

Chain Reaction

Friends of the Earth Australia

Number 67 \$3.00



- Ecofeminism**
- Packaging**
- Whales**
- Community
right to know**



JOIN OVER 100,000 development professionals around the world who read *Development Forum*, the bimonthly international development newspaper with a United Nations perspective, published in English, French and Spanish.

To subscribe, or to obtain a complimentary copy or information on advertising rates, contact the Circulation Manager:

P.O. Box 5850
Grand Central Station
New York, NY 10163-5850 USA

TELEPHONE (212) 963.1517
FAX (212) 963.1381

SUBSCRIPTION \$25 per year
\$46 for two years

American Express, MasterCard or Visa accepted.

Third World Network FEATURES

For an alternative, Third World viewpoint on issues of Third World and global concern, subscribe to the Third World Network Features.

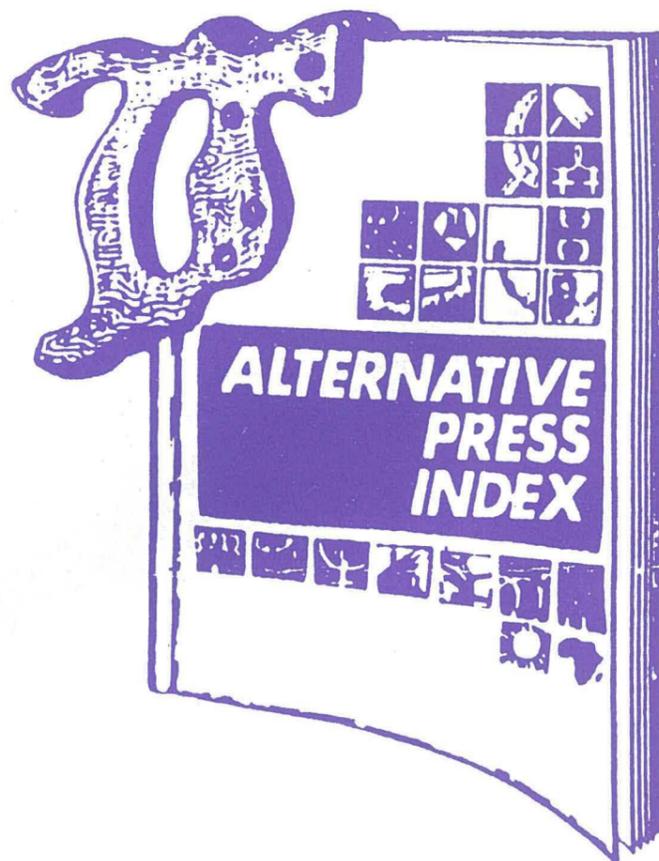
Written and edited by journalists, activists and thinkers from the First and Third Worlds, this weekly feature service offers a minimum of 150 articles a year, an average of 3 per week. Topics covered include environment, economics, health, human rights, indigenous/tribal affairs and appropriate technology and development models.

Normal subscription rates: US\$300 (air), US\$150 (sea)
Special rates for NGOs: US\$150 (air), US\$40 (sea)

CONTACT:

Third World Network, 87 Cantonment Road, 10250 Penang, Malaysia.

Social change tool for the 90s



This quarterly subject index to over 200 alternative, radical and progressive publications will be an invaluable tool in your study of social and political change. Ask the folks at your library to subscribe to the *Alternative Press Index*, a unique guide to information you won't find elsewhere.

Libraries \$125; individuals, non-profits, and movement groups \$30.

AND NEW THIS YEAR:
SPECIAL CUMULATIVE EDITION FOR VOL 23, 1991
\$50 [OFFER GOOD THROUGH DECEMBER, 1992]

For more information, write:
Alternative Press Center
P.O. Box 33109
Baltimore, MD 21218

Chain Reaction

Number 67 October 1992

16 Unwrapping packaging's public relations

How does packaging get such good coverage? *David Vincent* looks at the organisations and people who represent the interests of the packaging industry.

20 Forging Australia's nuclear chain

Recent developments are aimed towards Australia forming another link in the international nuclear industry writes *Maggie Hine*.

24 From centre to margin in ecofeminist thought

Ariel Salleh looks at the development of ecofeminism and the different substantive issues covered by ecofeminist writers from Third World countries.

26 Women and nature

Ecofeminism has inspired *Felicity Ruby*, who looks at the way language is used to feminise nature, and some of the meanings and implications of this.

31 Managing the Reef

There is a philosophy to the management of the Great Barrier Reef but *Denise Russell* argues that it is inadequate for protecting the Reef ecosystem.

34 Right to know

Community access to environmental information is a developing issue. *Larry O'Loughlin* and *Clare Henderson* compiled this report on what is meant by 'right to know'.

36 The massacre of the whales

William Lines provides a fascinating account of how whaling in Australian waters in the nineteenth century almost eliminated the great animals.

38 Regulating the slaughter?

Whaling has been banned, or has it? *Larry O'Loughlin* prepared this report on the regulation of whaling.

Publisher: Friends of the Earth, Chain Reaction Co-op Ltd, GPO Box 90, Adelaide, SA, 5001. **Editors:** Clare Henderson and Larry O'Loughlin
Front and rear covers: Artwork by Andrew McHugh and Chain Reaction, printed by Andrew McHugh on the Empire Times Press
Reprographics: Linea Graphics; Cadillac Color Web
Printing: Cadillac Color Web
Ink: Soya bean-based
Correspondence: Chain Reaction, GPO Box 90, Adelaide, SA, 5001
Phone and facsimile: (08) 293 8535
Electronic mail on Pegasus: peg:chain

Registered as a periodical category 'B' by Australia Post No VBQ 2034

letters	2
Hello Again Flower	3
earth news	7
greenword	12
FOE news	13
backstage	19
reviews	41
resources	47

Written material in *Chain Reaction* is free of copyright unless otherwise indicated, or where material has been reprinted from another source. Please indicate your source when reprinting. Permission to use graphical material must be obtained from the artist. *Chain Reaction* is indexed in the *Alternative Press Index*. The opinions expressed in *Chain Reaction* are not necessarily those of the publisher or any Friends of the Earth group.

ISSN 0312-1372
Recommended retail price \$3.00

Letters

Building Jerusalem

Could it be that we conservationists are getting rather long on Utopian rhetoric and a bit short on realistic analysis and decisive action? (And I do not mean the 'direct action' that can be another form of rhetoric, but the kind of action which involves practising, or showing how to practise some of the changes we advocate so vociferously.)

