to show that all this talk of rights is so much hot air. What you are really describing is the duties of humans, not the rights of animals.

You refer to the 'richness of animal culture', and (in certain cases) this is an apt description – even of the rats in our ditches (which do not proliferate because we leave unguarded food, as you would like to believe). But that does not imply that animals organise their lives by moral principles, or that they blame and condemn each other as we do (and as you do preeminently), or that they settle their disputes by judgement and law. It is because we respond to the call of duty that we can be, and ought to be, stewards of our environment, and not just one competing species among many.

The world is polluted and over-heated not because of stewardship but because of bad stewardship. If everybody thought as you do, this would, I believe, simply entrench the position of humanity as the dominant species, while leaving all others to fend for themselves in a constantly dwindling habitat. It is fair enough to live by the principle 'Do as little harm as possible', in a world that is in a state of ecological bal-

ance. But that is not our world. I would prefer to say, when it comes to questions of the environment, 'Do as much good as possible'. That may mean also doing harm, and not only to rats.

Roger Scruton

Dear Roger

You equate culling with 'stewardship' and still fail to acknowledge the mess we've made in this area. You suggest, instead, that all will be remedied by a bit of sensible tweaking.

Fewer mice – and birds – would be killed by cats if cats weren't mass produced for the pet industry. I don't believe, in any case, that you are remotely concerned about crimes against mice by cats. Your concern is that the extension of rights to animals would mean a curtailment of the freedom that people of your disposition currently enjoy to exploit and kill.

I clipped a book review you wrote for *The Times* in December 1996. The volume, by a 'pious Catholic' and public school Classics master, described the author's 'sporting' exploits in Cumbria. You wrote approvingly of his 'defiant celebration of the act of killing fish and birds in quantities that far surpass his gastronomic capacity... I find nothing strange' you declared, 'in the fact that these activities should be the high point of someone's life, and the object of powerful religious feelings.'

You tell me that your objective is to 'do as much good as possible'. Is this an example?

The movement for animal rights is another chapter in the history of social progress movements that has included the abolition of human slavery and the enfranchisement of women and the 'lower orders'. That Animal Aid recognises the continuity of such struggles is evidenced by the Living Without Cruelty Exhibition we staged in March 2000. Oxfam, Amnesty, World Development Movement, and Fairtrade Foundation were among the participants.

The animal rights movement is inclusive of anyone whose goal is a new, fairer deal for animals. Our view is that it is better to go part of the way towards a cruelty-free lifestyle than obstruct the way forward with blinkered and inconsistent hostility.

Andrew Tyler

At the Liberty and Livelihood March on 18 March, **The Countryside Alliance** (www.countryside_alliance.org) will demand that Parliament:

- defend the right of rural people to live their lives responsibly in the way they choose
- protect rural people from prejudice – particularly against all country sports and hunting with dogs
- address the real problems of the countryside destroying communities and cultures.

Animal Aid (www.animalaid.org.uk) works for animal rights, campaigning against cruelty to livestock at markets, bad conditions in British zoos, factory farming and the use of animals for medical research. They produce a factsheet, downloadable from their website (see page 21), on alternatives to using animal for research.

'If everybody thought as you do, this would, I believe, simply entrench the position of humanity as the dominant species.'

Andrew Tyler



This month's heroes and villains: environmental opposites Bruno Manser and Gale Norton.

THE GOOD

The American comedian Andy Kaufman built a career on keeping one step ahead of his audiences. When they thought he was fooling around, he was being serious. When they began to take him seriously, he made out he was just fooling around. And so it went on. When he announced he was dying of cancer, people came up to him in his wheelchair in the street and told him he had gone too far. At his funeral, doubters prodded his body in its open coffin. Seventeen years on, there are still many who are hoping that his absence is his greatest stunt yet, and that one day he'll come back.

Today, nearly a year after the disappearance of another independent and individual man, similar hopes are beginning to grow up about the Swiss campaigner and human rights activist Bruno Manser, who marched into Borneo's Malaysian state of Sarawak last May, and has not been heard from since.

To understand the hopes growing up around Manser is to understand the man. The 46-year-old from Basel has become an international symbol of humanitarian care through his 16-years-long dedication to help alleviate the plight of the Penan, the last remaining rainforest nomads of Borneo. 'I would have given up long ago if I hadn't felt

for the Penan in my heart,' he said in 1999. 'It is the personal relationship with these people, deprived of their rights, which gives me this strength.'

Having spent much of the 1970s educating himself in a stunning array of practical handicrafts, Manser took himself off in 1984 to find a way of life in which he could use his skills for greater benefit. Arriving at the home

BRUNO MANSER

of the Penan, he liked what he saw, settled, and showed no inclination to re-emerge.

Yet re-emerge he did in 1990, armed with a mission to get help. The Penan's habitat was being destroyed by the Sarawak's timber industry, and the few surviving nomads would be soon to follow. Declared 'enemy of the state number 1' by the Malaysian government, Manser bristled to the challenge, and founded the Bruno-Manser-Fonds in Basel to raise attention to rainforest issues, those of the Penan in particular.

During the 1990s, his determination to make governments take notice and action to halt rainforest destruction revealed his stamina and flair for the dramatic. In 1993 he conducted a 60-day hunger strike outside Bern's Bundeshaus to highlight the need for an import embargo of tropical woods. The strike received nationwide support, but little action resulted. He travelled, he lectured, he exhorted; but change was coming too slowly. 'As long as logging goes on in Sarawak,' he said in 1998, 'our activities will not have achieved anything. I can't stop until all the Malaysian promises have been kept.'

He felt the tide was flowing faster and faster against the Penan, and he grew more desperate. Making the occasional undercover visit to the people who had adopted him and called him Laki Penan – or Penan Man – he witnessed further rapid erosion of their habitat. He made a diplomatic overture to Sarawak chief minister Taib Mahmud, offering to take responsibility for creating the Penan's biosphere himself. No response. He learned how to parachute, planning to float down with a lamb of peace on the Hari Ray festival in Kuching. The Malaysian embassy success-

fully lobbied the airlines to stop him, so he parachuted into Geneva instead. No response. He flew a glider above the Taib residence, and landed, allowing himself to be arrested. He was transported.

In 2000, he made one final attempt to do something, anything, to save the Penan. Allowing himself to be filmed as he made his way through the jungle to Sarawak, he sent off a few hundred postcards, and on 22 May was seen crossing the border alone into the land of the Penan. The jungle has not returned him.

His family and friends apart, this could have been the end of the story. But in a way, it's just the beginning. There are many who say that Manser, who could track a boar and prepare a poisoned dart with the best of the Penan, has simply gone home. There are others who believe he was shot by the army. Petitions have been drawn up, but the government denies all knowledge of his whereabouts. Is he in prison? Or in hiding? No-one has seen him; or at least, says they have seen him. Even the Penan put out a plea in November: 'We, the Penan, are his best brothers and sisters in the world. When we first heard the message of his missing, we all were worried and felt sad and lonely. We continue to search for him and try our best.'

As with Andy Kaufman, it is hard for many to believe that Bruno Manser is dead. And perhaps this is Manser's greatest stunt of all. In January, a Malaysian general visited Switzerland for talks. The Bruno-Manser-Fonds – which is continuing his work – believes that this visit was connected with Manser and the Penan. The mystery of Manser's whereabouts is developing interest, and Malaysian logging is scrutiny. Maybe, just maybe, this was all part of Manser's final desperate gambit.

Meanwhile, one calm day last August, something strange happened. Logging companies discovered an unexpected roadblock barring their way to work. The Penan had never done anything like this before.

Perhaps the roadblock was the Penan's own initiative. It probably was. But a tempting image comes to mind, an image of a figure watching from the shadows; of a champion who tried to fight for the Penan from without, and is now fighting from within; of a rugged, wiry and bespectacled man who speaks and even thinks in the language of the Penan, and who will never, ever give up.



ILLUSTRATIONS BY CHRIS BAUTHE

THE BAD

Well, we did warn you... Back in November last year, before George W Bush was 'elected' to the office of president, this very section of this very magazine pointed out just what a disaster he would be for the environment. Now, sashaying across the floor of the Senate like Darth Vader in high heels, comes Gale Norton, Dubya's scorched-earth environmental policy made flesh.

Boy, are we in for a rough four years.

Norton's appointment to the post of interior secretary has caused such dismay amongst American environmentalists that she achieved the dubious honour of having several energetic national campaigns set up to oppose her before she even started to do her job. Brent Blackwelder, president of Friends of the Earth US, pulls no punches: 'The nomination of Gale Norton,' he says, 'amounts to a declaration of war on the environment.' Brock Evans, executive director of the Endangered Species Coalition, meanwhile, organised an urgent national petition to try and overturn her nomination because of 'her extremist brand of far-right anti-environmentalism'. Carl Pope, head of the Sierra Club, calls her appointment 'a natural disaster'.

Strong stuff, but then environmentalists have never liked Republicans much (usually with good reason). So maybe they're just exaggerating. Listen to this, for example: 'It's the classic green scam... we don't believe she comes from the mainstream of even the Republican Party, much less the mainstream of American people'. Who said that? Greenpeace? The Earth Island Institute? Er, no... it was Martha Marks, president of Republicans for Environmental Protection.

To find out why even moderates within her own party are weighing in against her, it's necessary to take a look at Norton's record. So steel yourself for a trip up one of the most persistently pro-big business, pro-polluter, pro-landowner and anti-everything else career ladders you could hope to find.

The 46-year-old Norton began her career working for the right-wing Mountain States

Legal Foundation, which makes a habit of representing loggers, miners, ranchers and developers in fights against environmental regulations and safeguards. She worked there under the tutelage of James Watt – a man as reviled by American Greens in his time as Norton is likely to become. Watt was interior secretary under Reagan, and when he took up that post in the 1980s he took Norton with him, to serve as an associate solicitor. It was there that Norton first proposed the measure she may now get the chance to implement – the opening up of the Arctic National Wildlife Refuge to oil drilling.

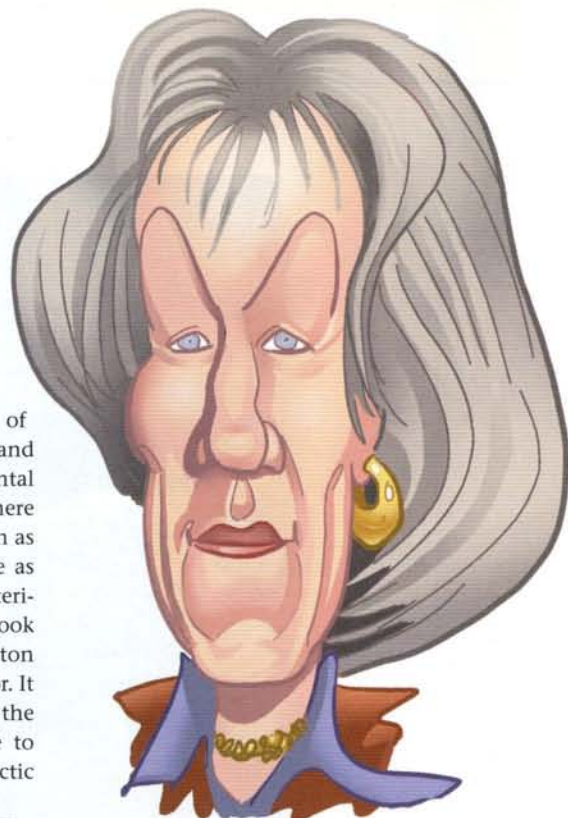
From there she moved, in the late 1980s, to work at the equally right wing and anti-green Pacific Research Institute, where she helped to plan litigation strategies to

GALE NORTON

enhance private property rights at the expense of community interests. Still moving onwards and upwards, she went from there to become attorney general of the State of Colorado in 1991. During her eight years in the post she notched up an impressive number of damaging measures, including cutting the State's environment budget by a third, refusing to challenge polluters, ignoring the dangers of a nuclear waste dump in Denver and, most lastingly, promoting the controversial Colorado 'self-audit' law. One of the first laws in the US which provided blanket immunity for polluters from a whole host of environmental legislation, this had the effect of allowing polluters to evade fines.

In 1998, Norton was a founding member of the cunningly-named Coalition of Republican Environmental Advocates, which exists to promote a so-called 'wise use' environmental agenda – basically, removing environmental regulations.

Not a pretty picture, is it? So let's try and get inside her head for a minute and ask ourselves why she does these things. Her politics are very interesting. For a start, Norton calls herself a 'libertarian'. Indeed, before she



became a Republican she was a member of the Libertarian Party, where she opposed the legitimacy of the federal government, and called for the abolition of several government agencies. Norton believes that the US government is more of a burden than a help; an interesting viewpoint for someone who now helps to run it.

From this libertarian viewpoint comes her 'States' rights' view. She was widely criticised for a speech she made in 1996, in which she defended the Southern States' role in the civil war. From it too, comes her virulent defence of private property owners, whether they be big companies or householders – who, she has suggested, should even have a 'right to pollute' without government interference.

What this all adds up to is a terrifying near-future for the American environment. For, as interior secretary, Norton is responsible for overseeing, amongst others, the government Fish and Wildlife Service, administering the Endangered Species Act. She will also be responsible for over 500 million acres of public land – part of which, the Arctic National Wildlife Refuge, she advocated opening up for exploitation within minutes of being nominated.

You wouldn't have thought, would you, that even Dubya would be stupid enough to put such a determined fox in charge of the chicken coop. But maybe he just doesn't like chicken.

...AND THE UGLY

'It is not so much a technical question as a matter of a president's constitutional responsibility... It is in many respects a moral issue.'

US defence secretary Donald Rumsfeld's explanation for the US national missile defense (NMD) project.



THEATROWE

DO-IT-YOURSELF MONEY AND THE NEW ALCHEMISTS

**There are alternatives to the global economy.
David Boyle explores the world's local currencies.**

It was a small courtroom near the Pyrennees that, in the last few days of 1997, put France's successful new local currency on the map. Three locals, all of them born and bred in the UK – Sarah Two, Roger Evans and John MacCullough – were on trial in the local court in Foix, in the rural Ariège département, for what the prosecutor called 'working illegally'.

It wasn't that they were illegal immigrants or anything – these are, after all, the days of the EU Single Market. Their crime was to have been paid for work using a local homegrown do-it-yourself money.

The men had repaired Sarah's roof, but they hadn't been paid in francs – the 'acceptable' currency recognised by the global economy. They had been paid with 2,000 'grains of salt', the local currency organised by a growing movement in France known as SEL, French for salt but also the acronym of the *Société d'Echanges Local*.

Maybe it was because Sarah Two was a member of the local vegan collective that she enraged a local farmer – though she was also a flautist, drum-maker and former postmistress from High Wycombe. Either way, he reported her to the authorities and the three of them were soon facing a tough sentence of up to 248 hours of community service.

'This kind of behaviour upsets traditional structures and institutionalises a parallel economy,' said the lawyer representing an angry federation of local builders. 'It is destructive to our entire political and social system.'

The prosecutor agreed: the French civil code says that service exchanges have to be of equal value – and roof tiling and tofu weren't.

'So let's say a SEL is worth one franc,' said the confused magistrate.

'No, it doesn't quite work like that,' said Sarah – who ended up with a suspended fine and symbolic one franc damages to the local builders' guild, only to be acquitted on appeal.

And it doesn't work like that. SEL is similar to the idea of the local exchange systems LETS, hundreds of which began in the UK in the early 1990s. It means that local people can trade without cash, but using a notional currency that stays circulating locally and doesn't flow out of the area to drag in imports from across the globe.

It also means that people can break out of the global money system as the one and only measuring rod for success.

'Once financial values dominate everything, there's no longer room for anything else,' says Alain Bertrand, the small business adviser who moved from Paris to Ariège to set up the first SEL in 1994. 'Many of the members there also had no money at all. Without SEL they wouldn't be allowed to do anything – let alone mend their roof. It is inhuman that people are forced to define production and exchange only in money terms.'

The case meant enormous publicity for the whole idea of SEL and Bertrand and his colleagues were overwhelmed by groups across France wanting to start similar systems themselves. Soon there was an organisation dedicated to the idea, SEL'idaire.

Ariège turned out to be particularly fertile soil. Although Tony Blair's family had famously chosen the area for their 1997 summer holiday – just as the local builders were getting hot under the collar about the roof – this is a poor rural area of France.

What with farmer José Bové's famous attack on McDonald's in Millau, rural France is increasingly aware that the global economy can be devastating to traditional life.

The first SEL was launched with the help of the local Alliance-paysans-ecologistes-consommateurs, as part of their on-going battle with the WTO and GM food. They gathered in the town hall in Foix in December 1994; three months later, 300 people were using *grains de sel*.

And in the years that followed, Alain's efforts have generated over

350 SEL groups – nurtured in their early days by SEL'idaire – and a total of about 45,000 people trading around the country.

'What power have we got to change things?' asks Bertrand. 'The answer has to be bringing things back to local level. By inventing their own specific kind of money, people involved in SEL are able day by day to change the way things are produced and choose their own kind of society.'

Since the trial, even the French Government's attitude has moved from outright hostility to praise from and a request to meet the minister in charge of a new division of the Finance Ministry known as 'Economie Solidaire'.

'The point is that we are able to do something they're not able to

do,' says Bertrand. 'When we start a group and it starts to grow, people start to build relationships with each other again, they start to link with other groups – maybe producing organic food. They start to trust.'

That's the key to the whole idea. Local currencies like SEL, time banks and LETS in Europe – and the highly successful printed notes known as 'hours' in the USA

– are all in their different ways able to rescue a sense of local community. They rebuild people's confidence, and they re-discover local resources – often people's skills – that the global economy simply forges.

That is why the Dutch, Australian and Irish governments have all legislated to allow people to earn their equivalent of grains of salt without damaging their benefit rights.

The LETS story has become quite familiar in the British press – though there's usually a hint of condescension about it – swapping aromatherapy for knitted crystals and so on. But it hasn't yet managed to break through into the mainstream outside some rural pockets and the anti-poverty strategies of cities like Leicester, Liverpool and Greenwich.

SEL isn't necessarily the same – as Bertrand points out – because grains of salt are rigorously based on time, like the time banks in the USA and Japan that recently launched in the UK too. Unlike grains of salt, LETS currencies like bobbins in Manchester or bricks in Brixton sometimes have an equivalent value in pounds or francs to make them easier to use.

GROWTH OF AN IDEA

But the SEL story demonstrates that local currencies can mushroom as a real response to globalisation. Bertrand has even taken the idea back to Paris and made a successful leap from rural to urban.

'I didn't believe it would work there at first, because there was no food to sell. There were things like English lessons but that wasn't really enough,' he says. 'But we now have 500 in the group, and you can buy internet training, you can get office work done in local money, we have a system that brings organic food in from the countryside.'

This growth by linking up with other organisations is one of the keys to SEL's success. It has meant that you can hire building space, buy computers, food and training – even theatre tickets – with SEL money. Having a local currency that stays put, resisting the temptation to shoot off down the wires around the globe, means neighbourhoods can make the most of what they've already got – whether it is wasted people, wasted space or wasted resources.

Bertrand's game-plan is to link the SEL groups together enough to provide low-cost or interest-free credit to small local business all over France – a real competitor to the global economy.

The model is WIR in Switzerland, and to understand what that means we have to delve a little into the secret history of money.

And there is one – though you won't find it in conventional

'The SEL story demonstrates that local currencies can mushroom as a real response to globalisation. Alain Bertrand has even taken the idea back to Paris and made a successful leap from rural to urban.'

economic text books, still less in Peter Jay's recent BBC history of the subject, which confined itself to kings, governors and banking princes.

The forgotten history of money is about how people can create their own. It reached a head during the Depression, as communities struggled with the problem that they had lots of work that needed doing, lots of people desperate to do it – but no money to bring the two together.

Ambitious local currencies sprung up in places like Wörgl in Austria, and all over the USA, inspired by the Argentinian trader Silvio Gesell, who had urged the world to discourage hoarding with 'negative interest rate' currencies.

The great Yale economist Irving Fisher threw his reputation behind the idea – having just lost some \$10 million in the Wall Street Crash – and soon about 300 US communities were printing their own money.

Faced with the bankruptcy of their local bank, Tenino in Washington State even minted their own coins in wood. They were snapped up by hungry collectors at enormous profit to the town.

Then on 4 March 1933, it was all over. Advised that the monetary system was in danger, President Franklin Roosevelt gave them a short

time to wind themselves up. Local money disappeared for two generations. The only one that survived was in Switzerland.

WIR stands for Wirtschaftsring and it is Europe's oldest barter currency, aiming specifically at small and micro-business, and it is now so widespread that it amounts to a virtual parallel currency with the Swiss franc.

It started in 1934, and by 1993 it had a turnover equivalent to £12 billion and 65,000 corporate members. Its main areas of specialisation are the building trade, restaurants and food. But members include most kinds of business – even a circus.

What they can't do is exchange WIR currency for Swiss francs, any more than grains of salt can be converted. That is both a disadvantage and an advantage at the same time: the disadvantage is that local currency will never have the buying power of a global currency. The advantage is that it stays circulating locally,

providing mutual credit to members either free (in the case of SEL) or very cheap (in the case of WIR).

MARGINALISED

The establishment history of money sets all this aside. Conventional economists regard local currencies as 'barter' and therefore as a throwback. They dismiss the idea as 'fringe', 'wacky' or – worse – an attempt to defraud the tax system.

Actually, parallel currencies are already mainstream – it's just that they're not designed for poor people.

International barter among multinationals now makes up well over 10 per cent of world trade, with giant corporations like Active International or Atwood Richards using electronic barter currencies like trade dollars to exchange resources like outdated stock, media advertising or hotel rooms.

And when any local exchange can't immediately find what they need, they can use an international currency called universal to barter

it from elsewhere. The Australian company Bartercard encourages UK members to donate their trade pounds to Metropolitan Police charities, so it can be used to buy play equipment for children.

Loyalty points like beenz, iPoints and air miles are playing an increasing role in our lives. The latest loyalty card from Boots has space on it for more than 20 different

loyalty currencies. And in case you didn't think this is money: until recently Northwest Airlines used to pay their entire worldwide PR account in frequent flyer points.

Even the deputy governor of the Bank of England, Mervyn King, says that a new generation of private currencies exchanged on the internet is emerging which might sideline central banks altogether – though he had to go to Wyoming to admit it.

The point is that big currencies like the euro and the dollar don't work very well for everybody all the time – even if you're a mega-corporation bartering unsellable purple toothpaste. Global corporations realise that as much as anybody – but when local communities want to create their own money, they end up in court.

Like Italian professor Giacinto Auriti, who recently went on trial for printing his own currency, known as 'the money of the poor'. Or Isle of Wight County Council, which was convicted in 1997 for printing its own tokens, that they had made the mistake of calling 'euros'.

SEL has gone beyond that. But the other myth its success debunks is that local currencies are purely an Anglo-Saxon phenomenon.

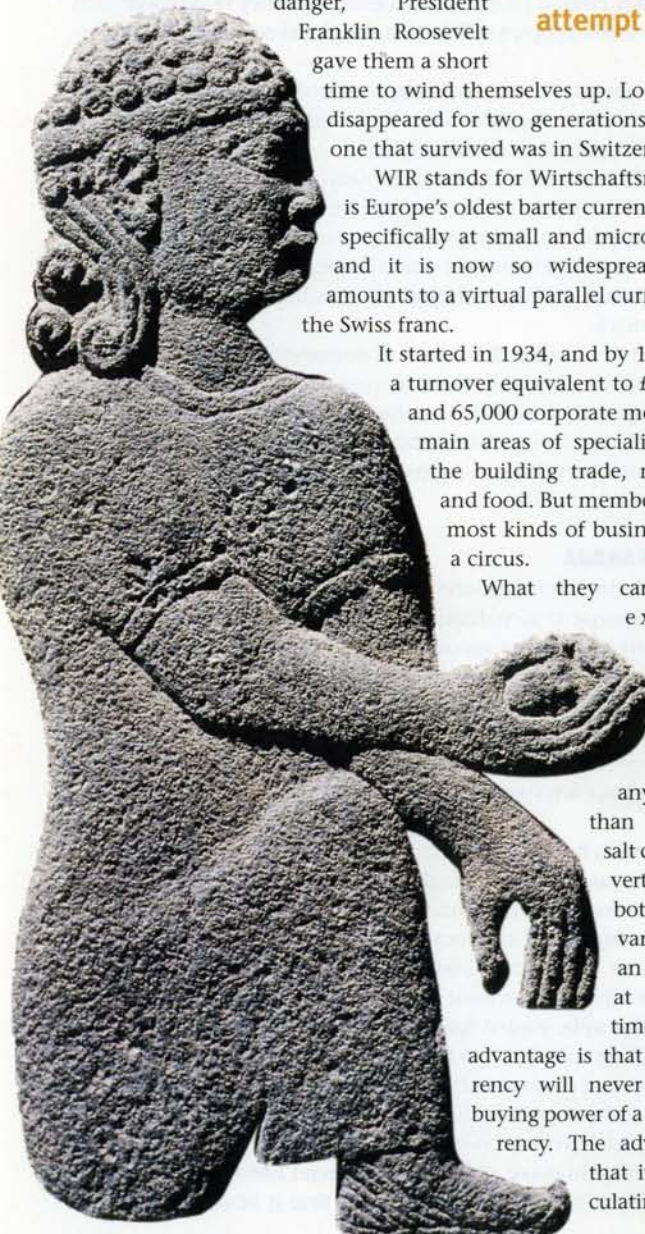
They certainly re-emerged in Anglo-Saxon countries. Like the hours notes in Ithaca in upstate New York – started in 1992 as a way of fighting off a new Wal-mart store, and now backed by the local chamber of commerce and accepted at a third of the town's businesses.

Or the similar Womanshare system in New York City, run by local carpenter Diana McCourt, whose husband Malachy is one of the celebrated McCourts of *Angela's Ashes* fame.

But SEL has also led the way for the rest of the world. There are similar schemes, using printed notes, in Senegal and other parts of French-speaking Africa. There are ambitious local currencies in Holland, Germany, Italy and the first time bank in Slovakia. There are widely used printed currencies across Latin America, like the tlaloc in Mexico.

Like SEL, the most exciting local currencies are linking up with a range of other organisations. In Chicago, pupils are earning 'time dollars' by tutoring other pupils, and spending them on recycled computers.

If you have one of the Minneapolis dual-track HeroCards, you can buy products at the Mall of America – the biggest shopping mall in the USA – partly in dollars and partly in a local time-based currency,



SPOT THE LOCAL CURRENCIES

Barataria: Collective name for the four organisational barter schemes set up in rural Scotland, County Mayo, Madrid and Amsterdam by the European Commission, including the Scottish Organisational Currency System (SOCS). www.socsystem.org.uk

Hours: Starting with Ithaca hours, the printed currency in upstate New York, and now spread to around 70 communities across North America, including the ambitious recent Toronto dollars. www.lightlink.com/hours/ithacahours

Local Exchange and Trading Systems (LETS): Starting in Canada, spreading as 'green dollars' to Australia and New Zealand, there are now 100-200 LETS currencies in the UK. They take a range of different forms, from the community-based systems to small barter schemes. www.letslinkUK.demon.co.uk

Système d'Exchange Local (SEL): Similar to LETS, but rigidly sticking to

the principle of an hour for an hour, using the measure 'heure-au-vert' or 'green hour', pronounced Eurovert. There are about 350 such schemes. www.selidaire.org

Time banks and time dollars: More like mutual volunteering than barter, members earn credits for helping out in the local community – visiting older people, tutoring and so on – and can spend them on help for themselves or on recycled computers. Mainly in the USA and Japan, but there are now 20 time banks in the UK. www.timebanks.co.uk

Tlaloc: Printed currency from Mexico City, using the name of the local rain god. www.laneta.apc.org

Womanshare: All-women service exchange, based in New York but with similar systems in other parts of the world. www.mtdn.org/contents/wsharehtm

earned by helping out in the local community, tutoring in schools or giving lifts to the elderly.

It isn't exactly green, but it does mean that anyone can have some spending power as long as they've got time and they're prepared to help someone.

SEL and the other 2,000 or so local currencies remain small, but they may be able to help communities fight off the worst symptoms of globalisation, by using local resources more efficiently. What the global currencies can only see as rubbish or useless people can be wealth to a local measuring system. After all, four million perfectly good computers are put into landfill every year in the UK.

It also means that people can issue their own currency – not by themselves, but with each other. It's like rediscovering alchemy.

'Below the radar beams of many official monetary experts, fundamental change in our money systems is in fact already well under way, irresistibly driven by the social and technological forces of the Information Age,' says one of the designers of the euro, former Belgian central banker Bernard Lietaer, in his forthcoming book *The Future of Money*.

REVOLUTIONARY THOUGHT

And when the world depends on the by-products of the \$2 trillion a day that is speculated across global computer screens every day, we do need something else to rely on.

Five centuries ago, alchemists like the mysterious Paracelsus – wandering round Europe in a coloured coat which he never washed – were the inspiration behind a revolution against the old order of authority and control.

They toppled the old certainties of medicine and politics with their dreams of a 'chemical revolution', attacking monopolies and putting power and medical knowledge in the hands of ordinary people. Now there are suddenly some new alchemists trying to do the same with money.

They are the vanguard of a money revolution which allows us all to do what governments and bankers would prefer to keep to themselves: create money.

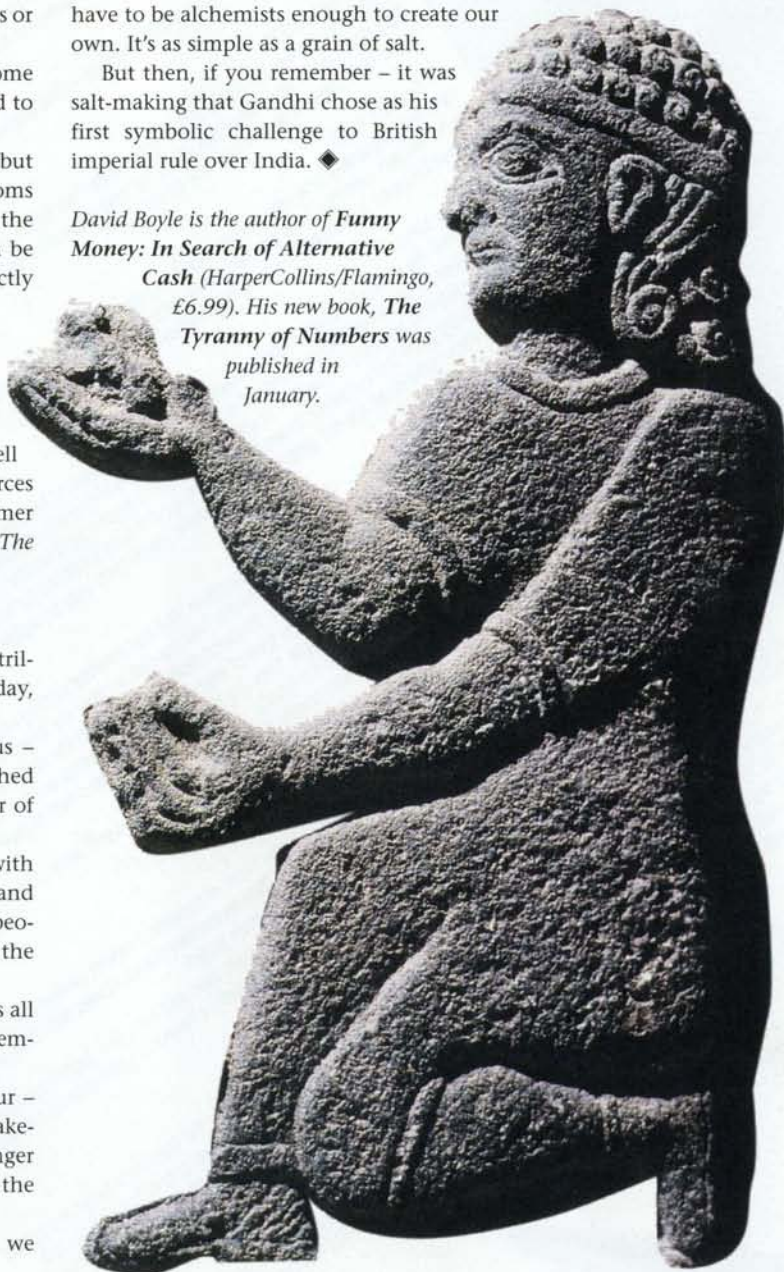
Alain Bertrand describes SEL as a mixture of protestant rigour – rigidly measuring human exchanges – with informal French 'make-do'. But it is a protestant revolution. It says that people no longer need priests, in the form of governments and bankers, to create the money for them. They can do it directly themselves.

If the international currencies don't protect local life, then we

have to be alchemists enough to create our own. It's as simple as a grain of salt.

But then, if you remember – it was salt-making that Gandhi chose as his first symbolic challenge to British imperial rule over India. ♦

David Boyle is the author of *Funny Money: In Search of Alternative Cash* (HarperCollins/Flamingo, £6.99). His new book, *The Tyranny of Numbers* was published in January.





30 September 1996

Felt sick with nerves on this, my first day of work. How would I cope with seeing animals in pain, or even having to inflict it myself? By the time I got to work I was so anxious that I'd developed a stutter. At the induction talk, for the eight new staff that week, those of us who hadn't returned our contracts were given another copy. I tucked it into my other paperwork. It is a legal document and has a confidentiality clause included. I want to avoid signing this.

I was designated to the dog toxicology department. My unit consists of six rooms and I am given a room of 32 puppies to look after. They are adorable. Later I read the Home Office guidelines, for the health of my dogs. They seem almost impossible. All the dogs have their own legal document and has a confidentiality clause included. I want to avoid signing this.

In the first afternoon I was asked to check the health of my dogs. They seem almost impossible. All the dogs have their own legal document and has a confidentiality clause included. I want to avoid signing this.

10 October 1996

I was told not to use so much sawdust - 'One shovelful is enough and it needn't be piled up.' There is no bedding and this is all the dogs have on the concrete floors.

15 October 1996

Another visit from the Home Office inspectors. This time I saw them outside in the corridor - a technician told me to sweep the floor - I swept it, but they didn't enter my side of the unit. Last time they came they stood outside the dog rooms and chatted with the technicians. So I've now seen them arrive twice, but I haven't seen them look at a dog yet.

17 October 1996

I still feel physically sick with nerves. The Independent Television Commission (ITC) has granted me permission to film what is going on. Based on my written evidence I am granted the licence in the public interest. The camera equipment is strapped to my body. It is very bulky and I am worried because it is visible every time I bend over.

27 October 1996

I help prepare the doses for another experiment - it is an agrochemical toxicity test. A lot of the tests in my department were testing for the toxicity of herbicides and fungicides. The man I am working with measures out the compound and I put it into capsules. He is meant to print this out seven times and then make the next six doses for the week far more quickly and with less accuracy. This means the dogs are not getting the right dose: these tests may be invalid.

28 October 1996

The worst day yet, as the experiments started on my 32 puppies. The test involves putting each dog in a sling and injecting a chemical used in the scanning of human livers. Two are sick as they are being injected, some of their legs swell up and on top of this the puppies wriggle, they are hit or shaken by the scruff of their necks. I feel why have they got them so young? If the puppies wriggle, they are hit or shaken by the scruff of their necks. I feel like a torturer. I hold them and soon get their blood on my hands.

20 November 1996

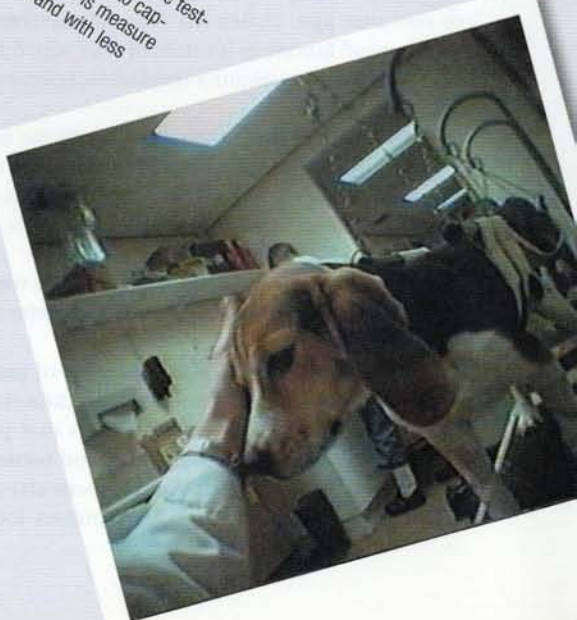
We had to go through the whole blood-testing rigmarole again with my room of puppies. I cannot believe the animal technicians' attitudes - they were messing around while trying to take blood. One technician pokes, tickles and fools around with the man he is working with which made the process of finding a vein take even longer.

25 November 1996

I've started the post-mortems on my dogs. Today I carried my favourite puppy along the corridor to what are known as the Death Row cages outside the post mortem department. I spent last weekend deciding whether to blow this whole project and smuggle her out - but I must think of the future of the other animals here and hope that my film will help all of them.

27 November 1996

I have just walked out of the laboratory for the last time. I wanted to say goodbye and pet the remaining dogs, but I've found it so hard loving those about to be put down that I kept my distance at the end. I don't think anybody suspects me.



SEEING IS BELIEVING

In 1996 Zoe Broughton worked as a laboratory technician inside Huntingdon Life Sciences (HLS) whilst secretly filming. Her programme, broadcast on Channel 4, sparked a downturn for the company from which it still hasn't recovered. Here we present extracts from the diary she kept at the time (see opposite) and her observations now, four years on.

I followed the whole process; from the puppies' settling-in weeks, through experiments, to the postmortems. As I was leaving, the staff told me my chores for the next morning – not suspecting I would be in the edit suite at Small World Productions instead, assembling evidence of cruelty and incompetence.

It's A Dog's Life was broadcast on Channel 4 on 26 March 1997. At last, I thought; everyone will know what really goes on in the Huntingdon laboratories. I wished I could have seen the faces, and heard the comments of the staff I had worked with as they realised what I had really been doing there. My main worry was that, after the film had gone out, nothing would happen. The film would be shown, and I would move on to my next project.

Not so. Three of the laboratory technicians I had filmed were suspended from HLS the day after the broadcast. Two men I had shown hitting and shaking the dogs were arrested at their homes by the local police, and by the autumn had been prosecuted under the Animals Act of 1911. They admitted to charges of 'cruelly terrifying dogs', and were given community service orders and ordered to pay £250 costs by magistrates in Peterborough, the first time laboratory technicians have been prosecuted for animal cruelty in this country.

My film had shown one technician squirting a syringe of drug into

the bin when he could not find the dog's vein, and the overall suggestion was that, as technicians weren't accurately measuring out the chemicals that were being tested, the data could be inaccurate. Some of the companies using this testing laboratory withdrew their contracts and the price of shares in HLS plummeted over the next few months from 121p to 54p, at which level the company asked for the value of the shares to be frozen on the stock market.

HOME AFFAIRS

The Home Office began a full investigation into the allegations I had made, putting many man hours into watching all the uncut video evidence, interviewing past and present staff and studying the company's records. On 24 July 1997, Home Office minister George Howarth told Parliament in a written answer:

'Shortcomings relating to the care, treatment and handling of animals, and delegation of health checking to new staff of undetermined competence, demonstrate that the establishment was not appropriately staffed and that animals were not at all times provided with adequate care.' He therefore proposed to revoke the Certificate of Designation for the laboratories as from 30 November 1997. A replacement certificate was given after several stringent conditions had been met. ■

THE HUNTINGDON SAGA: WHAT WAS IT REALLY ABOUT?

Four years on from its inception, the 'Huntingdon Saga' is worth reflecting on, for it tells us a lot about economics, animal rights and the British government's attitude to protest.

One thing is certain; blaming violent animal rights protests for Huntingdon's near fall into receivership or even closure, is wrong; but very convenient. For the fact is that, though Huntingdon's problem was clearly a financial one, blaming its financial problems on the protests against it legitimised government intervention to save the company.

Based on the dictum that democracy ends once violence starts, the government talked up the 'outrages' committed by protesters, so that whilst defending the 'national interest', they could enforce two far more pressing interests. The first was saving the company itself. The second was justifying a new legal crackdown on dissent.

First, the government, led by science minister Lord Sainsbury and biotechnology expert Monica Darnbrough, played a central role in brokering the rescue package for Huntingdon earlier this year, negotiated with Stephens, the Arkansas investment firm which happened to already be Huntingdon's largest shareholder. To quote Lord Sainsbury: 'If HLS had closed, 1,000 jobs, including those of 400 scientists, would certainly have gone abroad...' Jobs, in other words, were more important than any of the questions raised by activists about what Huntingdon actually does. And, as so often before, the government, so keen to lecture on the

importance of 'free' markets and the evils of trade barriers and subsidies, supported intervention to prop up a company that it had decided was in the 'national interest'.

Secondly, the whole situation was very convenient for Home Secretary Jack Straw, who has long been itching to introduce a new package of draconian law and order measures aimed at weeding out those 'enemies of the State'. What violence there was outside Huntingdon – and there was some – was carefully inflated in government rhetoric to justify the allocation of £1.47 million in police funding to crack down on protests. Then, the government announced the most sweeping extension of police powers since Michael Howard's infamous 1994 Criminal Justice Act, which was explicitly designed to criminalise travellers, ravers and road protesters. Straw's latest tricks include new powers of seizure, crackdown on protests, power to take and keep DNA samples and on the spot penalties for 'disorderly' behaviour. Critics say they are an infringement of what basic liberties the British citizen has left.

The question to be asked on the back of all this is; whose liberties is the government trying to defend? Those of individuals or those of morally questionable but scientifically (and financially) profitable corporations? And are the true criminals those who exploit animals for human gain, or those who complain about it? You decide.

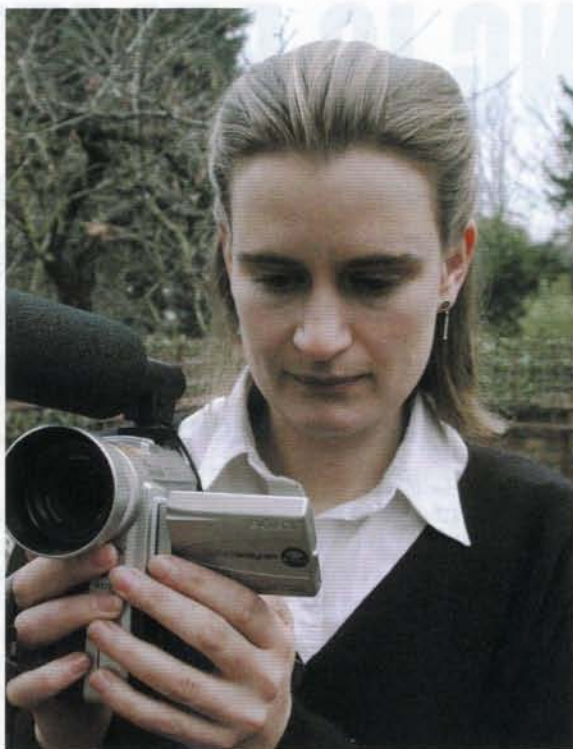
Stephanie Roth

■ Whilst I had been working in the UK company, unbeknownst to me a woman had been doing precisely the same in the American HLS for PETA, (People for the Ethical Treatment of Animals). The events that she had allegedly witnessed were so disturbing that HLS decided to take action.

HLS took PETA to court and they now have a gagging order, stopping them from publicising or even talking about any of the information that they discovered; not because it is untrue, but because American company law protects companies, not freedom of speech or exposure of the truth. Astonishingly, this gagging order also means that PETA cannot communicate with the American Department of Agriculture, which, like our Home Office, was going to investigate the evidence. Obviously if the prime witness is forbidden to speak and cannot authenticate the evidence, then nothing can be done.

My film won two major awards; the British Environmental Media Award 'Scoop of the Year', and then the Brigitte Bardot Genesis Award which I went to America to receive. Clips of the film and the award ceremony in Hollywood were broadcast across the States on Discovery US, which makes the suppression of the footage gathered inside the American HLS especially ironic.

After my film had been broadcast protests began outside



Huntingdon's laboratories, later spreading to the banks investing in the company. Whilst most of the protests were peaceful, there were some appalling acts of violence against laboratory staff by hardcore animal activists. I deplore this, but also think that the company has not been completely straight with the public when it claims that it is in financial trouble because of the violence (or, for that matter, when it says that the beagles in its laboratories are being used for testing life-saving medicines as they admitted to Channel 4 News that a third of their tests are studying toxicity in substances such as pesticides).

FALLING FOUL

Recently the company hit rock bottom, with its share price standing at under 2p per share. I woke one morning to hear on the radio that HLS could be about to announce its closure. At the eleventh hour HLS's largest shareholder, the Arkansas-based Stephens Group, has now put up enough funding to

ensure its operation until 2006.

I did not work there to try to close it down, but I was shocked by what was going on and hope I'd find it a changed place if I went back there now. ♦

Zoe Broughton is a freelance video journalist.

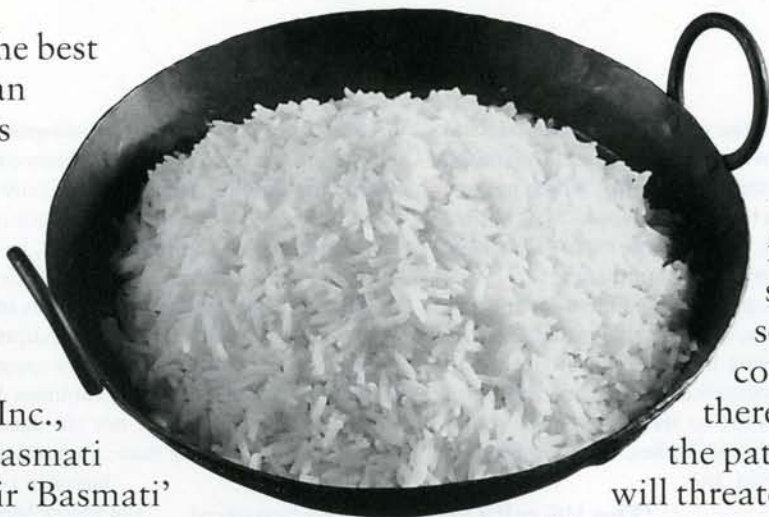
www.theecologist.org

This will make you sick

Basmati is one of the best kinds of rice you can buy, savoured for its slender grain and distinctive taste. But Basmati, an Asian crop, is under threat. A Texas-based company, RiceTec Inc., owns a patent on Basmati rice in the US – their 'Basmati' is derived from crops that have taken farmers in India and Pakistan generations of hard work to develop. It's disturbing to think an Asian crop has now been patented by a US company.

If that doesn't stick in your throat, this will

Large international bio-tech companies are set to monopolise the world market in food crops. Patents on food crops owned by the



developed world are a major concern. Export markets are threatened, the farmers' right to save and sell their seeds is being compromised and there is a real risk that the patenting of food crops will threaten livelihoods, making poor people poorer.

The dice are already loaded against poor families. Now their efforts to secure adequate food are being threatened. The international community must act before it's too late: we want to halt the patenting of staple food crops and genetic resources for food and farming.

Don't swallow any more. Support us today by calling us on 01460 23 80 80.

Act now: stop patenting on crops



private profit
public hunger

ACTIONAID

ActionAid campaigns against food patenting

DISGRACE INTO SPACE

Space is being opened for business – the war business and commercial business. Will humanity be able to prevent the armed conflict and rampant greed that has marked human history on Earth from extending into the heavens? Karl Grossman reports.

Even before man first stepped on the moon, the human race was putting together its plans for the ownership of space. The United Nations General Assembly's Outer Space Treaty, which became effective in 1967, was a giant leap in the race into space. Now ratified by most of the nations of the world, it is the basic international law on the mapped and unmapped areas beyond our planet.

'Inspired by the great prospects opening up before mankind as a result of man's entry into outer space,' declares the preamble to the Outer Space Treaty (OST), 'recognising the common interest of all mankind in the progress of the exploration and use of outer space for peaceful purposes,' the treaty goes on to state that 'outer space, including the moon and other celestial bodies, is not subject to national appropriation' and it seeks to exclude war from space.