In the EcoCity issue of *Chain Reaction* (Number 66), the conference papers there reprinted rang with exhortation and confident expectation: 'Cities must change soon and in profound ways ...'; 'A sustainable society has to be characterised by ...'; '... a responsible city requires density, working at home, appropriate technology, urban wilderness ...'; '... there is considerable agreement about the general form of the new economy ...' (my emphases).

These visions are beguiling, and no doubt we need to be beguiled in these grim times, but insubstantial without:

1) realistic analysis of the political, economic, social and demographic forces that presently make more-of-the-same more likely; 2) reports of *actual* experiments along the lines recommended, with hard-headed assessments of their efficacy and amenability to generalisation. It is true that we have in the papers a brief reference from Hester and Lawson to Runyon Canyon Park, LA and to NY's Neighbourhood Space Coalition; and that Ted Trainer refers to 'some NSW settlements' where, he claims, people live sustainably; and to Crystal Waters Permaculture Village which 'could become an impressive example of what is needed'.

But where are the detailed reports, research and theoretical analysis that might encourage the rest of us wistful dreamers to:

3) act accordingly? Above all, where in the conservation movement is the *marketing push* to sell demand for, and know-how about, non-consuming lifestyles (against the *huge* persuasive drive of contrary political and economic interests) to the wider

community? For we rather tend to preach to the converted and talk to ourselves, I fear.

I appreciate that the organisations, like everyone else these days, are strapped for cash. But could they perhaps consider pooling their resources to move to establish a suitable shop-front, a Sustainable Living Centre – an energy efficient building (the medium *is* the message!), which will itself demonstrate principles, house displays, act as an educational resource and public relations powerhouse and perhaps research centre?

Perhaps we rely too often on the adrenalin rush of indignation against 'them' (governments, industry, greedy capitalists) to fuel our efforts, without noticing that we are ourselves so deeply embedded in the system as to be part of the problem. Perhaps we might consider it a good thing, as well, to spend part of our energy on the constructive, the experimental and the broadly instructive. Ted Trainer is to be commended for his lone effort in this direction, at Pigface Point, Sydney – but we need larger resources than those that can be provided by one man working in another demanding job.

Somewhere between Utopian dreaming and perpetual combat mode lies a third path – the path of practical experiment, exemplary action and public education – all backed by solidly sceptical research and theoretical analysis.

It is right to push governments to lead in green directions, to set our-

selves glowingly green goals. But perhaps we might achieve a more realistic sense of the complex difficulties militating against reduced consumption, avoid the charge of glib self-righteousness (see Jonathon Stone's Australian Foundation for Science Lecture, ANZAAS 1991), and win more converts to the cause, were we to take some appropriate steps to lead ourselves.

Gail Abbott
Sydney, NSW

P.S. Since writing this letter, I find that just such as my proposed shop-front is already in the planning stages in Sydney's Blue Mountains. Intelife's Technology 2000 Environment Centre is designed:

a) to provide appropriate employment training for the chronically unemployed and homeless, and
b) to provide a demonstration of, and information about, ecologically sustainable living practices and technologies to the general public. Money for the site has already been committed by the Blue Mountains City Council, and further funds have been sought from the Federal Government.

Might I suggest that readers give this project their every support?

Donations to the Intelife Project (Reg. Charity CC3449 – ACN 000.002.522) are tax deductible, and they and requests for further information may be sent to its Director, Paul Curtis, PO Box 97, Wentworth Falls, NSW, 2782. Donors will be issued with Sydney City Mission receipts.

TV violence

Everyone has different opinions. I suppose I have, but what if you agree as well as disagree with one issue? 'The impact of television on children' (*Chain Reaction* 65) blamed TV, not the parents, not the children.

You see violence on TV non-stop on the news, current affairs, children's cartoons and movies. Once I read the article it led me to think that there is not just one side to the issue but two. What Anne Sanson wrote was true, the violence is seen, seen by children in cartoons or even if they glance at the news. It will interest them

and they will stop what they are doing and watch the actions, nothing else around them will be in their notice. The children don't understand the reporter explaining the report, all they are interested in is the guns, tanks and fighting. Yes, violence is in the Ninja Turtles and Voltron and their toys are violent tools, but little boys won't watch or play 'sissy' things. The parents could help with this by explaining the cartoons are all make-believe. If parents get that worried don't let the kids watch telly – simple!

It all depends on whether the children are impressionable or not. As they get older they will un-

derstand and hopefully their parents would have taught them violence is not right.

Peta Gordon
Gnowangerup, WA

It's an IS plot

On reading 'How was AIDEX?' by Louise MacDonald, I was not surprised to learn of the shenanigans of the International Socialists (IS) at the protest.

You do not have to be paranoid to posit the view that the IS behaves exactly in the same manner and with the same tactics as a CIA-sponsored group. These groups, found widely throughout South America, South Africa, Afghanistan,

the Philippines, and so on, have the sole purpose of disrupting small-scale organisations and demonstrations which articulate 'alternative' views. Under the guise of 'Left wing' sentiments, they do a good job of keeping the focus away from the genuine issues. And, of course, they never fail to promote a lot of violence which the cameras soak up. Think about it.

M. Taylor
Holland Park, QLD

Friends and FOES

With astonishment I have read the article about the corporate takeover of Friends of the Earth', by



Why not write to *Chain Reaction* with your comments on the magazine or any other issue of interest?
Chain Reaction
GPO Box 90, Adelaide, SA, 5001
Fax: 08-293 8535

Letters

'Hungry Coyote', in your April 91 issue. I think publishing this article in this form is wholly unfair to a sister organisation of Friends of the Earth Australia.

First of all, the article is just one opinion about what happened in the mid-eighties in FOE US. As chairman of Friends of the Earth International from September 1986, I have tried to reconstruct as good as possible what has happened, and I know that there are other versions as well. Two specific comments:

The title suggests that corporate interests were successful in taking over FOE US. In the article nothing of that kind is proved. The fact that some of the persons involved were rich or in jobs had to do with companies (partly even before their involvement in FOE) does not prove anything. Mentioning such details (and only about the persons that were opposing the Brower group) is sheer demagoguery.

In a small framework you refer to Tom Turner, who in a later issue of Earth First! alleged many inaccuracies in the article from 'Hungry Coyote'. However, you do not pay much attention to his comments and apparently you

only selected some quotes. One of his comments however is crucial: FOE carried a large and growing debt in the eighties. And one of the main problems the majority in the FOE organisation had with Dave Brower was his responsibility for this debt and his reluctance to accept the need to economize. Knowing this it especially demagogic to write, as 'Hungry Coyote' does, that the result of the 'DC hijack' was 'a staggering \$627,000 debt' as if this DC group was especially responsible for that debt.