The trouble with agreements, however, is that there's always someone who wants to move beyond them. Consequently, on 20 November 2000, 163 nations voted in the UN General Assembly for 'reaffirming' the Outer Space Treaty and specifically its provision that space be set aside for peaceful uses. Their reason? The US is ramping up its own plans for the military domination of space.

The US military wants to 'control space' and 'dominate' the Earth below as explicitly stated in documents of the US Space Command and its components. The US Space Command 'coordinates the use of Army, Naval and Air Force Space Forces' and was set up in 1985, its website explains, to 'help institutionalize the use of space'. US military documents now refer to space as the 'ultimate high ground'. Huge amounts of money have been put into programmes for space warfare including development of space-based laser weapons. One new US programme is the 'Space-Based Laser Integrated Flight Experiment' with a 'lifecycle budget' of \$20 to \$30 billion. One space-based laser already undergoing tests is the Alpha high-energy laser which was reported to have had its 22nd successful test firing last April.

With George W Bush as president and Richard Cheney as vice-president, the US has a national administration committed to expanding US space military activities even further. It is insisting on prompt deployment of a missile-defence system which US military documents describe as one 'layer' in an overall space military programme.

What was dubbed 'Star Wars' after being unveiled by US President Ronald Reagan in 1983 has never gone away. With its enormously powerful complex of corporate and political backers – and avid support of the US military – it developed a momentum of its own. With the assumption of power by the Bush-Cheney administration, it has

received a big boost. As *The Washington Post* noted upon the Bush selection of Donald Rumsfeld as defence secretary, the new Pentagon chief is the 'leading proponent not only of national missile defenses, but also of US efforts to take control of space'.

To reinforce and advance the OST, in 1979 the Moon Agreement – its full title: Agreement Governing the Activities of States on the Moon and Other Celestial Bodies – was adopted at the UN. It restates that space be set aside 'for peaceful purposes' and begins what would be regulation of commercial uses of space. It declares 'the moon and its natural resources' as 'the common heritage of mankind', and states: 'Neither the surface nor the subsurface of the moon...shall become property of any state...organisation...or...person.'

But only 14 nations have signed on to the Moon Agreement – and not the US or Russia or other nations currently considered 'space-capable'. A main reason? 'The attitude is "we don't want to share",' explains Janet Michelle Cuevas, a specialist in space law and UN representative of the Global Network Against Weapons & Nuclear Power In Space.

Meanwhile, commercial space ventures are increasing and getting rather wild.

When a Russian Proton rocket, for example, lifted off carrying a module for the International Space Station last July, it was emblazoned with a giant Pizza Hut logo. 'Our sponsorship of this critical mission tells consumers around the world that we're always looking to take Pizza Hut innovation to new heights,' said Pizza Hut president Mike Rawlings. Pizza Hut, with 11,100 stores on Earth, also plans to provide pizza pies for the station's crew.

Virginia-based LunaCorp intends to land robotic vehicles on the moon beginning in 2003 for missions 'funded by corporate sponsors, exclusive television contracts' among other sources. RadioShack has become the 'first corporate sponsor,' says Luna Corp, of these rovers that 'will prospect for water and prepare the way for human settlements'.

Even more alarmingly, Colorado-based SpaceDev – 'the world's first publicly traded commercial space exploration and development company' – plans to dispatch a device it calls a 'Near Earth Asteroid Prospector' within the 'next three to five years' to Nereus, an asteroid believed rich in minerals. SpaceDev wants to declare Nereus private property and stake a claim to mining rights – despite the OST and Moon Agreement.

Mining in space is a main goal of those seeking its commercial exploitation. 'Indeed, the global expansion of European technology and civilisation brought about by the terrestrial age of exploration is but a pale foreshadowing of the opportunities before us as humans

'The US military wants to "control space" and "dominate" the Earth below as explicitly stated in documents of the US Space Command and its components.'

move out into space,' writes John Lewis, codirector of the NASA/University of Arizona Space Engineering Research Center, in his book, *Mining The Sky: Untold Riches from the Asteroids, Comets and Planets*. And although penetration of space by people and their machines is but a few decades old, already the space above the Earth has become contaminated. There are now 110,000 man-made objects larger than a half-inch orbiting in the space above the Earth, and the situation has gotten so serious that NASA 'now replaces pitted orbiter windows after most flights' of space shuttles, notes a 1987 US National Research Council report that warns of potentially catastrophic collisions with space debris. The amount of 'space junk' has doubled since 1990 and now poses 'a navigational hazard,' says Norwegian space specialist Erik Tandberg. The US and Norway are planning a giant radar station to be called Globus II in Norway's Arctic specifically to better monitor orbiting debris.

'A total of over 3,000 tons of space debris surrounds the Earth today,' says Dr. Alexey Yablokov, a noted biologist and president of the Centre for Russian Environmental Policy. The 'rapid accumulation of debris' could 'complicate the further development of astronautics since there would be a direct threat of collision with debris fragments which travel at very high altitudes,' says Dr. Yablokov.

Among the junk now overhead are 37 nuclear-powered satellites put in space by the US and former Soviet Union. The operation of the satellites is over but the radioactive fuel in them is still hot and lethal and they'll be falling back to Earth in the centuries ahead.

The use of nuclear power in space – despite serious accidents involving both the US and Soviet/Russian nuclear space programmes – continues. The next proposed US launch of a nuclear-powered device is scheduled for 2003 when NASA plans to send a plutonium-powered space probe called Europa to the moon of Jupiter of that name. The plutonium system is to generate electricity to power



onboard instruments. NASA claims it is necessary, that at that distance from the sun, photovoltaic solar cells can't serve as a substitute (as they now do on satellites because of accidents in which nuclear-powered satellites dropped to Earth dispersing radioactive material). Yet, also in 2003, the European Space Agency will be sending up its Rosetta space probe which will be using high-efficiency solar cells instead of plutonium to produce electricity – and Rosetta is to go beyond the orbit of Jupiter to rendezvous with the comet Wirtanen.

NASA's insistence on using nuclear power in space is due, in part, to its desire to coordinate its operations with the US military which regards nuclear power as necessary for the high-powered weapons such as lasers it would like to deploy in space in coming years.

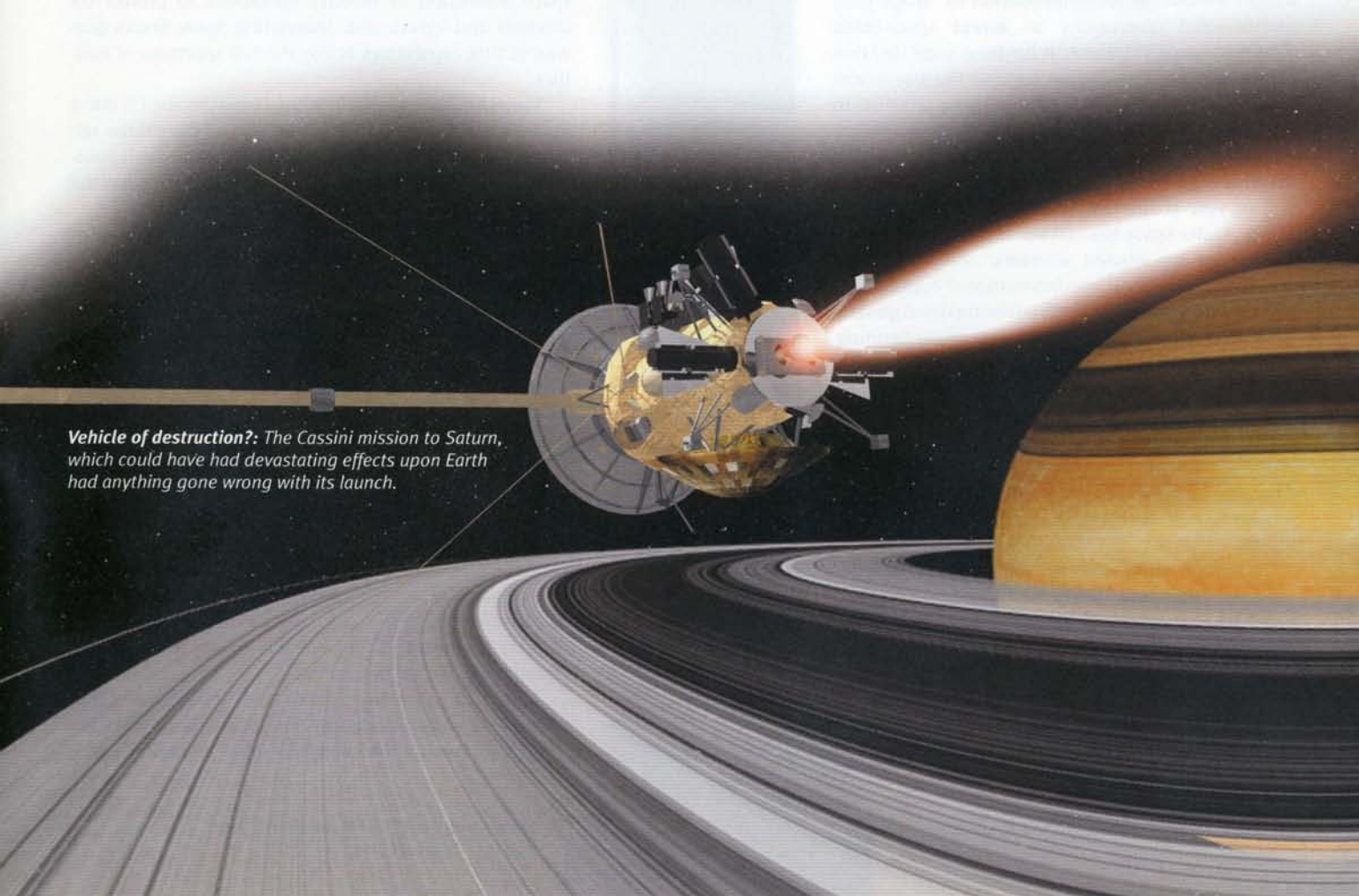
LASER TREATMENT

As *New World Vistas: Air And Space Power For The 21st Century*, a 1996 US Air Force Board report, states: 'In the next two decades, new technologies will allow the fielding of space-based weapons of devastating effectiveness to be used to deliver energy and mass as force projection in tactical and strategic conflict... These advances will enable lasers with reasonable mass and cost to effect very many kills.'

'If the US is allowed to move the arms race into space, there will be no return,' says Bruce Gagnon, coordinator of the Global Network Against Weapons & Nuclear Power in Space. 'We have this one chance,' he emphasises, 'this one moment in history, to stop the weaponisation of space from happening.'

Gagnon, the leader of the nine-year-old Global Network, based in Florida with affiliates throughout the world, adds: 'For years we polluted our lakes, rivers and oceans thinking that the solution to pollution was dilution. Today we know this was a mistake. But space is now viewed similarly – that it is vast and limitless and that nothing we do in the heavens will have any consequences.'

Vehicle of destruction?: The Cassini mission to Saturn, which could have had devastating effects upon Earth had anything gone wrong with its launch.



‘For thousands of years our relations have marvelled at the moon and stars while sitting by their campfires,’ muses Gagnon. ‘Even today, no matter where we live on this planet, we all still feel connected to the night sky. It is a common experience that we all share. Now imagine putting military bases on the moon, or constellations of space-based lasers orbiting the Earth. Imagine weapons in space, possibly powered with nuclear reactors. These are not images that we can accept. We must move now to protect space like we would any other vital wilderness. The heavens must be viewed as a preserve from weapons, nuclear power and massive commercial development. The sky is not for sale.’

AMERICAN BREAK-AWAY

Try telling that to the US. In recent years, it has become clear that the original wording of the OST left a few grey areas on the subject of weaponry – laser weapons, for example, didn’t exist in those days, so are not specifically banned by the agreement. To clear up any confusion, Canada and China in recent years have put forward resolutions at the UN. UN Secretary General Kofi Annan has strongly supported this initiative. As Annan declared at the opening of the UN Conference on Disarmament in Geneva in 1999, space must be maintained ‘as a weapons-free environment’ and he urged ‘we codify principles which can ensure that outer space remains weapons-free’.

However, the US has blocked movement on the resolutions. In a presentation at the UN in 1999, Marc Vidiraire, counsellor of the Permanent Mission of Canada, pointed out that ‘Canada first formally proposed... a legally binding instrument’ for a ‘ban of the weaponisation of space’ in 1997 and renewed it thereafter. He cited a US Space Command report titled *Long Range Plan* and ‘its recommendation to “shape [the] international community to accept space-based weapons”’. Said Vidiraire: ‘It has been suggested that our proposal is not relevant because the assessment on which it rests is either premature or alarmist. In our view, it is neither. One need only to look at what is happening right now to realise that it is not premature.’

Last year at the UN, Canada again sounded the alarm. ‘Outer space has not yet witnessed the introduction of space-based weapons,’ said Vidiraire. ‘This could change if the international community does not first prevent this destabilising development through the timely negotiation of measures banning the introduction of weapons into outer space... There is no question that the technology can be developed to place weapons in outer space. There is also no question that no state can expect to maintain a monopoly on such knowledge – or such capabilities – for all time. If one state actively pursues the weaponisation of space, we can be sure others will follow.’

In his first address at the UN, Russian President Vladimir Putin told the ‘Millennium Summit’ last year that ‘particularly alarming are the plans for the militarisation of the outer space’ and he proposed ‘under the umbrella of the UN, an international conference’. In Canada at year’s end, Putin and Canadian Prime Minister Jean Chrétien issued a joint statement announcing that ‘Canada and

the Russian Federation will continue close co-operation in preventing an arms race in outer space’ that will include organising an ‘international conference on the non-weaponisation of outer space’ in 2001.

But why are other countries so opposed to US plans for domination of space? Is it because they genuinely feel it should be left as a ‘wilderness’, or because they want a slice of the action too?

‘Space domination is a hegemonic concept,’ states Wang Xiaoyu, first secretary of the delegation of China to the UN. ‘Its essence is monopoly of space and denial of others’ access to it. It is also aiming at using outer space for achieving strategic objectives on the ground.’ The result, he adds, would be either other nations accepting the US gaining strategic superiority in space or to launch their own programmes. ‘Against this background,’ he said, ‘the international community should act without any further delay to take effective measures, with a view to keeping the worst from happening.’

The following day, at the UN Conference on Disarmament, China formally advanced its resolution for ‘an international legal instrument banning the test, deployment and use of any weapons, weapon system and their components in outer space, with a view to preventing the weaponisation of outer space.’ From the floor, country after country declared support.

Much of the introduction to the *Long Range Plan* appears in the box on page 37, but the full document then continues on for more than 100 pages detailing US plans for ‘Control of Space’, ‘Full Spectrum Dominance’, ‘Full Force Integration’, ‘Global Engagement’.

Another US Space Command report is *Vision for 2020* which on its cover depicts a laser weapon shooting a beam down from space zapping a target below. *Vision for 2020* then proclaims: ‘US Space Command – dominating the space dimension of military operations to protect US interests and investment. Integrating Space Forces into warfighting capabilities across the full spectrum of conflict.’

Vision for 2020, issued in 1996, compares the US effort to control space and the Earth below to how centuries ago ‘nations built navies to protect and enhance their commercial interests,’ how the empires of Europe ruled the waves and thus the world.

And *Vision for 2020* also stresses the global economy. ‘The globalisation of the world economy will also continue, with a widening between ‘haves’ and ‘have-nots’,’ says the US Space Command. The US Space Command is readying itself to be ‘the enforcement arm for the global economy,’ says Bill Sulzman, director of Citizens for Peace in Space, the group challenging US space military activities in Colorado Springs, Colorado, where the US Space Command is headquartered.

The most recent report outlining US military space plans is *Almanac 2000*, an Air Force Space Command report that declares: ‘The future of the Air Force is space.’ ‘Into the 21st Century,’ it says, the US Air Force needs to be: ‘Globally dominant – Tomorrow’s Air Force will likely dominate the air and space around the world... Selectively lethal – The Air Force may fight intense, decisive wars with great precision... The future Air Force will be better able to monitor and shape world events.’

‘Master of Space’ is a motto of the Air Force Space Command. ‘Master of Space’ appears as a uniform patch and is featured in jumbo letters over the entrance of a



major Space Command element, the 50th Space Wing in Colorado.

US military leaders are similarly blunt. As General Joseph Ashy, then commander in chief of the US Space Command, put it in 1996: 'It's politically sensitive, but it's going to happen. Some people don't want to hear this, and it sure isn't in vogue, but – absolutely – we're going to fight in space. We're going to fight from space and we're going to fight into space.' Ashy spoke of 'space control,' the US military's term for controlling space, and 'space force application,' its definition for dominating Earth from space. Said General Ashy: 'We'll expand into these two missions because they will become increasingly important. We will engage terrestrial targets someday – ships, airplanes, land targets – from space. We will engage targets in space, from space.'

COMMERCIAL DRIVE

As hard-driven as the push to make space a new arena of war is the effort to make money from the heavens. Organisations including ProSpace, Archimedes Institute and Space Frontier busily lobby for unfettered capitalism in space.

Allan Wasser, a ProSpace board member, has been especially active in urging that 'the way to finesse the [Outer Space] Treaty is for the United States to pass a law directing American courts to grant recognition to an extra-terrestrial land claim made by any private entity that has established a true space settlement.' Wasser says: 'The 1967 OST is not the norm in human history. The right to claim newly settled property has always provided the economic incentive for human expansion. Would Europeans have settled America if they couldn't claim ownership of the land they settled?'

On the other hand, Ryder W Miller of the Astronomical Society of the Pacific's *Mercury Magazine* has coined a new term – astroenvironmentalism. With the new millennium, notes Miller, 'private companies and national interests are making plans to tromp around the inner Solar System... The Mars Society would like to have a human presence on Mars and even terraform the planet to suit human purposes.

SpaceDev would go to the asteroid Nereus for big bucks... NASA, meanwhile, is facilitating the privatisation of space ventures. All of these ventures have one thing in common: They have not incorporated the concerns or lessons of environmentalism or preservation into their plans to step outward into the Solar System.' Miller argued

that 'the first goal of environmentalists should be to lobby the United Nations' and national space agencies 'to agree to ethical guidelines'. He would like 'Outer Space Environmental Impact Statements for the world to read'.

The UN Office for Outer Space Affairs (OOSA) based in Vienna has jurisdiction over the OST and the Moon Agreement. OOSA Associate Legal Officer Philip McDougall notes that the Moon Agreement 'does not exclude potential commercial activities such as space transportation, space tourism, space based telecommunications, power generation, medical and

agricultural product development etc, at all. These could conceivably all be conducted without the need to lay claim to ownership of the moon or other celestial bodies,' he says.

There are charges that, like governmental regulators of terrestrial activities, OOSA is cosy with commercial interests. Regina Hagen of the Darmstadter Friedensforum in Germany, a board member of the Global Network Against Weapons & Nuclear Power of Space, notes that when the OOSA-organised UNISPACE III conference in Vienna in 1998 was opened for industry participation there was even a 'Preparatory Seminar' titled: 'The Age of Space Commercialisation. The Evolving Role of Governments and Industries in Enhancing International Cooperating in Space Activities.'

Once commercialisation enters the fray, then legal issues follow quickly behind, not least the matter of liability. For instance, a major provision of the OST is that a nation that launches 'an object into outer space... is internationally liable for damage' caused by it. The subsequent 'Convention on International Liability for Damage Caused by Space Objects' which entered into force in 1972 and like



WORDS OF WAR: EXTRACTS FROM AMERICA'S LONG RANGE PLAN

'The Long Range Plan has been US Space Command's #1 priority for the past 11 months, investing nearly 20 man-years to make it a reality. The development and production process, by design, involved hundreds of people including about 75 corporations [including Aerojet, Boeing, Hughes Space, Lockheed Martin, Rand Corp, Raytheon, Sparta Corp, TRW and Vista Technologies].

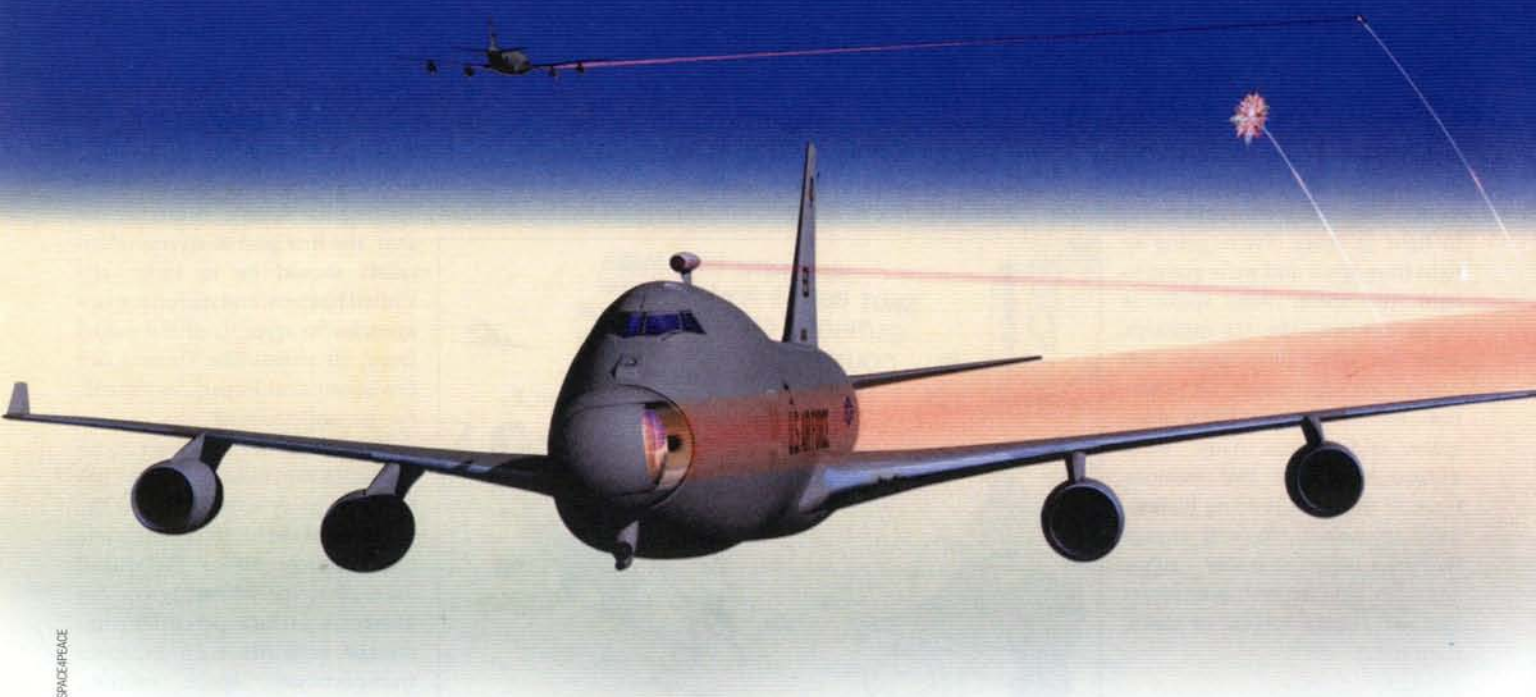
'Now is the time to begin developing space capabilities, innovative concepts of operations for warfighting, and organizations that can meet the challenges of the 21st Century... Even as military forces have become more downsized in the 1990s, their commitments have steadily increased. As military operations become more lethal, space power enables our streamlined forces to minimize the loss of blood and national treasure... Space power in the 21st Century looks similar to previous military revolutions, such as aircraft-carrier warfare and Blitzkrieg.

'The time has come to address, among warfighters and national policy makers, the emergence of space as a center of gravity for DoD [Department of Defense] and the nation. We must commit enough planning and resources to protect and enhance our access to, and use of, space. Although international treaties and legalities constrain some of The Long

Range Plan's initiatives and concepts, our abilities in space will keep evolving as we address these legal, political, and international concerns.