Secondly, I do not understand at all why this article is published in this form at this moment, two and half years after it was published in Earth First! It would have been not more than reasonable, especially as it is concerning a sister organisation, to give FOE US a chance for comment in the same issue. And the least what you could have done is explain as editors what happened afterwards with FOE US. The article gives an impression of an organisation at the end of its existence. Reality nowadays is completely different. FOE US indeed had a difficult time after the split. However, in 1990 it merged with the Environmental Policy Institute (an offshoot of FOE US in the seventies) and the Oceanic Society. The name for this new organisation is Friends of the Earth. This new FOE has become one of the main pillars of FOE International. It is one of most important fundraisers for FOE International. It has delegated half of its Small Grants Program to FOEI in order to help FOE mem-

bers in the Third World. It is playing a key role for FOEI in changing the policies of the Multilateral Banks. It was one of the few US-based environmental organisations that dared to campaign actively against the Gulf War. FOE US is far from been taken over by corporate interests!

FOEI is a federation of autonomous environmental organisations. I am sure that FOE Australia is very much in favour of this autonomy. It does not want other FOE groups to decide what priorities it should have, how exactly to make decisions etc. However, that implies as well that it needs to respect this autonomy of other FOE members. This does not mean that criticisms to other groups are not allowed. There are general principles all groups have to stick to. And at the AGM of FOEI in Sao Paulo, in October, we may make our mutual commitments more precise. But I think the article you published is only interesting for sensation-hungry people.

*John Hontelez
Chairman Friends of the
Earth International
Nijmegen, Netherlands
cc. FOE US, International
Secretariat, FOE Australia.*

Doyle adds fuel

It is five and a half years since I wrote the article on the 'The Green Élite and the 1987 Federal Election' (*Chain Reaction* 63/64), and I feel somewhat reticent about adding any more fuel to the fire. But, then again, perhaps it is only now, with the cushion of sufficient years separat-

ing the *now* from the *then*, which makes it possible for us to talk about such things without too much pain. I know certainly that few in the movement at the time were willing to talk about issues raised in my article.

Besides, there are several points raised by Jonathon West in his reply to my article (*Chain Reaction* 65) which cannot be left uncontested. First of all, my 'theory' about what happened in one part of the formally organised conservation/environment movement was not remotely based on 'conspiracy' despite what Jon suggests. In the article, I went to some lengths to stress the fact that one 'does not have to be a conspiratorist' (p. 28) to understand events leading up to the election. The importance of Jon West's dual role was stressed; but to emphasise the importance of individual relationships is hardly tantamount to a conspiracy.

Also on this point, I did not stress direct, instrumental relationships between the ALP and the group of professional élites: 'There is no evidence which suggests that the ALP has deliberately infiltrated the movement' (p. 29); and 'Some members of the élite network had ALP membership. But this is not the crucial factor in the explanation of the extent of the ALP-Movement link.' Instead, I emphasised the role of network politics wherein Labor bureaucrats and environment organisation bureaucrats worked together.

Most important of all was the fact that the ALP

was in government at the time, and members of the professional élite concentrated on direct lobbying techniques which brought them closer to Government rather than the ALP *per se*. In becoming closer to Government – whichever party it is – often structural constraints reshape the politics of social movements.

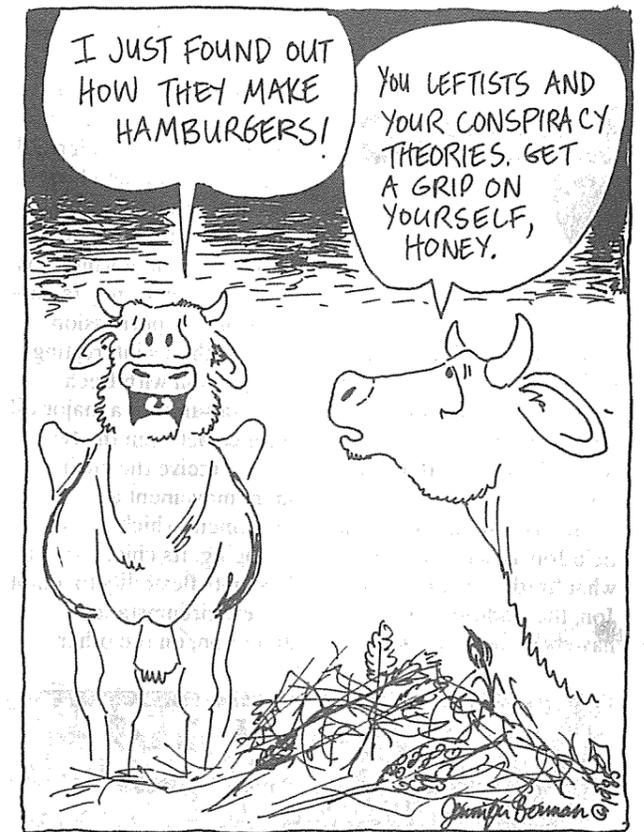
The use of the term 'conspiracy theory' was also used in the initial 'official' response from The Wilderness Society in The Times on Sunday back in 1987. It seems quite fashionable these days to discredit or ridicule certain political opinions by calling them 'conspiracy theories'. Quite the contrary to forming a conspiracy, the people involved in the professional élite had insufficient time, organisation, or resources to detail in advance a comprehensive blue-print for action which a conspiracy would necessitate. Indeed, my very point in the article was that so dominated were they by electoral politics that little opportunity lay open to them for anything more than incremental, kneejerk responses and decisions.

Jon mentions sponsorship: a couple of points about the 'Bond deal'. First, leading up to the 1987 Federal Election I was told directly by a number of sources about Bond Corporation's offer. One of these sources was a most trusted friend who was then on the seven member ACF Executive. Next, the TWS 'books' had gaping holes in them with only \$11,000 quoted as 'election expenses'. It was obvious

that the Channel Nine (Bond's Channel) advertisements cost much more than this figure but, at the time, there was no record of their payment or the source of their payment. I'm sure these 'books' have been fixed up since.

When I confronted Jonathon about the source of this funding at the time he admitted that there had been at least one large contributor which he refused to name. I mentioned to him that I believed that TWS was a public organisation and he had no right to withhold sources of funding. Since this time *The Eye* (Summer 1988-89, pp. 9-10) has reported hidden finances (more than just some 'wine for a raffle'), and I have no reason, to put it nicely, to alter my judgement about Jon's grasp of TWS's accounting.