'The United States will remain a global power and exert global leadership... The United States won't always be able to forward base its forces... Widespread communications will highlight disparities in resources and quality of life – contributing to unrest in developing countries... The global economy will continue to become more interdependent. Economic alliances, as well as the growth and influence of multi-national corporations, will blur security agreements... The gap between 'have' and 'have-not' nations will widen – creating regional unrest... The United States will remain the only nation able to project power globally... One of the long acknowledged and commonly understood advantages of space-based platforms is no restriction or country clearances to overfly a nation from space. We expect this advantage to endure... Achieving space superiority during conflicts will be critical to the US success on the battlefield.'

The Long Range Plan is just one of several US military documents – publicly available on US Space Command website at <http://www.space.com.af.mil/usspace> – that unequivocally spell out US plans for space.



SPACEPEACE

the OST is signed by most of the world's nations, says 'a launching state shall be absolutely liable' for such damage.

Yet in 1991, NASA and the US Department of Energy entered into a Space Nuclear Power Agreement covering US space missions involving nuclear devices stated that henceforth the flights would be covered under a US law called the Price-Anderson Act originally passed to shelter the nuclear power industry. The Price-Anderson Act limits liability in the event of a nuclear accident to \$8.9 billion for US domestic damage and but \$100 million for damage to all foreign nations.

Thus, if an accident occurs on the upcoming Europa plutonium-fueled NASA shot or any of other planned NASA space nuclear missions and there is an accident, despite the international treaty, the US will not accept full liability.

DANGERS IN THE SKIES

And such accidents have happened. The most serious US mishap occurred on 21 April 1964 when a satellite powered by a SNAP-9A (SNAP for Systems Nuclear Auxiliary Power) fueled with plutonium failed to achieve orbit and dropped from the sky, disintegrating. The 2.1 pounds of plutonium scattered around the world. 'A worldwide soil sampling programme carried out in 1970 showed SNAP 9-A debris to be present at all continents and at all latitudes,' according to the 1990 publication, *Emergency Preparedness for Nuclear-Powered Satellites*, a report by Europe's Organisation for Economic Cooperation and the Swedish National Institute of Radiation Protection. The worst Soviet space nuclear accident occurred on 24 January 1978 when Cosmos 954, a satellite powered by an onboard nuclear reactor, fell from orbit crashing into the Northwest Territories of Canada splattering nuclear debris over a huge area. 'Sizeable amounts of radioactive debris... survived reentry and were spread over a 600 km path from Great Slave Lake to Baker Lake,' notes *Emergency Preparedness for Nuclear Powered Satellites*.

And five years before the 'Space Nuclear Power Agreement' was signed came the Challenger accident and although no nuclear material was on board Challenger when it was sent up on 28 January 1986 and exploded, on its next mission scheduled for May 1986 it was slated to loft a space probe with 24.2 pounds of plutonium fuel.

The current Cassini mission to Saturn involves the most plutonium ever used on a space device, 72.3 pounds. Its most dangerous

aspect came on 17 August 1999 when NASA had Cassini whip by the Earth at 700 miles high in a 'slingshot manoeuvre.' The idea was to give Cassini a 'gravity assist' to provide it with additional velocity so it could reach Saturn. NASA in its Final Environmental Impact Statement for the Cassini Mission said that if the probe did not pass overhead as planned but dipped into the Earth's atmosphere – it would making an 'inadvertent reentry' and break up (it has no heat shield), plutonium would be released and, said NASA, 'approximately 5 billion of the... world population at the time... could receive 99 per cent or more of the radiation exposure.'

Cassini did get past. But five weeks later, on 23 September, NASA's Mars Climate Orbiter in a flight over Mars came in too low and crashed. It turned out that two teams of Mars Orbiter scientists – one from Lockheed Martin, the other from NASA's Jet Propulsion Laboratory – had been working with different scales of measurement, one feet, the other metres, in determining altitude.

To deal with burgeoning commercial activities in space, Attorney Cuevas of the Global Network proposes 'an expansion of international environmental laws' – the laws that nations have agreed on to protect the oceans, for example – and then 'integrating' space environmental statutes into 'an international space law regime'.

Citizen action at the grassroots is very much needed. 'Creating a global democratic debate about the kind of seed that humankind should carry into space is the ultimate goal of the Global Network,' says Gagnon. The group seeks to organise 'a collective voice that calls for protecting space from the evils that we have sown on this Earth.' ♦

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'To deal with burgeoning commercial activities in space, Attorney Cuevas of the Global Network proposes "an expansion of international environmental laws".'

SPACE TO LET: ADVERTISING IN THE SKIES

An example of how grassroots and political action can achieve a victory – although perhaps only partial – on space-environmental issues involves the battle against a programme to put 'billboards' in space.

In 1993, a company called Space Marketing Inc based in Georgia announced plans to place mile-long, half-mile-wide advertising 'billboards' in orbit. This would be 'a tremendous opportunity for a global-oriented company to have their logo and message seen by billions of people on a history-making, "high profile" advertising vehicle,' declared Mike Lawson, chief executive officer of Space Marketing Inc.

Space Marketing Inc named its placard 'The Environmental Billboard' because 'not only will it carry a message, but it will actually help the environment,' said Lawson. The stretch of reflective mylar plastic, supported by 'thin wall plastic tubes,' would include 'ozone reading sensors... to continuously monitor the condition of the earth's delicate protective ozone layer,' he said.

The first such billboard was to be in place in time for the 1996 Summer Olympics in Atlanta, Georgia, near the headquarters of Space Marketing Inc.

But environmentalists, astronomers and several US public officials didn't like the scheme at all and mounted a campaign that – after seven years – culminated last year in the US Congress passing and President Bill Clinton signing a law banning 'obtrusive space advertising'. The law defines 'obtrusive space advertising [as] advertising in outer space that is capable of being recognised by a human being on the surface of the Earth without the aid of a telescope or other technological device.'

The US secretary of transportation, the official who must approve of space launches by US companies, is directed under the law not to license any 'launch of a payload containing any material to be used for the purposes of obtrusive space advertising'.

Also, the US President is 'requested to negotiate with foreign launching nations for the purpose of reaching one or more agreements that prohibit the use of outer space for obtrusive space advertising purposes'.

However, the law specifically states that it does not 'apply to non-obtrusive commercial space advertising, including advertising on commercial space transportation vehicles; space infrastructure payloads; space launch facilities; and launch support facilities'. NASA is currently considering what advertising should be allowed on the US portion of the International Space Station.

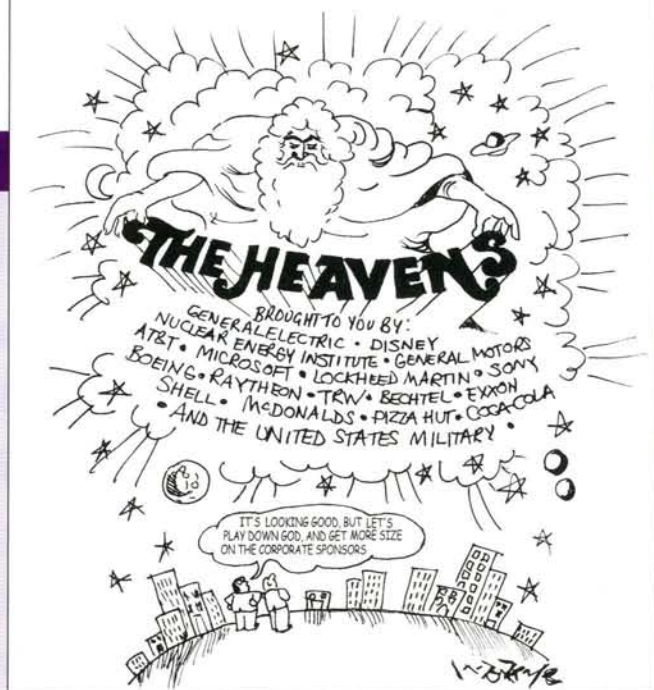
And Space Marketing Inc is still in operation – now doing business with the Russians. Indeed, Space Marketing Inc was a partner in the launch last year of a Russian Proton rocket with a Pizza Hut logo on its side (see main article).

'Let's stop and think for a moment about what our world would be like if Space Marketing Inc has their way and put up one-mile mylar billboards into earth orbit advertising the latest products,' declared US Representative Edward J Markey of Massachusetts in 1993 as Space Marketing Inc unveiled its space billboard programme.

'Children would learn a new nursery rhyme: "Hey, diddle diddle, the cat and the fiddle, the cow jumped over the mylar." They would make a wish upon a falling billboard,' said Markey, adding: 'We might stand here today and laugh about the notion of enormous billboards floating above the horizon or convince ourselves that it "just couldn't happen". But if left unchecked it might happen. Would companies pay a million dollars a day [the price Space Marketing Inc set] for a single billboard? Already today they might spend half that on a single TV ad. In aggregate, US businesses buy well over \$100 billion of advertising annually.'

'If allowed to happen,' Markey declared, 'this scheme would turn our morning and evening skies, often a source of inspiration and comfort, into the moral equivalent of the side of a bus.'

Markey, a leading environmentalist in the US Congress and US Senator James Jeffords of Vermont (a state rare among US states for it bans billboards), introduced the Space Advertising Prohibition Act of 1993.



And environmentalists and astronomers moved forcefully, too. A Coalition Opposing Billboards in Outer Space was formed that included the National Audubon Society, Center for Media Education, Astronomical League, Astronomical Society of the Pacific, Center for Science in the Public Interest, Scenic America, International Dark-Sky Association, Center for the Study of Commercialism, among other groups. They called Space Marketing Inc's plan 'commercial pollution of space'.

'Americans and other residents of this planet deserve places free of hucksters,' declared Michael F Jacobson, co-founder of the Center for the Study of Commercialism in Washington, DC.

US consumer activist Ralph Nader's network of Public Interest Research Groups launched a campaign called 'Save Our Skies, Ban Billboards In Space.' 'The signs, promoted by Space Marketing Inc,' they noted, would be 'roughly the size of the full moon to an observer on the ground.' They decried 'defacing the heavens with advertising.'

The late Carl Sagan got involved, writing from his Center for Radiophysics and Space Research at Cornell University that the scheme was an 'an abomination. It is the thin edge of a wedge which may destroy optical ground-based astronomy, the most ancient of the sciences. In the long run it means that there will be no place on Earth safe from advertisers. It opens the door to political, ideological and religious sloganeering from the skies. It is an attack on science, an invasion of privacy for everyone, an aesthetic affront, and a misuse of the engineering talent in the national laboratories'. (A scientist at the Lawrence Livermore Laboratory in California, which otherwise is occupied with producing nuclear weapons, was listed as involved in the design of the space billboards.)

The University of London Observatory protested saying that the programme would 'open a door which could lead to the most damaging consequences for astronomy' and calling upon the International Astronomical Union to take action. The Union issued a statement declaring that 'the future use of solar reflectors for advertising will fatally damage astronomical science'.

Under the original Markey-Jeffords legislation, the 'sale of products produced by companies advertising in space would be prohibited' in the United States. The law passed last year seeks to have the US president 'negotiate' with other nations.

Can – and will – Space Marketing Inc or successor companies be stopped from making space advertising deals with other nations? And what about somewhat less 'obtrusive' space advertising? As Markey said at the height of the space billboard fight in 1993: 'If there is money to be made then it's just a matter of time until someone, somewhere tries to do it.'

Despite repeated calls to Space Marketing Inc by the author, officials of the company did not respond to requests for information on their future plans.

THERE'S NO PLACE LIKE HOME...

Could 'bioregionalism' be the way out of our environmental crisis? Kirkpatrick Sale puts the case for the political philosophy he helped to develop.



A few years ago, writing a biography of Christopher Columbus for the quincentenary of his discoveries, I came across a wonderful Spanish term – *querencia* – usually translated as ‘love of home’. It is that, to be sure, but colloquially it means much more than that too, as I came to learn. *Querencia* is the deep sense of inner well-being that comes from knowing a particular place on the Earth; its daily and seasonal patterns, its fruits and scents, its soils and bird-songs. A place where, whenever you return to it, your soul releases an inner sigh of recognition and realisation.

That is pretty much what bioregionalism is.

There's more to it, of course, and I'll get to that, and why it matters. But it is useful to look at Columbus for a bit, for he is a part of the problem (as well as carrier of the problem) for which *querencia* – and bioregionalism itself – is the solution.

EXAMINING THE PROBLEM

Columbus never knew a home in all his travels, never experienced a love of place, much less a deep fellowship with any particular part of land or sea. He was in that sense tragically symbolic of the culture from which he sprang, the culture he was to implant in the New World. Europe was a society of restless and rootless people, many repeatedly forced to move to try to escape the ravages of the Plague, others regularly conscripted for far-off wars, some in constant motion like the peripatetic court of Spain. Even peasants were constantly displaced by famine, war, pestilence, crop failure and Lordly whim. In this maelstrom, in which the migrant soul had no way to learn or value nature, the only groundings were those of wealth, materialism, humanism, violence and conquest. It was those that became Europe's gift to the world.

And nowhere more so than in the Americas, especially the part settled by successive waves of European immigrants, pushing on from one ocean to the other for three centuries and creating a United States in which mobility, upward and outward, has always been its most treasured characteristic. And if today 20 per cent of its population changes residence every year (as against 8 per cent in the UK, for example), where social cohesion is so thin that its murder

and incarceration rates are the highest in the world, and the barest minimum of civic participation (ie voting) engages less than half the population at best, and then but once every four years, that is the inevitable result of being what historian Samuel Morison has called a ‘tenacious but restless race’ – never knowing, except in rarest incidences, the comfort of *querencia*.

Surely that is why this nation, and the industrialised system it has spawned, has so little regard for the natural world. We don't live on any one part of the land long enough to know very much about it, and it enters our consciousness mostly only when we wish to exploit it. In that sense Americans today are the true inheritors of the early settlers whom Alexis de Tocqueville described as ‘insensible to the wonders of inanimate nature’ and ‘unable to perceive the mighty forests that surround them till they fall beneath the hatchet’. And for all our efforts here in America to establish a huge park system and

protect wilderness areas, our truest character is revealed in our unabated urban-suburban sprawl, a paving over of three million acres of US farmland by 1995 and now gobbling up more than twice as much land as just 15 years ago.

WHAT IS BIOREGIONALISM?

Given the consequences today of living in a system devoted to the rapidest exploitation of the natural world for the rapidest accumulation of junk, surely it is not fanciful to feel that some such identification with place as *querencia* implies is a necessary antidote; and the sooner the better. Surely it makes sense to imagine a society divided into territories and communities where love of place is an inevitable byproduct of a life mindful of natural systems and patterns experienced daily – however far removed this may seem just now for the gigantic, destructive society around us.

This is what bioregionalism offers – and why it matters. It is a way of living and thinking which views the world in terms of the actual contours and life-forms of the Earth – measured by the distinct flora and fauna, the climate and soils, the topology and hydrology, and how all these work together: regions defined by nature, not by legislature. But it does more: it pays respect to these natural ecosystems by seeing them as coherent and empowered social and political entities as well, necessarily living by ecological principles of sustainability dictated by the limits of the land itself.

In the United States, it is easiest to think of watersheds as the defining bioregional unit – the Hudson Valley, for example, where I live, or the Potomac estuary, or the Kansas River area. But there are myriads of other discrete territories, such as deserts, mountain ranges, peninsulas, and islands, that function as bioregions. What gives particular weight and authenticity to viewing America this way is that it conforms remarkably to the way that the original people lived here before the European invasion.

A map of Indian settlement areas when treaties were signed with the US government in the 19th century shows that the lands the tribes claimed coincide to a great degree with what we now call bioregions – the Kaw along the Kansas River, for example, the Pawnee in the Platte watershed, the Osage on the Ozark plateau – indicating that people living in close harmony with the land naturally patterned themselves in bioregional ways.

Much the same is true of the traditional cultural regions of Europe, too, which to a large degree are shaped by geography – Brittany, for example, is a distinct peninsular plateau, Catalonia follows the Ebro watershed, Wales is the land of the Cambrian Mountains, and so on. A map of Europe's ancient regional divisions – such as Leopold Kohr produced for his wonderful *Breakdown of Nations* (though incomplete) – shows most of them to have clear geographical foundations, even if a few, like Scotland, actually comprise several bioregions. It is this patterning that reaffirms the bioregional idea as the natural, and once obviously successful, principle for human organisation.

Indeed, I would go so far as to say that since this was the way that humans lived for several million years in their ancient tribal societies, this way of life has become embedded in our very genetic makeup and remains always in our souls as the true, desirable configuration of people even when modern experience tries to deny it.

Now for a few basics.

HOW COULD IT WORK?

Obviously the institutions and processes within bioregions would vary as the lands and human experiences on them vary. But inherent in the bioregional vision are several fundamental precepts, rooted in an essentially ecological worldview, that would inform any kind of human settlement.

First, an economy guided by what Edward Goldsmith has called the ‘laws of ecodynamics’ – principally conservation as the ‘basic goal of behaviour’ and stability as the optimum norm in nature, but



including also economic interactions based on co-operation rather than competition, and enterprises governed by regardful self-sufficiency rather than imperialism or globalism. It would have to be careful about drawing down resources, processing, using, and recycling them, and it would follow the general rule of nature that all processes are circular. The goals would be potlatch distribution rather than private accumulation (both within and between communities) and general apportionment of resources rather than individual ownership.

Second, a governance based on the ecological law of decentralisation, establishing empowered communities within the empowered bioregion, and eliminating any form of government interference beyond that. Diversity and complementarity, two important ecological values, would guide political forms, encouraging a variety of human settlements and governments that would play distinct roles, all on an equal footing and none superior to any other. Given coherent and limited populations, some forms of democracy would be possible, and even consensus might be a goal, but neither would be necessary as long as political arrangements were voluntary and place-specific.

Third, a society following such ecological principles as symbiosis and division, the first directing co-operation among groups and communities within a bioregion – between countryside and town, for example – and the second assuring that none became too large or overbearing. The optimum population of community and region would be easy to determine, knowing that the human community could not grow so large as to harm or dislodge any other floral or faunal community or the air and water shared among them, and groups would need to limit their size or break off and form new settlements if they grew too big.

That, at any rate, is the bioregional vision. Yes, it may all seem a bit too, well, capricious; utopian. But what keeps it from being just cloud-cuckoo-land is the fact that it is based not only on the eternal laws and systems of nature, but on the ways of tribal and ancient peoples who knew and followed those laws and systems. And one thing more: it is a vision, a goal, that inspires people even now, today, and all over the world.

Not that they are all consciously bioregional – far from it. But on every continent for the last 50 years there have been – and still are – movements fighting in one way or another against the nation-state paradigm in the name of smaller, regional identities, seeking to run their own affairs their own way. That is very much the bioregional cause, and if most such movements have not marched under an ecological banner and have no particular sense of environmental ethics, they usually battle in the name of a territory recognisably defined by natural systems and a love of them.

THE REBIRTH OF REGIONALISM

In Europe alone, there are movements in more than three dozen regions seeking to assert their identities (besides the Maastricht Treaty's Committee of the Regions), from Wales and Cornwall to the Basque country and Catalonia, from Lapland and Scania to Pandania and Corsica. Some have ancient roots and some are modern responses to modern problems – as, for example, the Alpine Diamond in the Pennine Alps – but everywhere, as the diplomatic correspondent John Newhouse has written, 'regionalism appears to be Europe's current and future dynamic'. Certainly with what Vaclav Havel has called 'the end of the nation state,' the prospect of a devolution of power to these regions, whether or not supranational forms like the European Union continue to exist, is very real.

It was this dynamic that, more than anything else, led to the

breakup of Yugoslavia, and, though the results at the moment don't seem to present a very pretty picture, (quite apart from the ugly means of achieving them), the underlying truth of the matter is that 'Yugoslavia' was a made-up patchwork of ethnic bioregions (Slovenia, Serbia, Croatia, Kosovo, Macedonia, and Montenegro were all ancient geographically divided regions) that could not possibly last. That, too, is what the break-up of the Soviet Union was all about: the resurgence of a plethora of regional realities that not even the heavy hammer of Communist conformity could do away with. The three Baltic states, Armenia, Georgia, Azerbaijan, Ukraine, and a host of various '-istans' from the Caspian to Baikal, as well as a hundred other ethnic groups (and languages) with place-based identities – this is the eternal verity of this part of the world, for this is what its geography (and human development within that geography) has fashioned.

The revival of regionalism is to be seen everywhere, usually driven by ethnic attachments but always with geographical roots: in Turkey and the Middle East, in the Indian subcontinent, along the Indonesian archipelago and the Philippine chain, in China, everywhere in Africa, in Central and South America. It has been estimated, in fact, that there are 75 regional military forces in existence today, fighting against one nation state or another – some of them well-known (as in East Timor, Irian Jaya, Kurdistan, Chiapas, Kashmir, Somalia, Ethiopia, Colombia and Peru) but most of them out of the limelight and ignored by the internationalist media.

And in the land where bioregionalism started as a movement some 20 years ago, there are unmistakable signs of a resurgent regionalism, though none has taken up arms.

BIOREGIONALISM IN AMERICA

I suppose it is not news to say that there are, as yet, no actual self-empowered bioregions in the United States, nor are there likely to be in the near future. Nonetheless, according to Alan Ehrenblat, executive editor of *Governing* magazine, the US Congress 'has ceased to be the primary political instrument for resolving the difficulties of modern American capitalism', and 'people have discovered that the governmental units created long ago are too clumsy to serve them very well'.

Thus, there are now more than 30,000 'special district governments' operating at regional and local levels for such things as transportation, energy, water, land use, and education, and the Federal government has decentralised itself for day-to-day functioning into 600 regional councils, 488 substate planning districts, and at last count, some 1,932 regional boards, committees, and offices to plan and carry out nationally-funded services.

There are even regional secession movements these days. There is an active group in the San Fernando Valley north of Los Angeles trying to take that bioregion out of that city's unwanted reach. There is an organisation in Maine, including a State legislator, pushing to make the northern mountainous section of the state, so different from the coastal region, into the 51st state. Hawaii actually voted for secession and the right to become an independent nation in a non-binding referendum in 1996, and Alaska has an Independence Party seeking to put the question of nationhood status on the ballot there.

As for the bioregional movement itself, there are now more than 200 self-proclaimed bioregional organisations in the United States, and several in Central America and Canada as well. The concept of bioregionalism has been recognised by the Professional Geographers Association and the American Society of Landscape Architects, and has been used by the Government of California to shape 11 watershed organisations in order to develop policies on land use and natural resources. The idea has been quietly co-opted too by the Interior



Department of the Federal government, which has created Resource Advisory councils and Ecosystem Projects – on bioregional grounds – in a number of Western states, and by the US Forest Service, which has created an Ecosystem Management Division in Fort Collins, Colorado, complete with a map of North American 'ecoregion divisions' that is nothing more than a bioregional blueprint.

CAN IT EVER HAPPEN?

What it would take for the bioregional movement to go from theory to practice, from scattered environmental organisations to shadow (or even recognised) bioregional governments, is difficult to say. It is not likely to happen soon, even in those parts of the world where the regional passion has taken up arms.

Nonetheless, as national governments show themselves increasingly powerless and irrelevant to most people's real needs and passions, alternative forms will be developed and gradually empowered as they provide ground-level solutions to problems that seem to fly beneath the radar of the nation state.

Inevitably, I would suggest, those forms will be bioregional in setting, and eventually, given our genetic need for *querencia* and our historical experience as land-based people, they will be bioregional in outlook.

In *The Interpreters*, a book written at the height of the Irish Revolution by the author known only as AE, there is a passage in which a group of prisoners sit around discussing what the ideal new world should look like after the revolution. One of them, a philosopher, advances the vision of a unitary world order with a global, scientific, cosmopolitan culture; the sort of justification often put forth nowadays in the name of globalism. Another, the poet Lavelle, argues fervently against this conception, trying to show that the more the world develops its technological superstructure for global commerce and opinion, the farther it gets from its natural roots.

'If all wisdom was acquired from without,' Lavelle says, 'it might be politic for us to make our culture cosmopolitan. But I believe our best wisdom does not come from without but arises in the soul and is an emanation of the Earth spirit, a voice speaking directly to us as dwellers in this land.'

That is the voice of bioregionalism, the truest, more eternal voice of nature. And it directs us to become, as bioregionalists, dwellers in the land. Nothing more, and nothing less will do. ♦

Kirkpatrick Sale is the author of nine books, including *Dwellers in the Land: The Bioregional Vision*, recently reissued, with a new introduction, by the University of Georgia Press.

UTOPIAN? DON'T THINK SO

Where Chellis Glendinning lives, bioregionalism is already showing its face

The question is: How do we become bioregional? The answer: remembrance and invention.

Let's look at a place that has both. The Rio Grande Bioregion, otherwise known as northern New Mexico, USA, is a region where the coincidence of memory and creativity is very much alive. Pueblo, nomadic tribal, and Chicano cultures interweave their languages and livelihoods with the land and water in a rare remembrance of humanity's potential. Meanwhile, the region is also a haven for newcomers, called 'Anglos,' many of them renegades in flight from urban areas, who are creating a bioregional renaissance.

Until the arrival of the Los Alamos National Laboratory in the 1940s, the area was isolated from American society. Having survived solely in traditional ways until then, local land-based communities are still propelled by the old ways. These are not thought of as 'bioregional' – they are simply called 'la cultura' and 'how we live' – and yet they are infused with the same spirit that informs today's bioregionalist movement.

In the Rio Grande region, Native and Chicano people do not define who they are by job descriptions. They define identity by community of origin (Chimayo, Okey Owinge), family line (Martinez, Tso), and responsibility to the land (mountain, river). In these parts, people fish, hunt for elk, deer, and turkey, dig the acequias, or ancient irrigation ditches, grow corn, raise sheep and cows, and gather firewood in the forest. They also weave, practice tinwork, carve wood, and engage in traditional ceremonies and pilgrimages that honour the miracle of nature.

With production so close to home, the practice of trade is not top-down, mass-market, and imposed by corporate distribution systems. It is lateral. Veralde is known for apples. Chimay has the best chilli. Cordova spawns wood carvers.

As if springing from a bioregional dream, local villagers play the music heard on the radio, and they play at the dancehall on Saturday night. The history of people and land is taught in their corridos and rancheros, and the narrative of everyday life – alive, human-scale, often humorous – holds the community together.

In towns like Santa Fe and Taos, where Anglo newcomers congregate, and many place-based lifeways have been lost to urban

commerce, bioregional invention is still ripe. There are permaculture institutes, co-housing communities, recycled tyre and straw bale building, community gardens, and poetry readings. Each year Earth festivals, like All Species Day in Santa Fe, spread ecological awareness and love for the natural world. There is travel too, not along the lines of Club Med and Princess Cruises, but individuals and small groups making their way to other places to teach, learn, and trade. Bioregionalists from New Mexico travel to Ecuador, Peru and Cuba, bringing back news of spiritual practices, dances, and political forms.

The farmers' market is the place where these parallel efforts meet. Once a week in summer and fall, farmers from the villages and pueblos set up card tables to sell corn, lettuce, squash, herbs, elk, and mutton – right next to Anglos at their card tables selling corn, lettuce, squash, herbs, elk, and mutton. A Chicano band plays guitarras in one aisle. A cowboy trio plays fiddles in another. A European-American magician performs his tai-chi-like moves in the parking lot, and a Pueblo flautist lights up the crowd with crystalline notes.

Such examples of human endeavour are marvellous. And yet, of course, the global economy is fast arriving. What does it look like in northern New Mexico? Just as it looks everywhere else. Cellphone towers spewing microwaves on the highway. Uncontrolled sprawl. Cars, trucks, and freeways. TV advertising more engaging than regular programming. Cyberscreens outnumbering books at the library. Increasing availability of illegal drugs heroin and cocaine. Increasing use of legal drugs Prozac and Viagra. The inability of family stores to survive and community projects to find funding. What does it feel like? A glittery, agonising assault.

Whether via remembrance or via invention, the thriving of place-based lifeways, as exemplified in the Rio Grande Bioregion, must be the basis for hope for the future.

Chellis Glendinning's books include *Off the Map (An Expedition Deep into Imperialism, the Global Economy and Other Earthly Whereabouts)*, and *My Name is Chellis and I'm in Recovery from Western Civilisation*. She lives in Chimayo.



THE NEW PROTECTIONISM

HOW CAN WE MOVE CLOSER TO RELOCALISATION? COLIN HINES HAS A PHRASE FOR IT: PROTECT THE LOCAL, GLOBALLY.

IF A THOUSAND economists were asked if they wanted to be protected, in their everyday lives, by the police, say, or by an insurance policy, they would undoubtedly reply with a unanimous 'yes'. Everyone wants protection for themselves, their families and their communities from people, events or influences that may harm them. But try adding an 'ism' to the end of the word and economists reach for the cross and garlic, politicians go into paroxysms of outrage, and commentators prophesy a return to the 1930s overnight.

How can three little letters – ism – turn the common sense concept of protecting important interests into a dirty word? Part of the reason is a misreading of history; another is that it helps keep any discussion of meaningful protection for any of us from the ravages of globalisation firmly off the agenda.

First, the history. According to popular wisdom, recycled in economics textbooks, it was 'protectionism' which caused the worst recession the world has ever known in the 1930s. The introduction of some trade barriers by the US, in the form of the 'Smoot-Hawley' Tariff of 1930, so this popular wisdom goes, raised duties to record levels, worsened the depression, provoked extensive foreign retaliation, and destroyed world trade.

However, Professor Alfred E Eckes, a former chairman and commissioner of the US International Trade Commission – and no radical – has debunked this myth. Using official data and archive materials from the US, Canada and the UK, as well as the research of other economic historians, Eckes concluded the Smoot-Hawley Tariff did not precipitate the 1929 stock market crash. (Hardly surprising, since it was introduced the year after!) Nor did he find any compelling evidence that it exacerbated the Great Depression. In truth, it wasn't tariff barriers that caused the 1930s slump, but a lack of global demand following the collapse of false stock market optimism and the unsustainable credit binge of the 1920s.

This rather dry historical detour has not been made merely to underscore the chilling parallels with today's markets. Far more important is to use this knowledge to debunk the myth that protective measures such as controlling access to domestic markets will lead inevitably to a global depression. For it is this historically unfounded threat that is invoked by all pro-globalisation political leaders whenever the suggestion is made that a country or community should have the right to protect itself against the adverse effects of world trade.

The powerful myth of the dangers of protectionism is one of the



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philosophical keystones of today's globalisation model. If it is not unravelled, those who oppose globalisation will continue to have a hard fight on their hands.

It is crucial, then, that we stand up for the right to economic protection from today's destructive forces of global trade as loudly as we defend protection of environmental, community or human rights. The 'There Is No Alternative' siren song of the defenders of the status quo must be rejected, and in its place, a 'New Protectionism' must be called for – one that will save the environment and reverse the present trend of rising poverty.

Fortunately, such a radical alternative is beginning to emerge. It centres on the replacement of the present political and economic theology of globalisation with an emphasis on local production and the rebuilding of local economies. The policy suggestions to achieve this already exist, and I have pulled them together in my recent humbly entitled book; *Localisation – A Global Manifesto*. At a political level, UK Green MEPs are already endeavouring to push for such policies Europe-wide: a scale necessary to tackle the globalisation agenda of big business.

Localisation means, very simply, that everything that could be produced within a nation or region should be. Long-distance trade is then reduced to supplying what cannot. This would provide an increase in local control of the economy and the potential for it to be shared out more fairly and locally. Technology and information would be encouraged to flow, when and where it can strengthen local economies. Under these circumstances, beggar-your-neighbour globalisation gives way to the potentially more cooperative better-your-neighbour localisation.

The prerequisite for achieving the relocalisation of the world economy is to challenge the accepted wisdom that the process of globalisation is inevitable and can be made beneficial. At the same time, it is crucial to propose a cogent alternative. Its policies must be judged by whether they are seen as a plausible way to reverse the instability and insecurity that trade liberalisation has wrought upon the world. Protection is at the heart of a set of self-reinforcing policies to achieve localisation, which can be encapsulated in the slogan 'Protect the Local, Globally'.

The essence of these policies is to allow nations, local governments and communities to reclaim control over their local economies; to make them as diverse as possible; and to rebuild stability into community life. This does not mean a return to over-

powering state control. Instead, governments merely provide the policy framework which allows people and businesses to rediversify their local economies. The reduction of product or service miles (distance from provider to consumer) is also an environmental goal. In short, it means developing a positive discrimination in favour of the local, and allowing countries to protect themselves through limiting access to their markets and keeping most money circulating locally.

There is nothing particularly radical about this; indeed, to most people it may seem like simple common sense. To achieve it, I would suggest seven interrelated policy programmes aimed at increasing local control over economies, which can be adopted by countries or localities as they see fit. The end goal of an economy run along these lines would be maximum self-reliance, rather than today's fetishism of international competitiveness. The seven steps are:

- reintroduction of protective safeguards for domestic economies (tariffs, quotas etc);
- a site-here-to-sell-here policy for manufacturing and services domestically or regionally;
- localising money, so that the majority stays within its place of origin;
- enforcing a local competition policy to eliminate monopolies from the more protected economies;
- introduction of resource taxes to increase environmental improvements and help fund the transition;
- increased democratic involvement both politically and economically to ensure the effectiveness and equity of the movement to more diverse local economies;
- reorientation of aid and trade rules so that they contribute to the rebuilding of local economies and local control, particularly through the global transfer of relevant information and technology.

Pie in the sky? Not necessarily. A 'Protect the Local, Globally' policy is neither anti-trade nor autarkic (ie totally self-sufficient). Its goal is maximum local trade within diversified sustainable local economies, and minimum long-distance trade.

Of course, such a dramatic turnaround in the direction of the international economy could not just occur in one country. To take on the powerful international forces of international capital and big corporations would require these policies to be introduced, for example, EU-wide or across the whole of North America. But it could be done – and once one place had done it, an example would have been set.

The advantages of such an economic re-orientation, meanwhile, would be legion. A good way to illustrate this is by looking at how it would affect the most basic of human needs – food.

The transition to maximum self-reliance using the policy tools of 'Protect the Local, Globally' is actually a precondition for a fair food policy. Consider: fair land reform, for example, cannot take place if the thrust of all government's policies is to compete internationally. This requires keeping costs low and encouraging inward investors seeking maximum returns to locate and not relocate. It also needs a pool of cheap labour and farming intensively to reap economies of scale. Land reform can also never happen on the scale required if investors are not to be frightened off by radical and egalitarian social and farm policies.

However, once a country's food goals, and those of its regional neighbours, are only to accept investment and to consider exports when they contribute towards greater self-reliance, then land reform actually becomes a prerequisite. Similarly, other destructive agricultural practices like surplus dumping, import dependence and export concentration will wither away when there is a greater emphasis on national food needs and less dependence on producing surpluses.

In other words, to have a more self-reliant food system will require the rebuilding of rural economies and infrastructures, and

a decrease in wealth discrepancies. This is crucial, since, for developing countries in particular, such spreading of opportunities and wealth in the rural sector will be necessary for building up the demand for the goods from a growing domestic manufacturing and services sector.

For both developed and developing nations, the increasing dependence on local food resources should act as a spur to improve the environmental sustainability of local resource use, since this is where the future food supply will predominantly come from. More labour-intensive, less chemically-intensive agriculture will not only improve the local economy, but also ensure that new techniques are developed that will not threaten the local agricultural resource base, since importing your way out of problems becomes less of an option. The emphasis on resource taxes, including energy and agricultural pollution taxes, to help fund the transition to localisation, will also direct agricultural practices towards more sustainable patterns.

Finally, the most significant improvement inherent in the 'Protect the Local, Globally' form of localisation is that it controls the activities and investment patterns of multinational companies. Such players would not be able to force down wages or conditions through the threat of relocation. Access to national markets depends on being in that market and staying there. The increased control of governments, plus the local competition laws, dramatically reduces the power of transnational corporations to control the world food system.

The food example shows what could be achieved – and why it is necessary. The challenge before us now is to build the political will to get it done. The time has arrived for a radical economic rethink of the enormity seen since the end of World War II. Then, the experience of the Great Depression and its resulting war led to a massive channelling of national resources into improved social infrastructure, health, education and rebuilding economies with an end goal of full employment and economic security.

Now, it appears that the world is entering another period of international economic upheaval. This could be just the catalyst for change that we need. Those who are already politically active on these issues need a fresh look at how to achieve their goals at a time of economic slowdown and the growing constraints posed by globalisation. It is time for them to consider supporting policies that allow countries worldwide to protect and rebuild their national economies and, in doing so, tackle their social and environmental problems.

Campaigners can then move from campaign-specific 'isolation' to seeing the mutual advantage of forging themselves into effective alliances. For motives ranging from morality to self-interest, a fundamental change away from globalisation towards localisation is the way to success for most issues. The strength of such a coalition is that it would range from issues that are of wide and immediate public, business and political concern (such as jobs and declining demand levels, education and health), to more local issues – declining shops, etc. It would also encompass crucial concerns that lose out in times of economic insecurity, such as the environment and reduction of global poverty and inequality.

A new, unified chant needs to emerge from this huge grouping, ranging from international NGOs to local community groups, from small and medium-sized businesses to unions, from food activists to the culturally concerned. Activists must assert loudly and together that their campaign demands can only be realised through a move away from distorting national economies in order to achieve international competitiveness. Instead the goal should be protecting and rebuilding local economies. It's time to protect the local – globally.

*Colin Hines is an Associate of the International Forum on Globalisation. His latest book, **Localization – A Global Manifesto** was published last year by Earthscan.*

IF IT'S TUESDAY, IT MUST BE SEATTLE

PAUL KINGSNORTH WONDERS WHERE
ALL THE ROAD PROTESTERS HAVE GONE.

RECENTLY I WAS asked to appear on BBC radio to talk about the Government's new road building programme (34 seconds please, and make it controversial). Before the programme, the commissioning editor was thrilled to learn that, once upon a time, I had been a road protester myself. Had I been up any trees, then, he wanted to know? Down any tunnels; that sort of thing? A few, I said, since you ask. So what did I think of Mr Prescott's planned new bypasses? Outrageous, I spluttered. Naturally.

So, he asked, with all these new roads roaring across protected downlands in your general direction, will you be back in the camps? Can we expect to see you strutting around in climbing harnesses drinking herbal tea from dirty cups? Will you be chaining yourself to bulldozers and getting all teary-eyed about rare snails? In short, are you going to put your money where your mouth is and get back up them trees?

What, me? I said. You must be joking. I've got a meeting at four o'clock.

A lot of British environmental activists of my generation (still on the right side of 30, but not for long enough to want to talk about it) were blooded in the road protest camps of the 1990s. They were magical, bizarre, inspiring, depressing, frustrating, empowering places. They gave people a chance to use their own hands to defend a very real landscape, a very real natural beauty, against the idiocy and spite of a very unreal government.

I lost my eco-virginity at Twyford Down in 1993. I turned up a slightly cynical, badly-dressed student and left three days later, after a short spell in Southampton nick, as the blazing-eyed, still badly-dressed eco-bore I am today. Similar things happened to thousands of others. Twyford, Newbury, Solsbury Hill, Wymondham, Wanstonia, Pollock – these are names that politicised a significant section of an entire generation.

So where are they now? And why do I get the feeling that it won't be like that again? Even though the government plans to build bypasses over the next five years that will destroy watermeadows, SSSIs and protected downland; which will encourage car use and fail to relieve local traffic for any more than a few years? All the arguments are the same; it's only the landscapes that are different. And who's to say that the beauty of St Catherine's Hill or Penn Wood (RIP) was any more special than the beauty of the River Camel (Weymouth relief road coming your way) or the Avon watermeadows at Britford (watch out for that old Salisbury-bypass-disguised-as-a-widening-scheme trick)?

True, the scale is different. Horrible though Prescott's road package is, it's nothing compared to the Tories' famous boast that they



THE CONCERNS THAT
MOTIVATED PEOPLE TO
FIGHT AGAINST ROADS
ARE THE SAME THAT
MOTIVATE PEOPLE TO
FIGHT GLOBALISATION

were undertaking 'the biggest road-building programme since the Romans'. Also, of course, the political landscape has changed; no longer are we living with the fag-end of a dying, discredited government. Today, we drive down the Third Way together, in our air-conditioned Mondeos (leather upholstery, airbag as standard) towards Tony's New Dawn. Somehow, it's just not the same.

But it's not just that. Another reason that the road protests could never happen again on that scale is that the people who made them happen have moved on; and the movement they kick-started has moved on with them.

If there was one thing you learned on a road protest camp, it was to make connections. You asked yourself what the big picture was here. Why's this really happening? And you worked out that the big picture went something like: new roads for big lorries for new supermarkets for pointless new consumer goods made in poor countries by rich companies in a fast-growing global market which constantly needs more roads, more lorries, more supermarkets and less of everything that gets in the way.

When you saw the connections like that, you realised that fighting the roads was tackling the symptoms, not the cause. Today, less than 10 years later, the result of that collective realisation is making itself felt. The anti-roads move-

ment has, in a sense, gone global. The concerns that motivated people to fight against roads – environmental destruction; powerlessness; the erasing of local differences; the sham that is 'democracy' – are the same concerns that motivate people to fight against globalisation, the WTO, the World Bank – the whole shebang. Where did all the road protesters go? They headed for Prague, but got stopped on the Czech border because the tyres on their vans were bald.

In other words, the movement has moved on. It's a good thing; if it's to effect real political change, it needs to keep growing. But let's hope it doesn't ignore the local in its search for global solutions. Let's hope that the temptations of a trip to Seattle don't blind us to what will soon be happening in the Eden Valley and the Norfolk Broads.

Let's hope, in other words, that I am utterly, gloriously, wrong: that history does repeat itself; that the road protest camps spring up again; that Labour has to back down as the Tories did. Anything's possible. But probably not if people like me sit here writing about it instead of doing it.

I think I've still got that climbing harness somewhere.

Paul Kingsnorth is the deputy editor of The Ecologist.

FANTASY ISLAND?

PETER JOWERS WAS ONE OF THE BBC'S 'CASTAWAYS' LAST YEAR. NOW HE THINKS THAT THE PROJECT WAS LESS A SELF-SUFFICIENCY EXPERIMENT THAN AN EXERCISE IN TV RATINGS GRABBING.

I WENT TO the remote, Scottish island of Taransay early in 2000, thinking I was to participate in a serious attempt at environmental sustainability and community building. Instead, I found myself in the midst of the emerging TV genre of 'voyeur vision'. My year on the glorious island of Taransay was intense, wonderful and thought-provoking. But it was not what it was intended to be.

The elements of a self-sufficient community that we created certainly worked – at least in most cases. Our wind turbine and hydro worked virtually without hiccup, making our lives sensitive to fluctuations between energy abundance and paucity. Our lighting, school computers, UV filters, power tools, battery re-chargers (for the cameras), small milking machine and ancient washing machine all drew their power from wind and water.

On a limited budget of £30 each, we fed ourselves from imported dry goods and our own efforts. We grew over 30 varieties of vegetables. Tomatoes, cucumbers, aubergines, peppers and chilli peppers abounded. We proudly exported over £400 worth of vegetables to the mainland.

Two of our three cows arrived bedraggled, infested with worms and mange. With loving attention and left to graze freely, they ended up glowing with health, producing three calves. We drank exquisite milk each day and ate homemade soft herb cheeses. Our sow, Molly, arrived with 11 piglets, gave birth to 10 more, of which four died. These were slaughtered with great care and skill by our own butcher. Our chickens laid prolifically. Our compost/reed bed worked superbly.

Yet our attempt to live 'outside society' proved exceptionally difficult to achieve. Many within the 'community' seemed never to understand the concept. Radios and mobile phones found their way to the island. Invasions by journalists, curious visitors, friendly local people, officials, and the production crew meant we only ever had a few days to ourselves. Several people had to go 'off island' for a variety of reasons, and smuggling items back became rife. Isolation was never properly achieved – to the relief of many and the disappointment of a few.

The absence of shared values and levels of individualism also led to a very rocky first few months. Hard-fought early disputes settled down once some of those without any commitment to the project left. One key contributor left disappointed in the green credentials of the project. And issues of principle that any comparable 'real' community would inevitably face were left profoundly unresolved.

The project provided insights into the workings and power of



OUR ATTEMPT TO LIVE
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THE CONCEPT

media which proved both fascinating and disturbing. The degree to which the seduction of 'fame' led many participants to the project was disillusioning. Often work groups would dissolve once the camera left. Private thoughts that could not be spoken within the community were voiced on video diary to an audience of millions. The symbiotic dependency between the sewer press and TV was eye-opening.

The exigencies of media competition were fascinating to watch, as both the BBC and the production company were forced to alter the programme's initial format in the face of the runaway success of Channel 4's *Big Brother*. Several of the more thoughtful participants sensed an almost complete loss of control as their serious contributions became mere content to be shaped into media 'fairy tales' using the most tired generic conventions for popular television. The younger participants joyfully seized the opportunity presented to them. One began to realise quite how ratings-driven television is.

It was fascinating to watch how the production company, knowing its audience, used such techniques to simultaneously slip in real substance within these very tight constraints. The arcana of scheduling strategies, editing techniques and viewing figures became daily topics of conversation, controversy

and reflection as the whole community became increasingly media savvy. The word 'castaway' took on yet another meaning, this time of one's image in the ether of the global television airways.

Nonetheless, some important lessons can be learnt. The energy technologies of the future are here and they work. Communal rural living without a shared ethos is non-sustainable. Even with one, it would entail hard physical and emotional work. A selfish variant of individualism is driven deep into our psyches, and will be hard to overcome. Close communities must cherish diversity but, simultaneously, individuals must learn hard lessons about how to sustain shared commitments unselfishly. The potential benefits of such a life are immeasurable.

But perhaps the most lasting legacy of our 'experiment' might be for those who live in the Western Isles. Long after the Castaway project is over, those on these islands might blend the most magnificent facets of their past with the opportunities opened up by the new technology. The tide of depopulation might be turned, and the glorious and unique culture of the Western Isles could continue to flourish in this most special part of Europe.

Peter Jowers wrote this piece at the end of his year on Taransay.

STEVE CARROLL

UNMOVING PICTURES

GLOW-IN-THE-DARK RABBITS, CATTLE CARCASSES... DENYS TRUSSELL EXPLAINS WHY MUCH MODERN ART IS A REFLECTION OF MODERN SOCIETY – AND NOTHING MORE.

LAST YEAR A university art teacher in Chicago, Eduardo Kac, arranged for a biotechnology laboratory in France to genetically engineer a rabbit with a gene from a jellyfish. The modified creature that eventually resulted was called Alba. She glowed a faintly fluorescent green under ultra-violet light. Kac's intention was artistic. He had hoped that he would be able to show the rabbit to the public during a week in which he planned to receive visitors who would see him and Alba in a kind of domestic tableau at a house in France.

Kac publishes verbose theoretical articles on the Internet about his work and his commitment to the latest art fad – transgenic art. His writing is a tissue of sophistries that attempt to legitimise activities which, in moral and ecological terms are deeply suspect, if not repugnant. Like ordinary genetic engineers he makes untenable claims, such as the one that he is actually creating a new life-form, a life-form that is also an art form: 'Transgenic art is a new art form based on the use of genetic engineering to transfer natural or synthetic genes to an organism to create unique living beings.'

The fact that a rabbit that has not been genetically engineered is already a unique living being seems to elude him.

Kac is of course just replicating what genetic engineering already does, and he had to commission scientists to carry out his schemes. But his actions bring him huge publicity and place him, without his having to exercise any artistic skill or talent, before a huge and sometimes credulous audience. His actual skill is self-promotion, and as an astute publicist he is well aware of the moral odium that attaches to damaging the integrity of the rabbit's genome. He goes to great lengths to confess a sentimental love for Alba and a desire to include her in his family. His Internet ramblings are full of compassionate utterances about the new mutant and a deep concern for the morally appropriate way to treat the transgenic living artwork. Because the French scientists who engineered Alba are reluctant to release her into Kac's hands he is even conducting a custody battle to gain possession of her, indicating, despite the high moral ground that he claims in his publicity material that he has a conventional and proprietorial attitude to this latest member of his family.