The final point about Bond's alleged funding is that it will not appear in any books or records. Bond owned the seaboard Channel Nine stations. It would have been illegal to fund an election campaign so directly. It has recently been shown how creative Bond is in shuffling finances to protect his own personal fortune from the grips of bankruptcy. It would not have taken much to channel the funds through a separate person or company. Perhaps the money was not given to TWS directly? It may have been that TWS merely received cheaper rates? Whatever the details, the fact remains that the deal was a covert one, kept from the members of TWS; the many TWS workers operating outside the élite network; and the



Greenword 66 solution

1	A	T	T	2	E	3	N	4	D	5	P	6	E	7	C	8	O	9	I	10	N
R				11	A	E	R	I	A	L		A	12		13	D	I				
14	I	15	N	16	R	A		R	17	P	S	18	Y	19	C	H	I	C			
19	A	U	S	T	R	A	L	A	21	S	I	A	22	E	A	C	H				
	R	H	S	23	T	I	N	24	E												
25	R	I	26	R	I	G	H	T	27	T	O	K	28	N	29	O	W				
	U	31	K	O	O	R	I	E	32	N	E	O	N	33	C						
34	O	N	E	A	35	E	O					36	N	A	S	A					
	G	37	G	R	E	E	N	H	38	O	U	39	S	E							
40	A	R	U		N				Z	T							42	S	I		
43	F	R	E	E	44	P	45	W	46	O	M	E	N	47	A	T					
L	48	A	R	T	49		50	E	51		52	N	E	T			53	L	A		
A	54	C	I	R	55	A	I	D	E	X	56	O	P	A	L						
57	T	58	I	T	L	E	C				59	I	B	M	61	D	I				
62	R	O	L	E	63	E	T	C	64		65	C	I	A							
66	E	R	A	S	E	O	67	S	O	O	N										

Letters

vast numbers of individuals (such as myself) involved in the conservation movement, which the lite network purported to represent.

In his response to my article Jon asks me to specify what 'tradeoffs' were made. Jon, the trade-offs may not have been between wilder-

ness areas. Instead, you traded votes for the Labor Party with the Wet Tropical Forests. You and the other professional élites traded when you undertook the aforementioned financial dealings. Far worse, however, was your trading of the movement's integrity without even asking its participants for permission.

Jonathon's interesting comparison with Lech Walesa sums up a major difference between the two of us. I perceive the environment movement as a social movement which is ever-changing. Its chief strength lies in its flexibility to adapt to new circumstances. Jonathon, on the other

hand, is caught wholly within the constraints of formal organisational/political party politics. To Jon, the movement is not a movement at all; but a single, regimented body (a lobby group) which must adhere to one, single holy-grail (that of the organisational bureaucrats) in order to achieve 'optimum effectiveness'. But, when will it be understood that social movements are not political parties, and they are not formal organisations. Instead, both parties and organisations are just two types of collective political behaviour found within social movements. In short, to toe a line may be appropriate within organisations; but it is not within social movements.

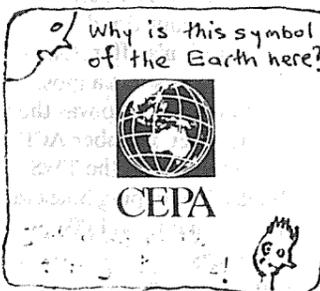
Don't get me wrong: political parties and formal organisational activity are very important. Indeed, at the time of writing the article in 1987 I was a member of both the ALP and the Australian Conservation Foundation. But where political parties and formal organisations become dangerous to the continued survival of social movements is when they begin to perceive themselves as the movement, and not just an important part of it. When this happens, the thousands of other organisations, other informal groups, other networks and other individuals which make up the movement are rejected and alienated.

If the environment movement is to continue to have a large input into local, national and global politics then it must continue to change, to question, to develop its

own tradition of critique. It is its very aliveness which makes it a social movement. Despite of my membership of certain organisations or informal groupings, I will never give up my right to say 'Well Done' when it is deserved; or to complain when I believe incorrect practices have been carried out. Perhaps there has been some good which has come out of my critique of the practices surrounding the 1987 Federal Election? Perhaps it provided a focus for people and got them talking about some operational issues which they had previously felt uncomfortable about? Perhaps these criticisms have helped, in some small way, to instigate changes within these organisations? Critique is too often equated with the opinions of the enemy. It also comes from within, and when it occurs, democratic political bodies deal with it; not shun it.

Yes Jonathon, the Wet Tropical Forests are safe - for now, as is always the case with electoral politics. But I, for one, do not want to live in an Ecotopia where people are not consulted; where they are represented falsely; where they are deceived; and where they are simply not valued.

Timothy Doyle
Adelaide, SA



Earth News

Greens have a party

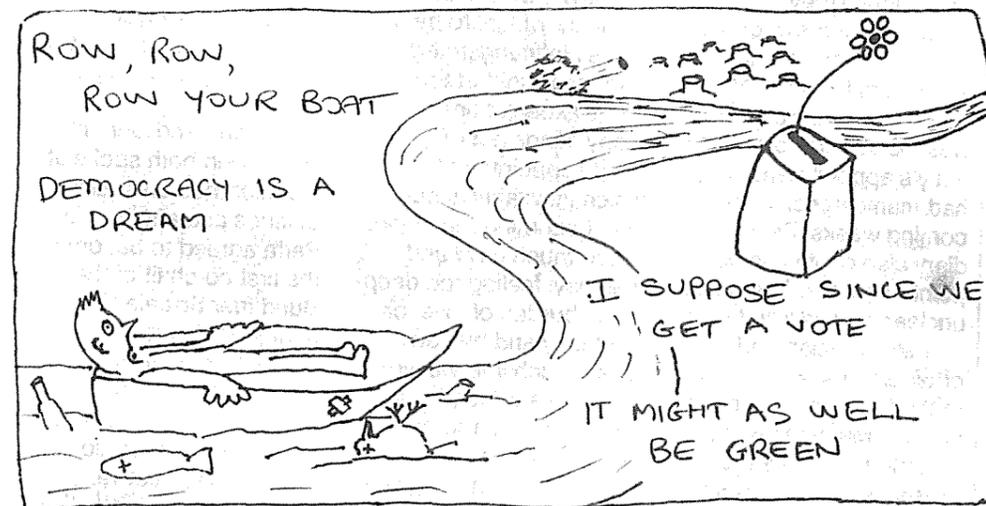
Australia now has a political party called *The Greens*, established as a confederation of state-based Green Parties from New South Wales, Queensland and Tasmania at a meeting in Sydney 29-30 August 1992, following a series of meetings over the previous six months.

The Greens agreed on a national constitution and are preparing to field candidates at both House of Representatives and Senate level in the forthcoming federal election.