Of course, it's all showmanship, and Kac has managed his art event so as to draw the maximum attention to himself. His fluorescent rabbit gimmick is typical of many in recent art and its antecedents lie in the Dada movement of the 1910s and 1920s. It is part of a long established Post-Modern convention to re-invent the conceptual wheels of Dada and some other aspects of



THE EXHIBITIONIST ARTIST IMPLICITLY DENIES ESSENCE, INTEGRITY, IDENTITY

Modernism. Is this fatuous, some would say cruel, game with the rabbit and the jellyfish really just an honest depiction by the artist of contemporary life? It's a question that has been asked throughout the 20th century in response to the belief that artists are merely being true to life when they engage in work that is banal, amoral and nihilistic. They are, the argument runs, just holding up a mirror to our civilisation. There is a definite lineage of such art, beginning with Marcel Duchamp (1887-1968) and running up to individuals active now, such as Damien Hirst. These artists have placed before us constructs, installations, conceptual works and 'events' that are usually fragmented replications of objects, processes or incidents that we see around us. The hugely publicised Venice Biennale is crammed with such work and it is taken to be representative of contemporary art.

The Dada/nihilist replicatory approach certainly belongs in modern consumer society and is right in its insistence of connection with it. There is a kind of honesty in it, but it is the honesty of a frenetic news photogra-

pher. It produces snapshots of meaninglessness, duplications of superficiality and incoherence. It avoids significance, any hints of a natural or cosmological order and any but the most trivialised philosophical statement. But it fails to show us that, even in the purgatorio of a deeply troubled civilisation, most souls seek significance and meaning. For every mountebank of the arts such as Andy Warhol, who replicated the unredeemed features of the historical and social conditions in which he lived, there have been many fine artists, strongly committed to meaning through the long unfolding of the Modern and the Post-Modern. Most of these artists are unsung, but they have kept alive the psychic links of humanity with nature, with community, with sacrality.

MESSAIENIC VIRTUES

Some of these artists have attained great fame, for instance, the French mystic composer, Olivier Messiaen (1908-92). Messiaen is an interesting figure on whom to turn our argument because he took on the structural and psychological crises of 20th century music, symbolised in its use of atonality, and incorporated it into a greater scheme of things: a cosmological vision that had some sense of the mystery of nature, a sense of the soul's apotheosis in *From the Canyons to the Stars*. Nothing could be further from the man who organised the appearance of a fluorescent rabbit. Messiaen found that truth could be intimated in musical structure, that there is such a thing as essence and transcendence. The

exhibitionist Kac, on the other hand, implicitly denies essence, integrity, identity. His denial of the integrity of the rabbit and the jellyfish is really making such a statement.

Which of these men is being more honest about the modern world? It is tempting to say that the exhibitionist is. In a period that has seen the emergence of fission technology, genetic engineering, the crackpot claims of socio-biology and 'artificial intelligence', that has known a limitless despoliation of the natural world, surely an absurdist, nihilistic view of existence is in order? Is this not the age of the mountebank, of the spin-doctor and his big lies? Are not the replications of the objects and events of this world the true art of our time?

Strangely, this is not so. Truth about history and human life is touched on, not by replication, but by mimesis, not by copying, but by creative interpretation. The truth of our time is not revealed by baldly placing before us its physical and mental fragments, but by making a work that involves an awareness of the unredeemed bric-a-brac of history and can transform that awareness into a transcendent, even redemptive image, whether in language, sound or a visual medium.

We might believe the fluorescent rabbit is an image of truth because it replicates what is actually happening in the world. As the children of mass-production who know one video player may be an exact replication of another and who are witnessing an attempt to standardise entire species by means of monoculture and genetic engineering we are prone to believe that replication is truth, that the copy is the original. Warhol's hugely public but completely insignificant career was built around playing with such ideas of replication.

Yet the essence of replication is its untruth, its emptiness of meaning. It is a moral and metaphysical zero that one Nissan car exactly resembles another, as it is that Damien Hirst hacking up the carcass of a cow is an art event. It is also a tautology, because it makes something that already exists in the real world, without adding to it the element of insight. In fact, this kind of art implicitly despises insight and seeks to deny its existence.

The only 'truth' that tautology, replication, the restatement of actuality can offer is that mechanical repetition is the stuff of our material culture. This is a fact of our time yet it gives us no sense of truth. It is a void fact and has no affinity with any rhythm of life. Art that insists on such facts ends up being indistinguishable from them. The hacked-up cow, the fluorescent rabbit are victims of a collaboration with emptiness. The artists who use them cannot fill emptiness and do not protest against it. They just make another repetition in a numbing mechanical series. We sense a superficial realism in this series, but no truth. This is possibly because we are still sufficiently close to nature to sense that she does not replicate, does not standardise. The shaky claim that DNA is a replicator ignores the endless subtle variation by means of which nature passes life on from one generation to the next. Replication is precisely what the heredity process in natural reproduction does not do; and art that insists on replication we sense as being false, even when it points up facts about our world.

PYRRHIC VICTORY

Such art is influenced by ideas deriving from the nihilist philosopher, Pyrrho (365-275 BC), whose extreme scepticism was revived enthusiastically by Marcel Duchamp in the first half of the 20th century. Entity, the coming into being of forms of life, art, thought, feeling, or even of inanimate structure, is seen by such

scepticism as a random distribution of indifferent, valueless and illusory quanta. One object is the same as another in a cosmos where no authentic essence or entity exists: 'everything's everything' in the words of one Post-Modern poem.

PAST THE POST

This view is widespread in the theory and practice of Post-Modernism. It even makes claims of being a form of enlightenment. Is it not a kind of philosophical monism, a realisation of the unity of all things in a nirvana of inexistence?

I do not believe so. The religious and philosophical traditions, particularly of eastern cultures, that have made the transcendence of identity a mystical goal, are travestied by the narcissistic and cynical relativism that now characterise the fashionable milieux of art. The imagery that its replications place before us betrays another kind of intention. Often it is boring, gratuitously violent and far from being free of ego. In fact it is a display of the very worst kind of ego: not the affirmative 'I create, therefore I am' that moves in Western art at its best, but the infantile 'I seek attention, therefore I am'. It is ego without love and is to be clearly distinguished from the ego-lessness of the mystic seeking to lose identity in the universal.

It is also based on palpable untruth. Its contempt of essence and entity ignores the fact that forms of life, thought and feeling constantly emerge from formlessness. The inchoate is far from sterile.

It is a vast womb that gives birth to stars and life-forms alike. While such forms may be transitory, they are forever being reborn in this cosmic flux – a fact rigorously ignored by aesthetes who deny the existence of significant forms and choose only to look at the entropic, as distinct from the creative, aspects of nature.

Can this deracinated ego be honest about the parlous state of modern society? It certainly can reflect that state, but it cannot redeem it. Whereas in other kinds of societies art has usually had a redemptive role; a process that invites people to move through the cruelty of history in such a way that, how-

ever briefly, a transcendence of its evils might be achieved. That was the basic theory of Greek tragic drama and of many other cathartic arts and rituals in the Neolithic and Palaeolithic world.

The engineering of the hapless Alba and the hacking up of the cattle carcass offer no catharsis. They are mere caprice devoid of revelation. The claim of this kind of quasi-Dada event to be a radical critique of social evil and bourgeois complacency has long ago collapsed. There was a time, that of early high Modernism when such a claim could briefly have been made. That time really ended with the Second World War. Since then such art gestures have mainly affirmed a status quo of cynical materialism. The bourgeois, far from being shocked, are mildly amused.

There have been great artistic statements made in the 20th century, but they are not made by the likes of the Kacs, the Warhols and Hirsts whose ethos is so firmly embedded in consumer society. They are made by artists of actual talent and great personal stature, such as the Russian composer Dmitri Shostakovich, his compatriot, the poet Anna Akhmatova, or the indomitable Chilean, Pablo Neruda, author of the epic *Heights of Macchu Picchu*, that places before us in visionary terms nature and history on the South American continent. It is people like these and many who are lesser known who have risked their lives in upholding our common humanity.

Denys Trussell is an art critic who lives in New Zealand.

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DOCTOR'S HANDWRITING

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Recently, the British government announced that it has spent £3 million in taxpayers' money in defending the measles-mumps-rubella (MMR) triple vaccine. This has mainly been an exercise in damage limitation, to staunch the haemorrhage of parents opting out of this jab. The number of British children covered by the MMR jab has fallen to well below 90 per cent, and the Public Health Laboratory Service (PHLS), which is responsible for vaccine programmes, fears that with such low coverage a measles epidemic could be likely.

The reluctance of parents to have their children given the MMR vaccine is a completely sensible response to the growing question marks that lately hover over this vaccine. Dr Andrew Wakefield of the Royal Free Hospital in London, a specialist in bowel disorders, first planted this doubt in 1998 by publishing a small study showing an association between the MMR jab and development of chronic inflammation of the colon and autism (*The Lancet*, 28 February 1998). Since that time, Wakefield and his team have uncovered more than 200 children whose autism is linked to the jab.

Wakefield's team hypothesises that in certain susceptible children, the MMR vaccine may damage the intestinal function, which in turn could allow food by-products, called peptides, to pass through the intestinal walls, disrupting brain function and development.

To counter Wakefield's growing evidence, the government has hauled out a Finnish study, published in the December issue of the *Journal of Paediatric Infectious Disease*.

The Finnish study, which covered 1.8 million children receiving three million jabs, claims to find no such connection. Indeed, with only 437 side effects from the vaccine reported among this vast population, the study concludes that this is an extraordinarily safe vaccine.

It's important to take a fine-toothed comb to the study. For one thing, it relied on 'passive surveillance'; that is information voluntarily supplied by health providers to the Finnish Department of Public Health. Passive reporting systems are acknowledged to be notoriously unreliable. In America, where the Vaccine Adverse Reporting System relies on passive reporting by doctors, it is estimated that only 10 per cent of the total number of vaccine adverse events get reported.

The study admits that side effects were reported soon after children had the jab. But it has been well documented that major reactions to the MMR typically occur seven to 10 days later. Most of the cases of MMR-related autism occur two weeks after the children receive their jab.



THE TRIPLE WHAMMY

BY LYNNE
McTAGGART

'Even if autism does not turn out to be caused by the MMR, there's no doubt further study was needed before jabbing this concoction into the arm of every child in Britain.'

This study was also carried out and completed between 1982 and 1996; well before anyone suspected a link between autism and the vaccine. It's doubtful that anyone would have thought to blame a vaccination for the deterioration of a child's speech, behaviour or development a full two weeks later, as is typically the case.

Even if autism does not turn out to be caused by the MMR, there's no doubt further study was needed before jabbing this concoction into the arm of every child in Britain. Dr Peter Fletcher, former senior medical officer for the Department of Health in the early 1980s, has reported in the January edition of the *Journal of Adverse Drug Reactions* that the vaccine should not have been given a licence because there was never sufficient evidence of its safety or efficacy. In its pilot study, says Fletcher, the vaccine was only followed up for a matter of weeks. 'Three weeks is not enough,' he said. 'Neither is four weeks.'

Brief as they were, even those early studies showed worrying trends. In the PHLS's own study, convulsions occurred in one in every 400 children given the MMR jab (*The Lancet*, 1989; ii: 1015-6).

Several critics of the MMR triple jab have suggested that parents worried about possible synergistic effects could give their children the jabs separately. This has been championed by the national newspapers as the solution, and the

government has been roundly criticised for not offering this option. Parents interested in single jabs have resorted to flying their children to foreign countries where they are offered.

But the truth is that nobody knows whether giving the jabs separately is indeed any safer. Some evidence points to problems with the live virus used with any measles vaccine.

The real problem here is inventing the problem to sell the solution. What the government has done is to demonise what, a generation ago, was considered a benign disease in well nourished populations. Measles is not a random killer among well nourished children. In the five years between 1989-1994 there were only six deaths among children aged 0-19 with 59,263 cases of measles; an average of one death a year. Children in the West do not die of measles when they are well nourished. Doctors also better understand how to treat complications. Even in Africa, children with adequate stores of vitamin A stop dying of measles.

Everyone is asking how to give this vaccine. Nobody is stopping to ask why.

Lynne McTaggart is the editor of *What Doctors Don't Tell You*, a monthly publication which exposes dangers and unproven practices in modern medicine. Annual subscriptions: £34.95. For details: Satellite House, 2 Salisbury Rd, London SW19 4EZ or tel: 0208 944 9555.



CONTROL FREAKS

YOU PROBABLY HAVEN'T HEARD OF CARGILL. BUT THE WORLD'S BIGGEST GRAIN TRADER – AND GROWER OF GM CROPS – INCREASINGLY CONTROLS MUCH OF WHAT YOU EAT, SAYS GREG MUTTITT.

WHICH COMPANIES ARE responsible for introducing genetically-modified (GM) foods and crops onto our dinner tables? Perhaps you have heard of Monsanto, Aventis, Syngenta – even DuPont. But there are two other companies, virtually unknown, which have been instrumental in the introduction of the technology – Cargill and Archer Daniels Midland (ADM), the two corporate giants which dominate crop distribution. Between them, these two companies – and Cargill in particular – control virtually the entire global grain market.

No sector of the food supply chain is more concentrated than this 'middle link' between farmer and food manufacturer. For example, in the USA, the world's largest grower of GM crops, Cargill, ADM and competitor Zen Noh between them control 81 per cent of all maize exports and 65 per cent of all soyabean exports.

And with such a large share of world supply of these commodities passing through their hands, these two companies have considerable control over whether that supply is genetically modified or not.

IT IS NOT consumers or retailers who decide if food is GM free – it is the grain companies. And they don't want to play ball.

WHO WANTS GM?

In Britain, as in much of the world, public rejection of GM foods has been overwhelming. Supermarkets, food manufacturers and fast food outlets have almost all switched to using non-GM ingredients. However, food itself is just the tip of the GM iceberg. Over three-quarters of the world's GM crops go into animal feed. This too is controversial – NOP opinion polls in summer of 2000 found two-thirds of the British public opposed the use of GM crops to feed animals.

In response, British supermarkets have been attempting to stop the use of GM feed in the production of their meat and dairy products since autumn 1999. Yet they have made very little progress: one year on, some of the supermarkets now stock one or two non-GM-fed lines; but most claim to

be still in discussion with their suppliers. Meat producers, too, have had difficulty. At the end of 1999, one of the UK's largest poultry producers complained that 'we were strongly considering a total switch a few weeks ago but we were unable to secure non-GM supply for forward cover already on the buying book. The intermediaries who market the soya are unwilling to make the change to wholly non-GM in their crushing plant'.

PATIENCE, POWER AND PROFITS

In other words, many retailers who want to switch to total non-GM supply have so far been unable to. And why? According to some food companies, Cargill and ADM have been the major obstacle. Initially, both companies actually refused to supply non-GM crops at all. Under pressure from their food company customers, both companies later began supplying non-GM, but only through expensive specialist channels, where the economies of scale of commodity buying and bulk transport and storage are lost.

For Cargill, this move was reluctant. But it is playing a long game. The company knows that many consumers in Europe are unwilling to pay extra for their food to be non-GM. Cargill also believes that public concern over GMOs will calm down within a few years. Thus the company believes it can weather the storm of the GMO controversy without giving ground on non-GM availability – all it needs to do is be patient.

According to Dan Dye, vice president of Cargill's North American Grain Group, 'The biotech debate has made the job... more challenging and more

complex in the short term. But I believe the market ultimately will sort out the signals. We just need to keep our heads.'

Cargill exemplifies,



ENVIRONMENTAL IMAGES

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more than any other company, the culture of the American grain traders: closed, secretive, powerful and arrogant. Its activities may yield relatively small rates of return, but its profits come from large sales volumes. Its size gives it an advantage over its competitors through four mechanisms:

- economies of scale reduce costs of storage, transport and distribution;
- by far outweighing its suppliers (farmers and small elevators) in economic power, Cargill is able to push down its purchase prices and dictate terms and conditions which suit it (this is known as monopsony);
- by outweighing its customers (food processors, feed manufacturers, farmers etc) in economic power, Cargill is able to push up its selling price and dictate terms and conditions (this is a basic monopoly);
- by controlling a significant proportion of countries' food supplies (and, indeed, economies), Cargill is able to influence regulation and government programmes to its advantage.

Thus, through its sheer size, Cargill aims to accumulate economic and political power. By setting its profit-making in the long-term context, Cargill in effect becomes a political actor more than an economic one, in that its immediate, short-term behaviour is not governed by the laws of supply and demand. Thus it is able to resist current market pressures for non-GM supply, in an effort to achieve the long-term political aim of ensuring the success of the GMO project.

Archer Daniels Midland too has its roots in this American grain trader culture, but over the last few years the corporation has 'modernised'. Although it had already started, further pressure for this move came in 1996, when ADM was caught out abusing its economic power and found guilty in the world's biggest ever price-fixing case. It had been conspiring with Asian companies to fix the prices of lysine (an amino acid) and citric acid, and two of its senior executives are still in jail. The 'new' ADM is much more of an economic player, and pursues a strategy of maximising its margins, through processing and through handling specialist products. It has treated non-GM grains and beans as one such specialist product. Thus, like Cargill, it supplies non-GM expensively – unlike Cargill it made the move willingly.

THE SECOND GM GENERATION

So far, almost all of the GM foods that have hit the supermarket shelves involve genetic modifications creating 'input traits', which give advantages to the growers – such as

herbicide tolerance or insect resistance.

Over the next few years we will see a 'second generation' of GM crops, designed to have 'output traits' – advantages to the consumer or food processor.

'Cargill exemplifies, more than any other company, the culture of the American grain traders: closed, secretive, powerful and arrogant.'

This 'second generation' fits very well into ADM's strategy of handling and processing high-margin speciality products, and the company sees great opportunities for mark-ups (what they call 'adding value'). In particular, ADM is interested in so-called 'nutraceuticals' (food modified to contain medicines and nutritional supplements), animal feeds and industrial uses of crops (such as lubricants, plastics and fuel). ADM is already involved in these markets, so far mainly using more established processing methods. However, it sees the future in genetic modification, and is developing GM techniques for these markets.

Cargill too has its eyes on the second generation. Its most direct involvement in GM crops is with Renessen, a seed joint venture with Monsanto, developing GM crops designed to be used in animal feed, the first of which will appear in 2003.

Cargill is vertically integrated, operating at every stage of the food supply chain, from seed to packaged end product. It operates something like this:

- a grain farmer buys all their inputs as a 'package': Renessen seeds, Monsanto herbicide and Cargill fertiliser. The farmer signs a contract, which determines the growing and handling conditions, to deliver the produce to Cargill at a specified price and quality;
- the farmer sells the harvest to a Cargill elevator (storage facility);
- Cargill processes the harvest into animal feed;
- Cargill ships the animal feed to Thailand;
- there it is fed to poultry, by a farmer under contract to Cargill (as with the grain farmer);
- Cargill buys the poultry and processes, cooks and packages it;
- Cargill ships the packaged product to Europe, and sells it to McDonald's or a supermarket.

The above model, as is fairly obvious, reduces the farmer to a simple contract worker, while Cargill has all the control over everything that matters. Genetically

modified seeds will fit into this model well: a seed genetically modified firstly so that it works with (and only with) Monsanto pesticide and Cargill fertiliser, and modified secondly so that it contains all the vitamins, proteins, nutrients and antibiotics necessary for poultry feed, to Cargill's precise specifications. On top of this, GM grain behaves more predictably (at least in theory), so is easier to grow, easier to handle and easier to store. GMOs are lower in production costs, have improved product functionality, and hand over more control to Cargill.

This vision, in other words, is agribusiness paradise.

WHAT DOES THE FUTURE HOLD?

Cargill clearly has no intention of making non-GM crops easily and cheaply available. It will continue its arrogant refusal to co-operate with the wishes of consumers and retailers – it controls the market, so why should it change?

ADM is a more interesting case. Many campaigners have lauded ADM for requiring farmers to separate GM and non-GM crops, a landmark announcement it made at the start of the 1999 harvest. Yet ADM's interest is in supplying non-GM as a specialist product, at a high premium price (in line with its general strategy). It does not want the bulk market to be non-GM (as that would undermine the long-term future of GM crops), nor does it want the price differential between GM and non-GM to be reduced. For this reason, it has, in 2000, made announcements designed to reassure the market that GM is a sound technology, and hence tried to contain the size of the non-GM market.

But there is hope. The real break in the grain traders' collective refusal to supply non-GM affordably could come from Cargill and ADM's smaller rivals, in particular Zen Noh, Bunge and ConAgra. The grain distribution system currently has massive over-capacity, meaning any company can handle extra volume if it can sell it. The smaller grain handlers might see an opportunity to steal market share from Cargill and ADM. If these three companies were to see a niche in supplying cheaper non-GM crops, the big two would have no alternative but to follow. And in that scenario, we could see non-GM crops becoming cheaper than the GM varieties. In other words, the smaller grain traders could sound the death knell for (first generation) GM crops.

Greg Muttitt is a researcher at Corporate Watch. Read his full report 'Control freaks – the GMO exporters', on www.gm-info.org.uk or telephone 01865 791 391 for a copy.

DIGGING FOR VICTORY

BRITAIN'S ALLOTMENTS CAN PROVIDE THE ULTIMATE EXAMPLE OF AFFORDABLE LOCAL FOOD PRODUCTION. BUT THEY ARE UNDER THREAT FROM DEVELOPERS, SAYS MICHAEL WALE.

ANYONE WHO HAS ever lived in or visited a British town or city will have come across allotments, even if they don't know it. And those strange patchworks of cultivated soil, potting sheds and pathways play a more vital role than most people might imagine in the cohesion of local communities, recreation, and environmental protection.

Allotments are a fundamental part of urban life. There are over 300,000 of them in Britain, and their creation can be traced back to the enclosures between 1750 and 1860, when common rights to the use of land were eliminated with parliamentary backing. The ultimate result of this theft of common land from communities was the 1908 Smallholdings and Allotments Act, which came about as a result of years of pressure from ordinary people for a share in the land again. The Act required local councils to provide land for the creation of allotments. There is still a standard size for a plot as defined by this act – 10 rods – about 250 square metres.

But in recent years this vital patchwork of urban land, accessible to all, has come under increasing threat from property developers and sloppy local councils, who see the value of allotments only in the potential for building executive homes on them. Fortunately, though, the allotments movement is fighting back.

ALLOTMENTS HAVE BEEN providing low cost, local, clean food for families in the UK for almost a century. Now the allotment movement is fighting back against threats to its existence.

THREATS

As a result of the 1908 legislation, most allotment land is controlled by local authorities. But there is also a chunk of it in private hands, and it is this land that is most at risk from increasingly grasping developers, who see much inner city allotment land as a waste of space. Over the years, for example, both British Rail and the Church of England have regularly sold off their allotment plots, choosing to take the money instead, and ignoring any social duties they might have had to the local communities which relied on the land.

Perhaps partly as a result of this loss of allotment land, public interest in the cultivation of allotments dipped during the 1970s and 1980s, leading some to predict that they would soon disappear altogether. But, gradually, in the 1990s, a succession of food scares affecting meat and eggs (salmonella, BSE, listeria and the rest), worries about GM crops, and the ongoing boom in organic food drove up the waiting lists for plots all over the country. The result now is

that allotments are firmly back on the agenda as part of the vital heart of our towns and cities – much to the chagrin of many developers.

Despite the increasing numbers of land-grabbing property men and compliant planning committees and departments, events taking place on the international political stage in the early 1990s would eventually come to the rescue of the British allotment movement. It all started in Rio de Janeiro, the venue in 1992 for the Earth Summit. At the Summit, the British Government, like many others, signed up to Agenda 21, the international agreement aimed at protecting the global environment.

Two thirds of Agenda 21's targets must be applicable at local level – 'Local Agenda 21' – and some councils and individuals across Britain have used this agreement to achieve very real improvements in their local urban environments. Among these changes are the promotion, protection and rejuvenation of allotments.

For example, I recently received a four-page 'Agenda 21' colour brochure from Ealing Council in West London, where I live. It was headed, perhaps unsurprisingly, 'Acting locally, thinking globally', and a role for allotments was clearly spelt out: 'An allotment strategy is being developed',



it said, 'setting out the council's plans to help more people to grow their own food.' It is not the only local council to commit itself to this sort of allotment promotion.