'With 25 per cent of Australians telling pollsters they want to avoid voting Liberal or Labor, but we have something they lack - a vision for the long term future, based on politics which will ensure human survival and happiness on Earth. That begins with Australia taking the lead.'

'Green means "social justice", "peace" and "democracy" as well as environmental concern', Queensland spokesperson Mr Drew Hutton said. 'With the great shift to the Right in recent Australian politics, The Greens will put concern for ordinary people back into the equation. We join national parties in thirty five countries in rapid evolution of the global Greens, which

parallels the rise of Labour parties a century ago', he continued. 'The Tasmanian Greens' Business and Industry Strategy is a model for Australia as a whole', Dr Brown said. 'It is strongly representing the Green idea of humanity creating a fair, sustainable and Earth-caring future that is our primary role'.



The Greens intend to stand candidates at local, state/territory and national elections. But it will be some years before all electorates in all elections will see Green candidates. 'We are a dynamic newcomer, intent on building public support and donations. We are under no illusions: we have a huge job ahead of us', Dr Brown said.

The annual cost for running this national participatory organisation is estimated to be about \$30,000 for resources such as postage, email, STD phone calls, faxes, teleconferences, bus and plane tickets.

Contacts for *The Greens*: NSW: Steve Brigham (Telephone: 042-68 2108); Paul Fitzgerald (02-560 7837); Qld: Drew Hutton (07-846 2409 (home), 07-864 4729 (work), 07-864 4719 (fax)); Victoria: Janet Rice (03-687 7386); Tasmania: Bob Brown (002-33 2487 (h), 002-30 6201 (w), 002-23 1406 (fax)).

Source: *The Greens*; Pegasus network.

Wouldn't you rather be reading a Chain Reaction than watching one?

Chain Reaction is the national magazine of Friends of the Earth Australia. Since 1975, Chain Reaction has covered a broad range of issues relating to the environment - from the 'smoggy' issues of urban pollution and hazardous chemicals to uranium mining, as well as the traditional 'green' issues such as forestry and wilderness protection. Chain Reaction also looks at the politics and issues facing the green movement itself.

Please send me a free introductory copy of Chain Reaction.

I wish to subscribe for one year (four issues) \$12 or \$9 concession.

I wish to subscribe for two years (eight issues) \$21 or \$17 concession.

Name _____

Address _____

Postcode _____

Post to: Chain Reaction GPO Box 90 Adelaide 5001, Australia. 1992 May 1992

Petra Kelly 1947-92 & Gert Bastian 1925-92

Petra Kelly, one of the founders of the German Greens (Die Grunen), was shot dead in early October by her companion Gert Bastian, who then killed himself. Their bodies were found by a neighbour in the suburban Bonn house they had shared for years after relatives said they had not seen them for days. No message or suicide note was found and Petra Kelly's appointment diary had many entries for the coming weeks. Bastian's diary also contained appointments and it remains unclear why he killed Kelly.

Kelly, Bastian and 22 other Greens were elected to the German Parliament in 1983. Many joined the mourners, such as the President of the Federal Republic, the speaker of the Bundestag, politicians of all parties, and media representatives.

Source: Jurgen Maier, Bonn; Pegasus Network.

Tributes

Petra Kelly, more than anyone else, deserved the title often given to the Greens as a whole: *Hoffnungstraeger* – bringer of hope on behalf of the community. She worked for a politics for health, for life, for conviviality between people and in society, without violence or bullying, without the routine of bureaucracy, without the alienation of consumerism ... With an almost religious fervour and prophetic passion, she proclaimed a

few simple truths: that to create peace we need to get rid of armies and military systems, that human rights and the rights of all living creatures are absolute and cannot be subordinated to any reason of state.

Maybe it's too difficult for an individual to be one of the *Hoffnungstraeger*: with the weight of too many expectations, too many things not done and the disappointments which inevitably accumulate, becoming the object of too much envy and jealousy, feeling too deeply the burden of love for humanity and human loves which interweave with one another, feeling that the gap is too big between what one proclaims and what one manages to achieve.

Addio, Petra Kelly.

Alexander Langer MEP, Brussels, 21 October 1992

The world is better because of the lives of Petra Kelly and Gert Bastian. They both cared deeply about the plight of the oppressed in all parts of the world, no matter what type of political system was responsible. They worked extremely hard to increase people's chances to live with greater justice, freedom, and peace, as their recent work on Tibet had again revealed. Very importantly, Petra and Gert thought carefully before they acted.

We have lost two ardent and dedicated colleagues; all who strive to advance the causes of

justice, freedom, and peace will suffer their absence. I wish Petra and Gert could have lived out their lives with less stress, more rest, and fewer difficulties.

I do hope that other people will now develop their abilities, strengths, and determination to act courageously to advance the causes for which Petra and Gert lived so intensely.

Gene Sharp, Thailand.

I met Petra and Gert in 1988 when both spoke at a conference on social defence and afterwards Petra agreed to become the first co-chair of the Bund fuer Soziale Verteidigung (League for Social Defence). She helped us a lot in the next two years with her unrelenting energy and broad political perspective.

Petra Kelly was capable of working up to 18 hours a day, without consideration for her well-being, and often also without feeling for the needs of her collaborators. She had a terribly hectic style of working and speaking (once I transcribed a speech – she went two pages without a full stop). Gert Bastian, personal friend, assistant to Petra, and often her buffer to the outside world, bore a great deal of her burden. They were never separate – insiders knew that if you invited one of them, the other would invariably turn up too. That was the 'private life' they allowed themselves.

In a speech they prepared together for the

1988 conference on social defence, Petra said 'Somehow I have a small hope because the institution of slavery was overcome, and also the institution of war can be overcome. If we have access to non-violent social defence, I think that war and violence are not an inevitable fate. As George Orwell wrote in 1950, "only a radical conversion to non-violence can save Europe". Let us remember this.'

Christine Schweitzer, Koeln.

Petra Kelly realised early on that without spiritual values underpinning our efforts, we would be lost. She was in this sense an anti-politics politician in the same mould as Vaclav Havel and the other now-discarded popular leaders of the GDR, Poland, and Czechoslovakia. She was courageous, a gifted and passionate speaker; prepared to get arrested and go to jail for her beliefs. She was visionary, but, and this is a compliment and not a criticism, perhaps too delicate and thin-skinned for the life of an MP. When one believes in what seem self-evident truths, such as the dangers of nuclear weapons, it eventually becomes impossible to keep patience with the threadbare excuses for keeping them.

We had such brave hopes for a new order and for a brief moment it seemed within our grasp. Let us hope that Petra's death will be a catalyst, so that her life and inspiration can spur us on anew.

Meg Beresford, Iona, Scotland.



The newly-appointed Executive Director of the Australian Conservation Council, Tricia Caswell.

Movements in the movement

The Australian Conservation Foundation (ACF) has a new Executive Director, and Greenpeace Australia is about to lose its Executive Director.

Following the departure of Phillip Toyne, who is taking up a fellowship at the Australian National University in Canberra, ACF has appointed Tricia Caswell, formerly Industrial Officer with the Victorian Trades Hall Council, as Executive Director for a five year term.

Ms Caswell has held a number of positions over the years including Executive member of the Australian Council of Trade Unions, member of the Australia Council, member of the Australian National Commission for UNESCO, councillor with the Fitzroy City Council, and teacher in the technical and TAFE areas.

Ms Caswell has also been a member of the Australian Labor Party for a number of years.

'In the interests of demonstrating complete

impartiality and independence from political influence, I will be resigning my membership of the Australian Labor Party prior to taking up my position at ACF,' said Ms Caswell after the announcement of the appointment.

Greenpeace Australia Executive Director, Paul Gilding, will be taking up the position of Executive Director with Greenpeace International, based in Amsterdam, from 1 February 1993.

Greenpeace International announced in late September that its Executive Director of four years, Steve Sawyer, would be retiring from the position, and be replaced by Paul Gilding, aged 33, who was appointed Executive Director of Greenpeace Australia in 1990, after working on Greenpeace Australia's Clean Waters Clean Seas Campaign. 'I regard the move to Greenpeace International as a great personal challenge,' Gilding said. 'The next decade will be critical to the quest to find permanent solutions to the awesome

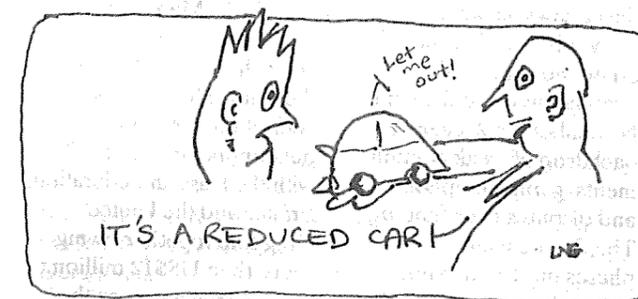
threats facing the planet. I'm looking forward to keeping Greenpeace at the forefront of that quest.'

Gilding said under his leadership Greenpeace would continue its hard-edged direct action campaigns on corporations and governments which consistently refused to take serious measures to cease environmental destruction. He said Greenpeace would also continue to explore co-operative work with corporations and governments that were rising to the challenge in providing environmentally beneficial technology, employment, infrastructure, and consumer goods.

'We encourage and cooperate with corporations which are setting the trends in environmental design, environmental technology, and employment. It is clear that such corporations will continue to increase market share in the future without depleting the world's finite resources or destroying our water, land and air,' he said.

Greenpeace has around 5 million worldwide supporters and offices in 30 countries.

Source: Australian Conservation Foundation; Greenpeace Communications, London; Greenpeace Australia.



Car reduction plans

Oregon's Department of Land Conservation and Development has adopted planning policies to reduce car use by 20 per cent over the next 30 years.

While many Oregon citizens indicate that they would like to commute to work and do shopping on foot or by bicycle, in many instances it is unsafe or unpleasant for them to do so. In response the Land Department has established the 'Transportation Planning rule' requiring that bike parking facilities

be included in the plans for most new multi-family residential developments, as well as retail, office and institutional developments, major transfer stations and park-and-ride lots.

The rule also requires that safe and convenient pedestrian and bike access be established between new residential developments and transit, shopping areas and community centres, and that land in larger cities be set aside for transit developments.

Source: Alternatives June 1992.

Holes in the Ozone

Since the amendment of the *Montreal Protocol on Substances that Deplete the Ozone Layer* in June 1990, scientists have discovered that industrial chemicals are destroying the stratospheric ozone layer much faster than predicted. They warn that the Protocol will allow significant deterioration of the ozone layer in the coming decade.

Ministers will renegotiate the Montreal Protocol in Copenhagen in November 1992, against a backdrop of weak commitments, gaping loopholes and disputes over funding. The Protocol currently phases out CFCs, halons and carbon tetrachloride in industrialised countries by the year 2000 and methyl chloroform in 2005. Developing countries have an extra ten years. The protocol does not control HCFCs or methyl bromide.

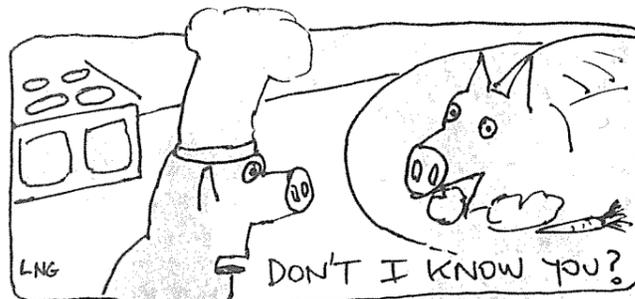
At a preparatory meeting in Geneva in July it was agreed to allow production of CFCs beyond planned phase-out dates to meet 'essential uses'. According to Friends of the Earth the criteria are so broadly defined as to open the door for abuse and are a step back from the clear cut phase out dates agreed in June 1990 in London.

According to industry estimates, this service exemption may allow the US to continue to produce approximately 49.5 million kilograms of CFCs per year after a 1996 phase out date.

Doubt has also been cast on the future of the Interim Multilateral Ozone Fund - the key to enabling developing countries to phase out ozone depleting chemicals. Many governments have failed to make good their obligations to the fund. Thirty-six per cent of the 1991 dues were outstanding in July 1992, with the Russian Federation, France and the United Kingdom together owing more than US\$12 million.

Controversy over the fund has fuelled the reluctance of developing countries to make further commitments.

Source: *FOE Link August 1992.*



Chefs versus mutant food

Leading US chefs and food safety advocates gathered in Washington DC in July 1992 to protest a joint Council on Competitive-ness/Food and Drug Administration (FDA) ruling in late May allowing genetically altered foods to be marketed without testing or labelling. It was also ruled that genetically engineered foods not be treated differently from natural or traditionally bred foods.

'We are not going to sacrifice the entire history of culinary art to revitalize the biotechnology industry,' said chef Rick Moonen, of the Water Club restaurant in New York City.

The companies Monsanto, Upjohn, Calgene, and Frito-Lay are all using gene splicing to produce genetic foods. In genetic food,

animal or even human genes are inserted into plants or other animals creating 'transgenic' foods. Examples of biotechnology use include: human genes added to pigs in order to create leaner meat, and to fish to increase their size; fish genes added to tomatoes to make them more resilient; and chicken genes added to potatoes to slow spoilage.