And it's not just at local level that allotments are being promoted. The Government, recognising the pressures of the developers on allotment societies, set up a select committee to look into the whole question. It produced its report in 1998, a weighty volume containing much common sense from those who gave evidence, and well guided by its chairman, Labour MP Brian Donohoe, who represents an Ayr constituency in Scotland, and whose father had an allotment during Donohoe's childhood.

The report showed that more than 75 per cent of allotment plottolders said the reason they were there was because of their desire for fresh food, an aspect particularly valued by people who had allotments because they wanted to grow organic food, or were concerned about modern food production methods. It was also noted that allotments provide an important and cheap source of fresh food for poorer people.

The report also discovered that the modern allotment had social values as well as environmental ones; as anyone who has ever worked on or visited an allotment can testify. In a world in which social cohesion and neighbourly co-operation are becoming increasingly rare, it can be truly inspiring to see the way that allotment plottolders co-exist. Every age and every culture is there, and everyone helps each other, with advice and with gifts of seeds, spare produce etc.

The report goes on to laud other benefits to society that allotments provide, too. 'We believe', it says, 'that allotments will often form a component part of healthy neighbourhoods. Given the undisputed health benefits of allotments, we strongly recommend that allotment provision be explicitly noted in national public health strategy and be integrated into the local delivery of that strategy. Allotments also offer benefits to the community at large. In

many urban areas, they make a welcome contribution to green space, acting as a "lung", in a similar way to parkland.'

The Government, somewhat inevitably, could not find time to change the law governing allotments, but, in fairness, it has raised their profile, and the sabre-rattling of the Select Committee report has embarrassed some private developers and somewhat reduced their public eagerness to convert allotments into real estate.

A LOCAL BATTLE

Nevertheless, allotments are still at risk – mainly private ones, which are not defended by the law that applies to council-owned sites. For the past three years, I have been personally involved in such a battle.

As secretary of the Acton Gardening Association, I have been involved in a battle to protect some allotments on private land. The real villains of the piece have been the Worshipful Company of Goldsmiths, who were left a large tract of open land – over 25 acres – by John Perryn, a local blacksmith who was born in Bromyard, Herefordshire, and died in 1636. In 1998 the Goldsmiths Company started to divest themselves of this land, which housed two cricket clubs, and seven allotment sites with over 200 members. The first tranche was bought on a long lease by a health club based in Chiswick, which was given permission to build a new health club, named the Park Club, on the land. As a result, two large allotment sites were destroyed.

This case is typical of the kind of threats that allotments everywhere face from leisure amenities and housing. We decided that we were not going to lose our local land to private interests without a fight, and we started awakening public interest in what was happening. But by Christmas 1999, the Goldsmiths had sold off the rest of the huge site, and, as our fight got more bitter, the Park Club issued all our sites with three months notice to quit. Armed now with a lawyer, I negotiated a new lease, with a min-

imum of 12 months notice, like every other allotment in the nation, and afterwards galvanised my members to keep digging. We orchestrated a letter-writing campaign, even writing to Prince Charles. The Council, under this pressure, refused to grant planning permission to the health club, so they were left with two large tracts of barren land they could not use.

The result of this battle for land is looking better all the time; a testament to the power of local people against outside interests. As peace looks likely to blossom between us and the health club, there is to be a swap of land between us. Supporters tell me we have won. We will see.

CONNECTIONS

It has also been very interesting to find out just how many people there are across the country fighting the same fight as us. Professor Richard Wiltshire from the School of Oriental and African Studies at London University, an allotment holder himself, has guided a massive group of allotmenters in Dartford, Kent. He is research officer for Quality Environment for Dartford, a local Agenda 21 initiative which is finding ways for local allotmenters and the community to work together. So far, QED has spawned a website funded by the local council. This site houses the 'Virtual Potting Shed', which is open to every allotment society in Britain to post news about their fights, their victories, and life in general. Wiltshire has just been commissioned by the newly created Greater London Authority and the Local Government Association to co-create a Good Practice Guide for Allotment Management.

With so much support and passion behind it all over Britain, the allotment could become an important part of city life once again. But we'll have to keep fighting to make it happen.

Michael Wale is a journalist and broadcaster specialising in environmental issues. btinternet.com/~richard.wiltshire/allot1.htm.

YOU DIG?

Find some earth and get self-sufficient. The **Federation of City Farms and Community Gardens**, in Bristol (www.farmgarden.org.uk) offers advice on setting up a community garden (design, funding, legal issues). Or, if you want to go it alone, 'square foot gardening', or how to grow everything you need and more on a 4'x4' plot is explained in excellent detail on the **HDRA** website (www.hdra.org.uk). Your local council should have details on how to apply for an allotment plot, and if there are none available, or they've all been sold to build shopping malls on, join the **National Society of Allotment and Leisure Gardeners** (www.nsalg.co.uk) and fight the fall in allotment provision.

Meanwhile, some wonderful projects have been set up by the

Women's Environmental Network (www.wen.org.uk/local.htm) enabling women from minority ethnic communities to grow their own food. Their Local Food Project Officer, Caroline Fernandez, is passionate about the benefits: increased self-esteem; better health from exercise and eating fresh vegetables; saving money; improving the local environment; getting in touch with the earth again; knowing where your food is coming from; decreased food miles; reducing the need for packaging; and as she rightly points out, it's great fun and very satisfying.

As part of the WEN's campaign, 'Taste of a Better Future', she has written a downloadable briefing on how to grow your own food, as well as a starter pack for schools.

A FORCE FOR GOOD

MARGARET CASEY REMEMBERS TINA COOKE, PASSIONATE CAMPAIGNER FOR INFORMATION INTO ALTERNATIVE TREATMENTS FOR CANCER, WHO DIED IN JANUARY.

TINA WAS DIAGNOSED with advanced breast cancer in January 1998. Disheartened by the chemotherapy that followed her radical mastectomy she decided to visit an alternative cancer-care clinic in Tijuana, Mexico. Having made astonishing progress there she returned to London and set up CAIB, the Cancer Alternative Information Bureau. She desperately wanted to save other cancer sufferers from having to waste badly needed time and energy in trying to find bits and pieces of information. She wanted everyone to know that alternatives do exist and that they can work alongside orthodox treatments to fight and control this disease.

A mutual friend introduced us two years ago although it feels as though I've known her a lifetime. We spoke on the phone once or twice and the next thing I knew she landed on my doorstep. Tina was full of enthusiasm, passion and a determination to tell the world of the information she had gathered in her search for the treatment of cancer. She was desperate to spread the word on the alternative and complementary therapies she had found during her own search for survival. At that time she was receiving and answering at least 30 letters a day and was in dire need of assistance; she was impossible to refuse – those of you who have met her will know exactly what I mean!

Tina was a very complex person with deep spiritual feelings and beliefs, passionate about life and the living of it to the full and best of her ability and above all she was totally besotted with and extremely proud of her four children. She was a devoted and adoring mother to Mark 21, Justin 19, Francesca 8 and Troy 5 – she



TINA COOKE, *campaigner for research into alternative cancer treatments.*

referred to them always as 'my beautiful babies'.

Tina possessed a wonderfully wild and wacky sense of humour. She had a unique sense of style, always impeccably groomed and dressed to perfection on every occasion. Prior to being diagnosed with breast cancer Tina was a very successful businesswoman in the publishing world with offices in Knightsbridge (next door to Harrods, Dahling!) and the ultimate entrepreneur. She could charm the birds from the trees with her radiant smile – everyone and anyone who met her were totally infatuated by her beauty, charm, wit and that infectious bubbly laugh!

In the two years we worked together we had an enormous amount of fun, a great

many adventures, tears of joy and tears of sadness, and best of all we accomplished a great deal – the greatest achievement being the growing success of CAIB and the fact that between us we managed to gather together on one stage the world's leading experts in the field of integrated cancer care, not once but three times, who imparted their wealth of knowledge to anyone who cared to listen – empowering them to take control of their cancer by giving them quality, if not extension to their lives. The enormous success of the CAIB conferences can be measured by the great many letters and phone calls we have received from both carers and cancer sufferers after each conference expressing gratitude for being given the opportunity of benefiting from the ground-breaking information provided by the speakers which would have otherwise been inaccessible to them. This was Tina's dream come true and this is what she would have us continue.

Tina worked tirelessly and endlessly to help other cancer sufferers, and in doing so neglected to heed her body's warning signs as the focus shifted from her own needs to those of others. All the travelling, meetings, fund-raising and associated stresses took their toll on her already weakened body.

Courage and determination alone were not enough and tragically, on January 21st she slipped away quietly and peacefully surrounded by her loving family as she succumbed to the disease she fought so valiantly.

She will be fondly remembered and sadly missed.

Margaret Casey works with the Cancer Alternative Information Bureau (CAIB).

IN HER OWN WORDS

'I did not want to die. I did not want to have a tube in my chest. I did not want to have chemicals poured into my body which were so powerful that even the nurses could not touch them because of the risk they'd get burnt. I wanted to find a new way.'

'They can send rockets round the world and even fly to bloody Mars, and yet they can't get a bunch of scientists together to crack cancer – sorry, I don't buy it.'

'Things have got to change soon because we're losing the war on can-

cer, and we're being deprived of the alternative weapons that could help turn the tide.'

Tina Cooke: The Ecologist Vol 30 No 4 June 2000

Tina Cooke set up the Cancer Alternative Information Bureau (CAIB) to help and advise those who are interested in discovering more about alternative choices available to cancer sufferers.

More information is available on the CAIB website at, www.caib.co.uk. CAIB can be contacted directly on 020 7266 1505, or fax 020 8332 0306.

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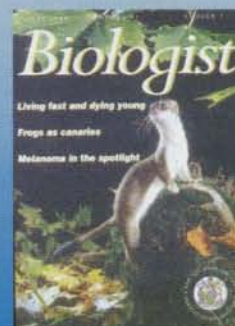
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DANGER ISLANDS

FUTURE RISING SEA LEVELS HAVE BROUGHT THE PLIGHT OF THE SOLOMON ISLANDS TO THE ATTENTION OF THE WORLD. YET AS NICOLA BAIRD REPORTS, GLOBAL WARMING IS ONLY PART OF THE ISLANDERS' TROUBLES.

THE SOLOMON ISLANDS used to be known as the 'Happy Isles'. But that was before Prime Minister Bartholomew Ulufa'alu was ousted by the Melaitan Eagle Force in a coup in June last year, before the nightmares of inter-island strife that followed – headless bodies have even been dumped in the marketplaces – and before the sea levels have even begun to rise.

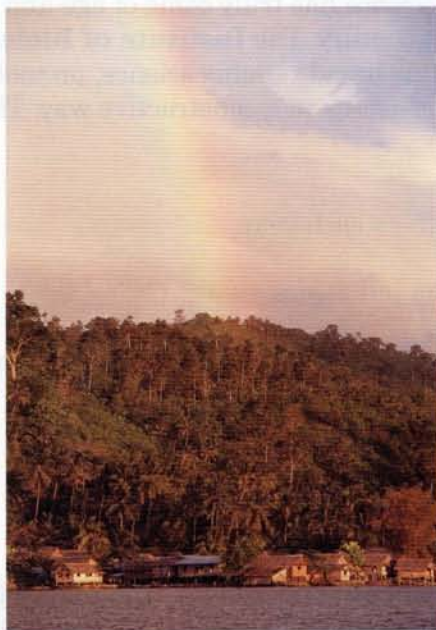
Thousands of families have had to flee their homes to avoid the increasingly bitter clashes between men from Guadalcanal, the island province where the capital, Honiara, is sited, and Malaitans who came to work on oil palm plantations near the airport, made homes in Honiara and seemed to take over the country's top jobs.

At the same time, the country's fragile economy, based on unsustainable exploitation of natural resources, has imploded.

Logging has, for some time, been the source of around 40 per cent of the government's earnings. As the country's debts mounted – by the end of 1997 it owed over a billion dollars – log exports grew and grew. Apart from a handful of powerful men – all too often in government jobs – this trashing of the forest didn't make the majority of Solomon Islanders any richer. The currency devaluation of August 1997 made life much harder for a people reliant on foreign imports (such as rice, tinned fish, cooking oil and kerosene) – especially the Malaitans and the Guadalcanal youths. It also made foresters wonder just how long this pace of logging could be maintained – some believed there were only a couple of years' of harvestable trees left, and that the damage done to the country's forests would take decades to recover.

The irony is that the Solomon Islands is a nation of villages. Most families prefer to live in self-sufficient language groups – around 80 languages are spoken – growing food and fishing using methods that their ancestors would recognise. However, the exponential population growth, lack of appropriate education – even primary schools charge – and too few places for secondary school students, combined with increasing exposure to Western lifestyles, has created a very restless youth culture.

Since the coup, there have been increas-



THE VILLAGE SOCIETY, unique wildlife and fragile social cohesion of the Pacific Solomon Islands have been stretched to breaking point by recent unrest. How much longer can they last?

ingly ugly clashes between the MEF (named after a local football team) and the Guadalcanal-based People's Isatabu Freedom Movement (IFM). More than 100 people have been killed in ambushes and random attacks, calling up memories of the violent battles of 50 years ago between Japanese and American soldiers and commemorated by place names such as Bloody Ridge.

Most of the fighting has been on Guadalcanal, around Honiara, but the consequences have been far-reaching: paid jobs nationwide have all but disappeared as a result. Besides foreign aid, all sources of hard currency have dried up as first oil palm plantations, then a gold mine and finally the country's own tuna cannery fell victim to the activities of rival armed militia. And despite a tentative peace agreement signed in Australia last October, business is not back to normal. The government is constitutionally illegal, the police demoralised, schools shut and the 40 foreign peacekeepers from Australia and

New Zealand are powerless to stem the chaos.

Meanwhile, the damage being done to this tiny island nation's environment is out of control. With 20,000 Honiara residents moving back to crowded Malaita province and another 10,000 Guadalcanal people forced to flee the capital to more remote parts of their home province, uncontrolled clearing of the forest for food crops is rife. 'People say, "We know the bush is our future, we know how important trees are, but we have to eat, so the ground has to be cleared,"' says Heinz Schurmann Zeggel from Amnesty International.

There are also reports of private logging deals, which the government collects no income on and cannot monitor, as well as dynamite being used for fishing in Malaita's beautiful Langa Langa lagoon and in Marovo lagoon (a World Heritage Site) over in Western Province.

What was once an extraordinary melting pot of Melanesian peoples has become yet another casualty in the rush for Western-style nationhood. And the premiers from the country's other seven provinces, mindful of the turmoil in the capital, are increasingly talking of going it alone. 'How much their village people are aware of this choice and if aware, how much they understand of the new system remains a mystery. None of the nine premiers mentioned anything about having consulted their people... a lack of village level participation in affairs partly responsible for the past months of social unrest,' according to John Roughan, adviser to the country's largest NGO, Solomon Islands Development Trust.

The future looks bleak. Pundits predict further armed power struggles in the other provinces, which will lead to even greater trials for the villagers; while those who can cream off the cash as they fight for positions of power.

And just when it seems that things could barely get worse, the Solomon Islands faces the threat of rising sea levels due to global warming. The islands are truly a country under threat.

Nicola Baird is an environmental journalist. She worked in the Solomon Islands from 1990-92.

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REVIEWS

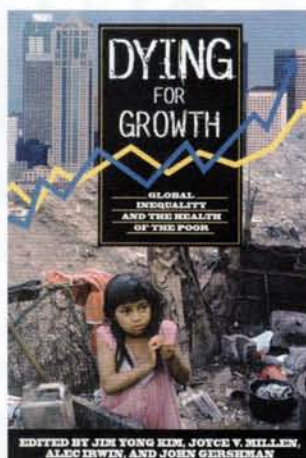
When the wisdom of medieval mercantilism was first questioned, and the practice of protectionism gave way to free trade more than three centuries ago, it was generally believed that applying the theory of 'comparative advantage' to international trade would eventually benefit everybody. But, as the editors of this well-written and meticulously documented work set out to prove, this holds true only if the trading partners start out on an equal footing. Citing numerous contemporary examples, they convincingly demonstrate that economic development tends to exacerbate existing inequalities, rather than bringing about greater economic and social equality.

To cite just a few examples from their text:

- 100 countries have suffered serious economic decline in the past three decades.
- About 3 billion people – half the world's population – earn less than US\$2 a day, 1.3 billion of them less than \$1, and every day some 840 million people go hungry.
- Three billion people lack basic sanitation, and one-third of them have neither adequate housing nor access to safe drinking water.
- In 1960, the poorest 20 per cent of the world population received 2.3 per cent of global income; today their share is less than half of that.

These and other figures reveal that, in many parts of the world, poverty and inequality are growing worse, 'despite decades of effort to stimulate economic growth'. GDP growth is still the standard yardstick for measuring progress toward the avowed goal of reducing poverty and improving the overall economic and physical health of a society. But, as the authors have concluded, 'growth is not a miracle drug' capable of curing all social ills. Or, as the late American writer and conservationist Edward Abbey put it so succinctly: 'Growth for the sake of growth is the philosophy of the cancer cell.'

One manifestation of the belief in growth as a panacea for all social ills is the 'trickle-down' theory, which gives solace to the souls of self-proclaimed 'compassionate conservatives', while serving as justification for all the abuses committed on a daily basis by transnational corporations (TNCs). But in a recent campaign speech, the deceptively mild-mannered but intellectually astute US vice-presidential candidate Joe Lieberman gave short shrift to this left-over cliché from the glory days of



DYING FOR GROWTH GLOBAL INEQUALITY AND THE HEALTH OF THE POOR

Edited by Jim Yong Kim,
Joyce V Millen, Alec Irwin and
John Gershman
COMMON COURAGE PRESS 2000
\$22.00

Reaganomics with the following aphorism: 'It's like feeding the pigeons by giving the horse more oats.'

Dying for Growth is replete with specific examples illustrating the editors' thesis, and taken from case studies conducted in numerous countries. The lead-in to a chapter about how global trade under the aegis of the TNCs adversely impacts the health of the poor is a quote from the economist J K Galbraith from 1977: 'The institution that most changes our lives [but] we least understand is the modern corporation. Week by week, year by year, it exercises a greater influence on our livelihood and the way we live than unions, universities, politicians and the government.' Prophetic words indeed.

More than 30 pages of *Dying for Growth* are devoted to the sham known as 'the war on drugs'. As any first-year student of economics can tell you, it is impossible to stop demand by cutting off supply. Reduced supply = higher price = bigger profits for dealers = greater incentive for growers. You fight the *narcotrafficantes* or eradicate the poppy fields or coca plants in one country, only to see the action move across the border to one of its neighbours.

Hence the \$300 billion which the US government has spent to date – ostensibly to stem the flow of illicit drugs across its permeable borders – would seem to be a total waste. A study by the RAND Institute concluded that the same amount invested in drug treatment programmes would be seven times more cost-effective. But if we

are to believe the authors – and their claims are well documented – 'the war on drugs' serves another, more sinister, purpose: supporting despotic governments friendly to the US (read: valued clients of the TNCs) in their efforts to suppress political opposition. For the footsoldiers of such opposition are usually the same poor peons whose livelihood derives from cultivating cannabis or coca. What better way to disarm them than depriving them of their income and thus the wherewithal to buy arms? This explains why a substantial part of the drug war budget is allocated to the Pentagon.

If any fault is to be found with this exposé of the destructive side-effects of globalisation, it is that the editors are reluctant to draw the logical conclusions from their own advocacy of improved living conditions for the 75 per cent of world population now struggling to survive. In the last half century, infant mortality was reduced by 60 per cent and life expectancy increased by almost 40 per cent, resulting in a yearly net increase in world population of some 80 million. If concerted action – as outlined by the authors – were taken to further improve these statistics, the annual increase would be half again as high. And while huge numbers of people – whether in so-called underdeveloped countries or in the American prison system (largely run by for-profit companies who 'farm out' their inmates to industrial sub-contractors for as little as 17 cents an hour) – provides the TNCs with a virtually inexhaustible pool of cheap labour, it also strains our planet's finite resources beyond all reasonable limits.

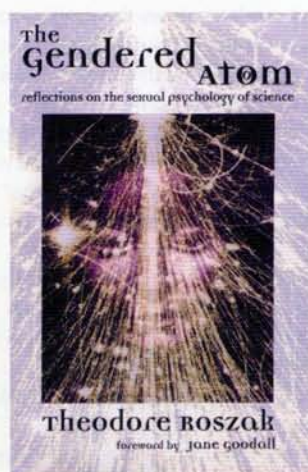
Evolutionary history shows that it may take thousands of generations for an animal to adjust to a new physical environment. And while homo sapiens has made great strides in the past century toward improved health and longer life expectancy, no commensurate effort has been made to reduce the procreative urge of the human animal, which was calibrated for survival in an environment far more hostile than the one most of mankind faces today.

Therefore, laudable as the authors' attempt at reducing human suffering may be, it can never succeed unless we are prepared to take an equally honest look at the obverse side of the coin: the population explosion, largely rooted in religious and cultural taboos, originally designed to safeguard the survival of the human race.

Gard Binney

THE GENDERED ATOM REFLECTIONS ON THE SEXUAL PSYCHOLOGY OF SCIENCE

By Theodore Roszak
GREEN BOOKS 2000 £8.95



The untarnished objectivity of science has long been questioned. Whether it be the reassurances over the safety of nuclear power, the health-giving properties of a BSE-burger or the 'absence' of concern over genetically modified food, scientists appear increasingly co-opted by big business and the interests of commerce.

But in his excellent new book, Theodore Roszak introduces the idea that the inherent

bias in science is far deeper, and that it can be traced back to our formative years. The gender stereotypes that pervade society, he says, also govern the way that 'good' science is conducted. The key message of *The Gendered Atom* is that, 'male scientists have always been more male than scientist.'

Intrigued? Infuriated? Excited? Read on. Using as an example Mary Shelley's *Frankenstein*, the classic tale of science gone mad, Roszak explores the relationship between gender and science. He sees centuries of male domination in society as a whole as the root of distortions in research and development, as well as in the relationships we all have with the natural world.

It's in school the indoctrination begins. It is the 'good little scientists' who put aside their squeamishness and dissect the frog. This is the beginning, says Roszak, of the type of 'macho science' which has 'licensed any number of aggressive and unfeeling acts' in the name of progress. It excludes all the qualities considered 'feminine' – sensitivity, gentleness, warmth, compassion and intuition.

Furthermore, he says, the long-held myth that science is in some way 'pure' or 'neutral' is patently not true. For as long as there has been science, there has been the pursuit of control over 'Mother' Nature. Male gods and masculine science have conspired to dominate the female. These deep-seated prejudices are at the heart of

'real' science, and reveal its innate corruption.

If it sounds extreme, or even needlessly controversial, it is anything but. And Roszak is keen to justify his use of strong language; the 'rap' of nature, he says, is not just a metaphor. The natural world is objectified, turned into a dead thing, and then defiled with impunity. The reductionist excess that requires there to be solid 'atoms' at the heart of everything is extended to life. He reminds us that the words for 'matter' and 'mother' were originally the same.

But the future need not be hopeless. This superb insight into the heart of science includes a look at the world of the sub-atomic physicist, that most rational and reductionist of breeds. They are beginning to realise that it is not individual 'things' that are at the heart of their quest for the constituents of the atom, but the relationships between the 'things' that matters.

It is likely to take some time to inoculate science as a whole with such radical views. After all, the idea that the atom was the indivisible element of nature lasted as 'fact' for 300 years.

How long will it take before geneticists understand that their 'atoms', ie genes, are important not just on their own, but in relation to the 'community' and the environment they inhabit?

Hugh Warwick

WORTH SEEING

This month sees the launch, on 2 March, of national **Fairtrade Fortnight** across the UK; an event which, its organisers hope, will make people aware of what fair trade is, why it's a good thing and how they can get involved. It's an ambitious project, but they've brought in a tranche of celebrity types – Antony Worrall Thompson, Judi Dench and others less interesting – to help them push it. The whole thing is organised by the Fairtrade Foundation, which is putting in place a variety of different events around the country to help promote it – starting with a 'fairtrade breakfast party' at Worrall Thompson's London restaurant on 2 March; which may well be worth a look in, particularly as the standard of his cuisine is fairly well-renowned.

Here's hoping it all makes a difference, for, in a world reliant on trade, there's little enough fairness out there. And the Fairtrade Foundation reckons that if everyone in the country just bought one fairly traded product a week (that's one with their mark on – otherwise it

doesn't count!) it would make all the difference.

But if you don't believe them – or, indeed, me – listen to what the farmers who are paid a fair price for fairtrade goods have to say. 'Fairtrade', says Jorge

Ramirez, president of El Guabo Banana Farmers in Ecuador, 'is the reason that small farmers in our association still have a livelihood at all.' You heard the man – now get down the shops.

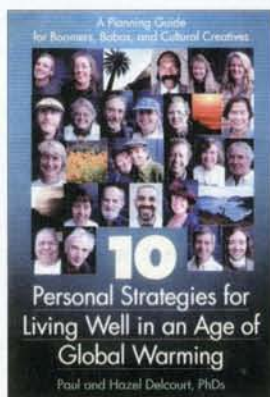
That's enough shopping. Now let's take in some art. Sorry to be so metropolitan again, but I do want to mention the **Tate Modern's** top floor gallery dedicated to the theme of 'Landscape/Matter/The Environment'. After my scurrilous comments last month about the state of 'modern art', it's just possible – though don't hold your breath – that I may have to eat at least a few syllables of my words. The floor aims to explore how artists over the last century have approached landscape and nature. With material from Monet and Matisse to Mark Rothko and Ellsworth Kelly the exhibition is certainly wide-ranging; and if nothing else, will make you think about how the relationship between art and nature has progressed (or regressed) as industrialisation and urbanisation have proceeded at breakneck speed. Go see, and decide for yourself. And don't forget to let me know of any other exhibitions you feel *The Ecologist* should be reviewing.

Paul Kingsnorth



10 PERSONAL STRATEGIES FOR LIVING WELL IN AN AGE OF GLOBAL WARMING

By Paul and Hazel Delcourt
CHELSEA GREEN PUBLISHING,
VERMONT 2000 US\$16.95



DISTRIBUTED IN THE UK BY GREEN BOOKS £12.95

This important new book will be published in May.

The Baby Boomer generation flows through American culture like the proverbial elephant swallowed by a snake. In the 1960s, they protested against the Vietnam War, helped topple a president, and inspired their entire generation to question authority. By the '80s, however, many Boomers found themselves ensconced in families, careers, and the traditional pursuit of upward mobility.

Added to the population demographics is both the certainty and uncertainty of global climate change. A generation on the threshold of the golden years must plan for a future that has an unprecedented number of question marks, such as:

- What will happen to property values when the Boomer generation starts to shrink? The Delcourts predict a major deflation around the year 2010.
- Will climate changes touch off mass population migration? Will the US Southwest still have fresh water, and will storm-buffed Florida be habitable 20 years from now?
- What lifestyle changes will be dictated by climate change? How do we cope with an expanding ozone hole? Can we 'go fishing' if the fish, and maybe even

the lakes, have already gone?

10 Personal Strategies is a planning guide that anticipates the greenhouse world, and offers positive solutions. The book is a byproduct of the retirement planning of the authors, and in it they share their findings, which have universal applications.

Based on current scientific research, this planning guide analyses the environmental changes most likely to affect people in the North in coming decades, and recommends specific strategies to achieve 'lifestyle' goals. Why buy a retirement home that might be under water in 15 years, or one built on an a dwindling aquifer ready to collapse?

These questions may seem frivolous now, but they are quickly becoming relevant to many of us. A person in the prime of life, cancer-free and with no history of heart disease, can expect to live until well past 90. In this timespan, climatologists agree, our physical world will undergo dramatic changes. The 10 strategies espoused by the authors let you plot the course that is right for you, as the world changes around you. The future need not be alarming for those willing to face it realistically and to act decisively.

Gard Binney

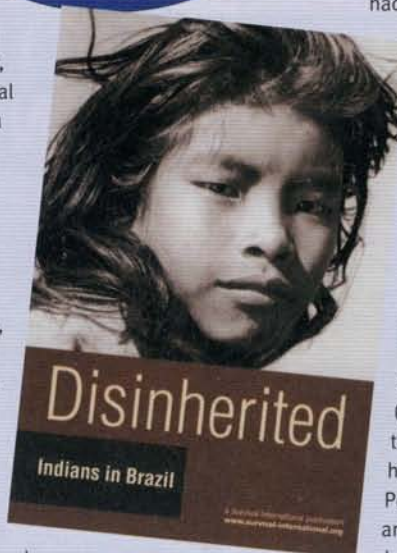
WORTH READING

Corporate Watch magazine (www.corporate-watch.org.uk, tel: 01865 791391), one of the best UK-based sources of information on our multinational friends, has transmogrified into a web resource rather than a paper based magazine – a bit of a shame in my humble opinion, though I imagine the trees which escaped were grateful. But they still send out the occasional newsletter, the Jan/Feb issue of which is as enlightening as ever. A personal favourite is the 'Babylonian Times' page, which takes what you might call a 'sideways' look at the latest corporate hogwash, wrongdoing and general plutocratic guff.

I mention this because, sitting on my desk next to it is the **Honda Environmental Annual Report 2000**, which it strikes me might fit in there rather well. Honda, one of the world's biggest creators of gas, plastic and steel guzzling automobiles, are very keen to tell us all of their 'conservation activities' this year – everything from how much recycling they do to their all-new electric cars. 'We hope', they say, 'that it will provide you with some insight into how seriously we take green issues.' About as seriously, it seems, as the world's biggest mining corporation **Rio Tinto**, whose lovely colourful new **Review** is all about how 'sustainable' they are. Did you know, for example, that this friendly bunch of hole-diggers has 'joined hands with a number of other leading mineral companies in an initiative that will investigate how the industry can help to create a more sustainable world.' Good news, eh? Mind you, I looked all the way through, and I couldn't find the bit about *not* digging enormous holes in the middle of pristine southeast Asian rainforests. Still, maybe I missed it.

Mines, roads... if you're an indigenous Indian you know all about just how 'sustainable' these things truly are. Some idea of what effect they, and other destructive Western-style developments have had on the Indians of Brazil can be found in

Survival International's (www.survival-international.org, tel: 020 7242 1441) new pocket book **Disinherited** – a fantastic and chilling little guide to the Indians' fate since 'contact', and where they go from here. If you want the real story, try this first. Pictures, chronologies, dates, stories and some chilling yet inspiring facts.



Finally, *Guardian* investigative journalist Rob Evans has produced a book which every warmonger should read. **Gassed** (House of Stratus 2000. www.houseofstratus.com) is an investigation into the British history of chemical warfare experiments at Porton Down – and it's chilling stuff. The array of poison gases and other horrors developed at Porton is in itself skin-crawling, but what they did with them was even

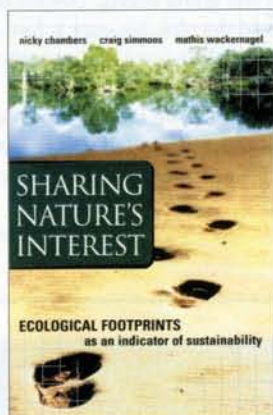
worse. Did you know that scientists at this cosy establishment in middle England conducted the longest-ever running series of tests of poison gases and chemical weapons – on their own soldiers? Neither did I. Read it and weep.

Paul Kingsnorth

SHARING NATURE'S INTEREST

ECOLOGICAL FOOTPRINTS AS AN INDICATOR OF SUSTAINABILITY

By Nicky Chambers, Craig Simmons
and Mathis Wackernagel
EARTHSCAN 2000 £13.95



Asked to explain the environmental crisis in terms everyone would understand, the 'green' business guru Paul Hawken put it like this: 'All our planetary systems are declining, and the rate of decline is accelerating. What more do you need to know?'

Measuring the rate and kind of decline, and assessing the impact of various measures that may stem or even reverse the trend, has grown into quite an industry since the Earth Summit in Rio in 1992 helped put 'indicators of sustainability' on the agenda for many concerned about the environment and the human future.

Sharing Nature's Interest pushes the case for ecological footprinting, a technique developed in the mid '90s. The technique aims to provide a way of calculating 'sustainable earth shares' for an individual,

town, region or nation. This is done by measuring how much productive land and sea is needed to support current lifestyles and comparing it to the amount actually available if everyone lived equally and in a way that did not compromise the ability of future generations to meet their needs.

The authors, who have developed and now promote software and other products that employ footprinting, say it is one of new generation of indicators that goes beyond being 'librarians', which organise information in categories, to being 'plumbers', which focus on how different categories are interconnected and what the trade-offs might be.

This book is an up to date guide to footprinting's whys, wherefores and how to's. There's a useful chapter answering questions people usually ask about the technique, and insightful commentary on the strengths and weaknesses of other approaches.

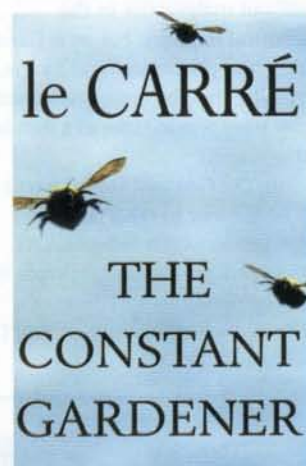
Intentionally, footprinting says nothing about peoples' quality of life. Rather, it provides a utilitarian view of nature – as a big bucket filled with resources – and measures who takes what. But, the authors argue, using such a crude simplification will broaden the model's appeal both to those reluctant to accept the ideas of ecological constraints and those who are keen on them. Also, they say, the graphic language of footprinting means it's easy to get the message across to 'ordinary' people, and so will help inspire action.

Tools to help make inspirational ideas real should be welcome. Footprinting certainly merits close attention. But some underlying points may not be new: back in 1902 Ebenezer Howard, in his *Garden Cities of Tomorrow*, proposed reserving five-sixths of the urban area for farming. His ideas were transmogrified in the New Towns programme, culminating in the glory that is Milton Keynes. Better luck this time, perhaps.

Caspar Henderson

THE CONSTANT GARDENER

By John le Carré
HODDER & STOUGHTON 2001
£16.99



John le Carré, that old doyen of the defunct Cold War has a new enemy: big business. With the superpowers gone – or one of them, anyway – the spy novelist has found a far more terrifying predator than atomic Russia: the multinational corporation.

Le Carré's latest tale begins with bloodshed: beautiful, young Tessa Quayle, wife of Justin, a middle-ranking British diplomat in the Kenyan High Commission, is found brutally murdered on the shores of Lake Turkana. Bright and idealistic, Tessa had spent her last few months investigating a giant pharmaceutical company which is attempting to sell its new tuberculosis drug in Africa. Her mentor and alleged lover has disappeared from the scene of the crime. *The Constant Gardener* traces the steps of Tessa's husband, Justin, as he tries to discover why his wife has been killed. His search draws



him into a murky world of corrupt business deals, computer hacking and ruthless brutality. In the process, he discovers his own integrity.

The subject matter is close to le Carré's heart. In his afterword, he goes so far as to urge readers to send money to the BUKO Pharma-Kampagne, a German watchdog set up to sniff out malpractice in the pharmaceutical industry. For, as le Carré says, researching 'the pharmaceutical jungle, I came to realise that, by comparison with the reality, my story was as tame as a holiday postcard'.

Certainly *The Constant Gardener* tells a tale that will be familiar to readers of *The Ecologist*; a tale in which independent scientists who don't toe the corporate line are robbed of their jobs and their reputations; where sick people in the 'Third

World' are used as guinea pigs to test out new drugs, or given pills that have been discontinued elsewhere due to their adverse effects. In *The Constant Gardener*, le Carré depicts a society that treads a fine line between brute mafioso-style thuggery and civilisation. Interestingly, we realise that the 'status quo men' – those port-swilling inhabitants of the Nairobi golf club – are as ruthless in their apathy as the corporate henchmen are in their violence. Wherever self-interest supersedes integrity, a dog-eat-dog mentality rules the day.

The fictionalisation of this real-life drama is in line with a rash of new Hollywood blockbusters demonising multinational corporations: *Erin Brockovich*, for example, or *Mission Impossible 2*. Faceless and all-powerful, today's corporations have become the populist bogeyman. This is no bad thing.

By bringing this important issue into public consciousness, such dramatisation could help temper corporate excesses. However, whilst Hollywood's heroes reign victorious, in *The Constant Gardener*, status quo rules; in le Carré's world, idealism is punishable by death. Nevertheless, *The Constant Gardener* is a telling depiction of the struggle to reclaim humanity from the throes of Mammon.

Le Carré is a master thriller-writer, of course – that's why he's on his eighteenth novel and still going strong. Despite the intricacies of the plot, his pace is fast, and he bandies the narrative voice seamlessly between characters.

May le Carré write many a novel on this same important theme; there are plenty more stories to be told where that one came from.

Lucinda Labes

6 OF THE BEST

News and campaigns editor Stephanie Roth suggests six good reads you probably won't find in the newsagent

Wild Duck Review, (Literature, Necessary Mischief & News) Quarterly.

PO Box 388, Nevada City, CA 95959, USA.
www.wildduckreview.com

'In literature, it is only the wild that attracts us. Dullness is but another name for tameness. It is the free thinking in Hamlet and the Iliad, in all the scriptures and mythologies, not learned in the schools, that delight us. As the wild duck is more swift and beautiful than the tame, so is the wild – the mallard – thought.' Wild Duck

Review explores the dialogue between wildness and tameness as expressed in Thoreau's wonderful quote.

Multinational Monitor 10 issues a year.

PO Box 19405,
Washington DC 20036, USA.
www.essential.org/monitor

Founded by Ralph Nader and edited by Robert Weissman, this magazine, by focusing on one subject in each edition, gives you all the necessary ammunition on subjects like political investments, corporate agribusiness, the World Bank and lots more. Vital.

Corporate Crime Reporter 48 issues a year.

PO Box 18384,
Washington DC 20036, USA.

Edited by authoritative Russell Mokhiber, this is a personal favourite... impatiently awaited each week. Shedding light on all the nasty stories of multinational companies and all the tricks they are up to. Each edition also features a fascinating interview.

WISE – News Communiqué 20 issues a year.

WISE Amsterdam, PO Box 59636,
1040 LC Amsterdam, The Netherlands
www.antenna.nl/wise

First-class information on the latest about nuclear power and the various players involved. With excellent research and inside knowledge, this is a paper to rely on. Its December issue featured 'Nukes at the climate talks', Japan, reprocessing, an early warning on what has become true and an excellent piece on Sellafield and the future of reprocessing in the UK.

Utne Reader: The Best of the Alternative Press Bimonthly.

PO Box 7459, Red Oak,
IA 51591-2459, USA.
www.utne.com

The Utne Reader has been kicking and bashing together some of the best articles for well over 15 years and still is a good read from page to page. Its November/December edition for example carried an article on Italy's Slow Food movement as well as 'Poetry in Brick and Mud', on architect Laurie Baker's affordable and energy-efficient constructions.

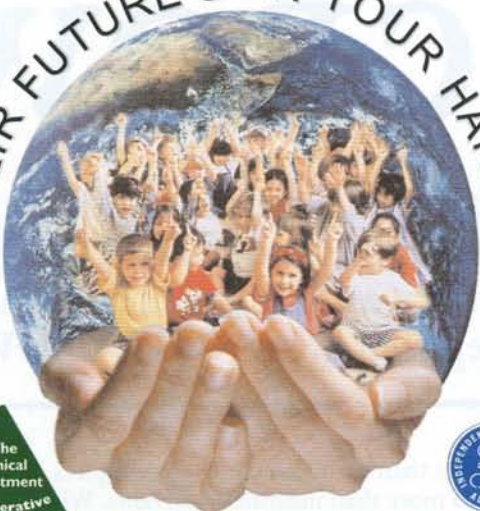
Appropriate Technology (Incorporating International Agricultural Development) 12 times a year.

Research Information Ltd, 222 Maylands
Ave, Hemel Hempstead, HP2 7TD, UK.
www.researchinformation.co.uk

A 'must-read' for everyone interested in the agricultural sector, particularly in the Third World. Look no further for case studies proving that local/grassroots initiatives and truly-sustainable programmes work with more success than intensive methods. But be warned – their stance on biotech is 'neutral'.



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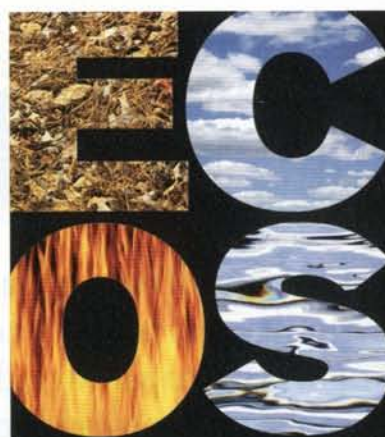
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DOWN – AND OUT – ON THE FARM

The Crow has found that even the most outrageous ideas may be taken seriously by bureaucrats.

About a year and a half ago I wrote an open letter to President Clinton — tongue firmly in cheek — suggesting that it would make more sense, logistically as well as economically, to reinstate the time-honoured institution of slavery in the United States than to continue the practice of assembling garments, toys, and electronics by child and adult slave labour in the so-called Export Producing Zones of far-flung overpopulated Third World countries.

The genesis of this brilliant idea, which was presented as an editorial in the December 1999 issue of *The Ecologist* was the fact that more than a million and a half non-violent drug offenders are currently incarcerated in American prisons, at a staggering cost of \$50 billion a year to law-abiding tax payers.

Case in point: a penniless woman with no criminal record, who carried two ounces of cocaine from New York city to Albany in exchange for a free ride, was thrown in prison for 17 years under the state's mandatory sentencing rules, from which no judge dare deviate on penalty of being stripped of his judicial robes. More about the silly and self-defeating 'War on Drugs' in a coming issue. The point of my letter was simply that it would make more sense to put these druggies to work, performing some of the unskilled mobs which are now delegated to foreign slave labour.

But not for a moment did I suspect that my Swiftly satirical suggestion would be taken seriously. However, according to a recent article in the muck-raking American monthly *Mother Jones* — named for the hell-raising 19th century labour activist Mary Harris Jones — there is presently before Congress a bill that would permit US agribusiness to import up to one million seasonal farm workers from impoverished nations like Mexico, Jamaica and Guatemala — up from the present number of about 50,000, which does not include an unknown number of illegal aliens.

The new system of importing foreign *Gast-Arbeiter* to harvest crops and perform other menial jobs has one big advantage over the old, ante-bellum system of plantation slaves: the 'guest workers' are only hired for six or seven months, and hence need not be housed and fed during the months when fields lay fallow; they are simply shipped back to their country of origin.

For the so-called H-2A visas do not allow them to remain in

the US after their term of employment expires. In this sense they are no more than indentured servants. While by law they are guaranteed certain rights as regards living conditions, working hours and minimum wages, in reality they are at the mercy of the farmers who have contracted for their labour, and who often have snitches on their payroll who report any signs of discontent to the boss, who can then summarily dismiss the alleged grouser.

On a big tobacco farm in North Carolina, 32 pickers sleep on mouldy mattresses in a hot, rat-infested tin shack, sharing six toilets and a stove on which to cook their two daily meals — one before the 6 am call to work and one at night, after 12 hours of back-breaking work in the fields, often without access to safe drinking water or toilet facilities. Since they are not provided with any protection against potentially lethal pesticides, they have pooled their earnings to buy a washing machine in which to clean their overalls. While their federally mandated pay is good compared to what they could earn in their homeland, they

'The agribiz bosses who dole out the seasonal jobs have little to fear by breaking the rules.'

are often short-changed by their temporary employer. As one farmer put it: 'We fuck 'em on the hours.' And the seasoned seasonal field hand knows better than to voice any complaints. Doing so might not only jeopardise his current job; it can put him on the list of undesirable candidates for future stints as ditch diggers, cane cutters, or potato pickers.

On the opposite side of the coin, the agribiz bosses who dole out the seasonal jobs — often the only source of income for the Third World temps — have little to fear by breaking the rules: 99 per cent of employers against whom complaints had been launched by workers to the US Department of Labor had no difficulty getting re-certified to receive their quota of slave labour the following year. This testifies to the power of Washington lobbies: it is cheaper for the big agricultural conglomerates and other players in the global marketplace to buy votes in Congress than to hire American workers, only a small number of whom ever get a crack at these seasonal jobs, even though there is no lack of applicants.

In the words of *Mother Jones*, 'the programme has turned NAFTA inside out: since US farms can't go to the Third World (the way manufacturing and mining companies can), the federal government lets agribusiness bring the Third World to US farms.'

Who said you can't have it both ways?

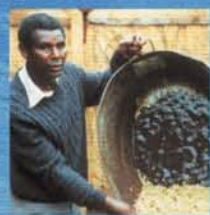
The Crow is a mouthpiece for thinkers with individual and strong views. This month, the role of The Crow was taken by Gard Binney.

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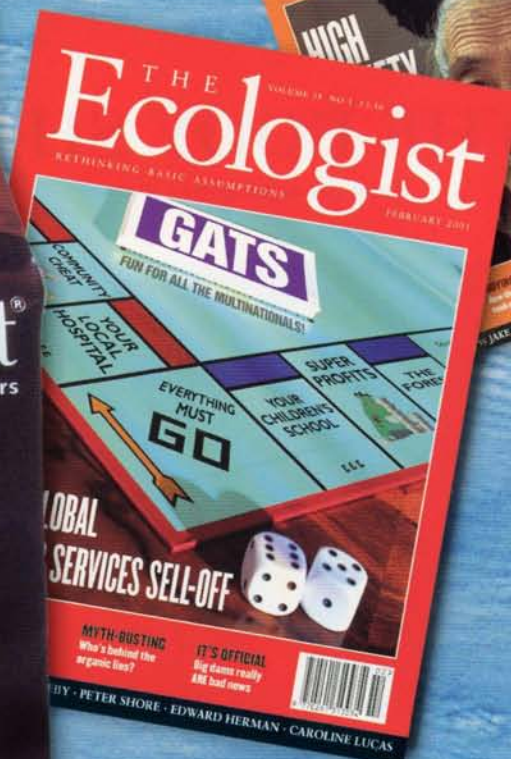
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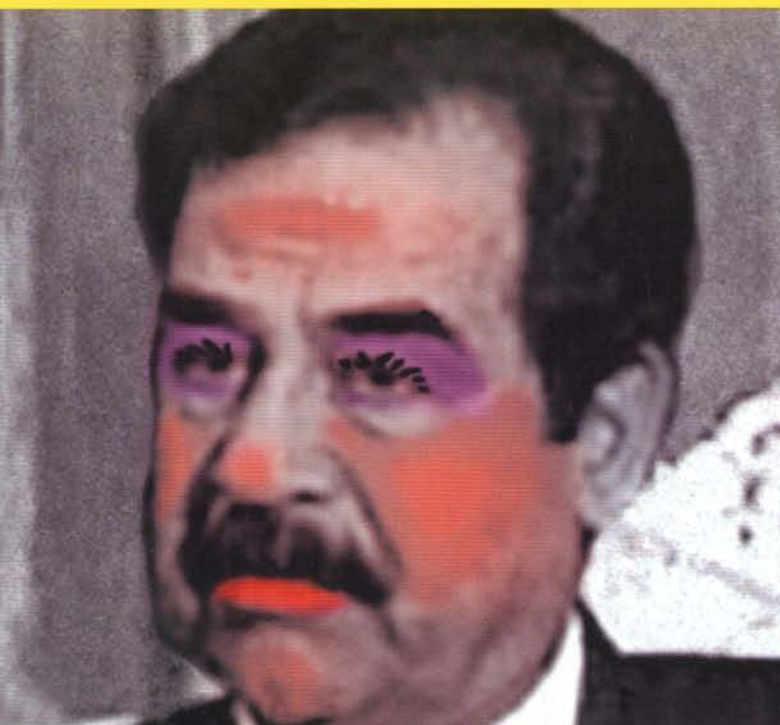
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