Health professionals are concerned that newly introduced genes could affect other genes and create foods which are toxic or highly allergenic.

The FDA should pre-test genetic foods and label them 'so that the consumer can decide whether we want this food for our families,' said Jeremy Rifkin, leader of the Pure Food Campaign.

Source: *Multinational Monitor, September 1992.*

Fast-tracking a disgrace

'The "fast-tracking" of government approvals for resource development projects has proved to be disastrous for Aboriginal people,' said the Northern Land Council Director, Mick Dodson, following the 14 August announcement that the huge McArthur River mine had the green light to proceed

from both the Northern Territory and Commonwealth Governments.

The MIM Holdings Ltd's (MIM) lead-silver-zinc deposit, near Borrooloola in the Gulf of Carpentaria, is estimated to be one of the largest in the world. First discovered in the 1950s, the mine has not proceeded due to the high costs of refining the ore. But earlier this year MIM took up the Federal

Government's 'One Nation' offer of development incentives including subsidies and promised fast tracking of government approvals. A hurriedly produced draft Environmental Impact Statement was released by MIM on 22 May 1992 and 12 weeks later government approvals were granted.

'The most shameful part of it all is that the people whose traditional country surrounds the mine are still landless,' Mr Dodson said.

'The governments knew that, but made no real attempt to fix it despite having a perfect opportunity.'

'The Kurdanji, whose traditional country is covered by pastoral leases - two of them owned by MIM - have long-standing claims for community living areas, claims the company has always resisted.'

'It's a disgrace that we can have the High Court back traditional land rights in the Mabo case, and then within months see governments turn their backs on a landless people in the rush to fast track a mining project.'

'Over 30 years after the deposit was discovered on Kurdanji land, MIM can get government approvals within three months and yet the Kurdanji still have no secure land tenure on their own country.'

'And NT and Commonwealth Ministers are crowing about this being a model example of the new approach to development approvals and inter-governmental co-operation! It's a shameful disgrace,' said Mr Dodson.

Source: *Land Rights News, August 1992.*

Hidden plastic

The US plastics industry is exporting its wastes to avoid domestic regulations and community opposition to waste-handling facilities and manufacturers, who have replaced the 'biodegradable' labels with 'recyclable', claim that their wastes are generating employment in the third world.

The US Chamber of Commerce's manager of Resources Policy denied accusations that the United States is dumping waste at a 1991 Congressional hearing. 'Materials for recycling are sold to enterprises in countries with sophisticated manufacturing facilities.'

Plastic, however, can almost never be recycled into the same product. Each time plastic is heated, its chemical composition changes and quality decreases.

Plastic bags and bottles dropped off at local recycling centres in the US are shipped to developing countries where much is not recycled at all.

In 1991, over 400 million kg of plastic wastes were sent by the US to Latin America, the Caribbean, Africa, Europe and Asia, the main target with over 30 million kg shipped to the Philippines and 70 million kg to Indonesia. Over 120 million kg was sent to Hong Kong, the largest single importer, where it is mostly stored awaiting shipment to China to be dumped.

In the Philippines, strict laws banning waste imports did not stop US firms and waste brokers from shipping over 30 million kg of plastic waste to the country.

The Philippine Navy says it needs more money



Janet Powell, Independent Senator for Victoria, is attempting to repeal anti-environmental legislation.

for surveillance to stop dumping of imported plastic wastes in remote islands.

Source: *Inter Press Service - Ann Leonard.*

Democrats keep anti-green legislation

Legislation regarded as a major block to trade union action on environmental issues has been retained with the help of the Australian Democrats.

Independent Victorian Senator Janet Powell, a former Democrats leader, will continue with plans for a November 1992 bill to repeal Sections 45D and 45E of the Trade Practices Act. The Democrats, whose very clear policy to support repeal was approved by a Party membership vote, have killed most repeal chances by sending the matter to a committee until May 1993, after the Federal election.

Sections 45D and 45E were added to the Trades Practices Act by the Liberal/National government in 1978 and 1980 to stop trade

unions imposing secondary boycotts on companies.

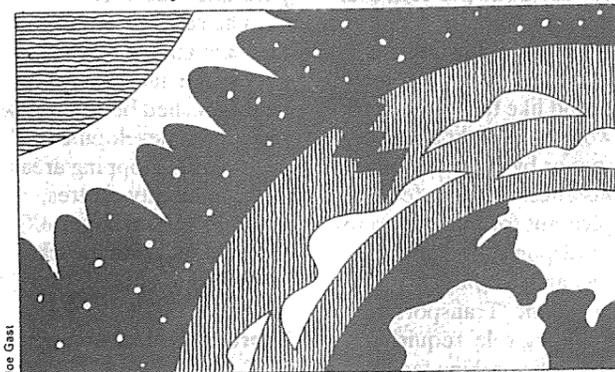
Secondary boycotts occur where a group or individual attempts to influence one party to restrict the supply of goods or services to another party in order to pressure the third party to accede to certain demands.

Sections 45D and 45E usually apply to trade unions, but Greenpeace has also been threatened.

Senator Powell said: 'Secondary boycotts can often be the only weapon that is available to protect the environment from unsustainable exploitation ... secondary boycotts can be used to stop uranium exports, or to halt the importation of rainforest timber. They can also be used in the fight against environmentally damaging developments at local level.'

Hawke government attempts to repeal the two sections in 1984 and 1987, were defeated by combined Democrats/Coalition votes.

Source: *Senate Hansard; Green Left Weekly.*



had all ganged up on the bureaucrats. Every one was sick and tired of the meaningless platitudes of the economic rationalists from Departments of Prime Minister and Cabinet and the Treasury.

Five o'clock eventually arrived. The Forum leaders, suffering from shell shock, cancelled the following day's session.

It is essential the government bureaucrats take note of the extreme criticism which came forward from many sectors of society. A meaningful final report needs to be produced to present to the Heads of Government later this year. There needs to be clear strategies which will lay down the foundation for a positive program to reduce greenhouse emissions and establish Ecologically Sustainable Development.

Source: Ted Floyd, *Friends of the Earth Sydney*.

Maitland news

Maitland Friends of the Earth had a successful annual general meeting in September with varied and enthusiastic discussions and office-holders found for every vacant position.

The meeting decided to focus more on recycling over the next year, especially as the local Council was in the process of adopting a community recycling program.

There are a number of active groups within Maitland FOE including: Education and Display which organises displays on a variety of issues in the Maitland area, as well as arranging talks with local groups; Recycling, which has been lobbying the Maitland Council on the need for and type of local recycling

program, and; Tree Planting, which collects seeds, propagates them and organises working bees to plant the trees (and native understorey and grasses) at needy spots in the community.

General meetings are open to all members and interested people and are held on the first Tuesday of the month.

For further information contact:

Kath Fitzgerald, Coordinator, 57A Burg St, East Maitland, NSW, 2323.

Verdict on the Earth Summit

The Earth Summit exposed the enormous gulf between what the public wants and what its leaders are willing to do.

People everywhere are demanding a secure future on an ecologically and culturally diverse planet – a challenging vision that could be realised within a decade. Instead, the Earth's citizens witnessed the collective failure of political leaders to agree upon key measures for a new direction for life on Earth.

Despite the deepening ecological crisis and the stark connection between inequity and human deprivation, those leaders failed to seize the historic opportunity offered by the Earth Summit, as did their predecessors at the 1972 Stockholm Conference.

The overwhelming majority of leading politicians backed short term economic expediency – business as usual – instead of an integration of environment and economy. They succumbed to lobbying by excessively powerful business groupings intent on safeguarding their own narrow interests.

The greatest irresponsibility was demonstrated by the governments of industrialised countries, the ones with most power to change the *status quo*. The North has done little to signal, let alone address, the issue of its over consumption. No measures were put in place to ensure that everyone has access to a fair share of the limited 'ecological space' on this planet. Much of the burden of the environment and development crisis has been left on the shoulders of the poorest countries.

Calls for fair trade, manipulated by big business through lobbying key governments, were used to block

progress on many key issues.

New international agreements on environment and development were few in number and, at best, deeply compromised, in particular due to the lack of timetabled commitments for action. At worst, they are steps backwards.

Many important objectives identified by governments at the start of the UNCED process have been abandoned, at least for the time being. It is clear that existing political groupings and structures are not fit for the task ahead.

In spite of the Summit's failures, the world witnessed some important progress in Rio de Janeiro. The debate about the environment and development was placed at the centre of the world's political stage. The debate has changed fundamentally – politicians have been forced to acknowledge the nature and scale of the crisis. The challenge now is to monitor how governments respond after the Earth Summit and to increase the momentum for change at all levels – the stakes have never been higher.

Inter-governmental achievements

- The world's leaders met.
- North-South inequity has been exposed as the root cause of most threats to the planet and its people.
- Inequity within many countries has been seen to mirror the international divide.
- Governments have been forced to respond to the powerful evidence of the need to abate the environment and development crisis by taking urgent and effective action nationally and internationally.
- The world's richest nations have been confronted in public with their responsibility to help developing countries obtain the money they need (through alleviation of the debt burden and fair trade, as well as direct funding) to protect their national environment and improve the quality of life for all their people.
- New international conventions on Climate and Biodiversity, while ineffective in many respects, may lead to negotiations on more progressive follow-up protocols.

What Governments did

- With notable exceptions, Northern

governments did not set a timetable for reaching the UN's target overseas aid figure of 0.7 per cent of Gross National Product, nor commit themselves to paying a fair share of the estimated costs of sustainable development or attacking the root causes of the North-South divide.

- Even with 'new money' governments were vague about the period over which it would be paid.
- The USA used its economic power to bully competitors and block meaningful international agreements.
- Malaysia championed the legitimate interests of many developing countries but undermined its credibility by using its natural resources as leverage, continuing to abuse the rights of indigenous people and allowing élites to profit from the destruction of its forests.
- The UK undermined progressive policies of certain other European Community Member States while Germany silently assented.

What business did

- Lobbying by big business, in particular the International Chamber of Commerce, has resulted in no new controls over the activities of transnational corporations, allowing them to continue operating to lower standards of environmental protection in developing countries. This opposition to regulation was, however, exposed and challenged.

Non-governmental achievements

- The dialogue between community based non-governmental organisations from all countries helped forge common perspectives and shared visions and created unprecedented opportunities for improved communication and more effective international collaboration.
- Such non-governmental organisations have presented a radical agenda for change based on grassroots action around the world.
- The UN's formal acknowledgement of the contribution of such NGOs allows them to argue for increased influence at national level.

Source: Andrew Lees, *Friends of the Earth International*.

Join your local Friends of the Earth group

FOE Adelaide University
C/- Clubs Association
University of Adelaide
Adelaide, SA, 5000
Ph: (08) 228 5852

FOE Flinders University
Students Association
Bedford Park, SA, 5042
Ph: (08) 201 2614

FOE Nouveau
PO Box 3231
Grenfell St, Adelaide, 5000
Email: roman

FOE Willunga
PO Box 438
Willunga, SA, 5172
Ph: (085) 56 2252

FOE Brisbane
PO Box 10159
Adelaide St
Brisbane, Qld, 4000

FOE Stanthorpe
c/- Lyn Alexander
PO The Summit
Stanthorpe, Qld, 4377
Ph: (076) 82 2245

Chain Reaction
GPO Box 90
Adelaide, SA, 5001
Ph & fax: (08) 293 8535
Email: chain

National Liaison Officer
222 Brunswick St
Fitzroy, Vic, 3065
Ph: (03) 419 8700
Fax: (03) 416 2081

FOE Perth
PO Box 7375
Cloisters Square
Perth, WA, 6850

FOE Snowy Mountains
PO Box 31
Cooma, NSW, 2630

FOE Cessnock
c/- D. Rothwell
Littlewood Rd
North Rothbury, NSW, 2335
Ph: (049) 90 2256

FOE Newcastle
15 Sketchley Pde
New Lambton, NSW, 2305
Ph: (049) 52 3385
(049) 67 4554 (h)

FOE Maitland
57A Burg St
East Maitland, NSW, 2322

FOE Sydney
PO Box A474
Sydney, NSW, 2001
Ph: (02) 281 4070
Fax: (02) 281 5216
Email: foesydney

FOE Fitzroy
222 Brunswick St
Fitzroy, Vic, 3065
Ph: (03) 419 8700
Fax: (03) 416 2081

FOE Maryborough
5 Clayton St
Maryborough, Qld
Ph: (071) 23 1895

Kyneton Environment Awareness Group
c/- WSD Springhill
via Kyneton, Victoria, 3444

FOE International Secretariat
PO Box 19199
100 GD Amsterdam
The Netherlands
Ph: 31 20 622 1369
Fax: 31 20 627 5287

Unwrapping packaging's public relations

The packaging industry in Australia, as one of the main sources of pollution and waste in the country, finds it necessary to maintain a number of public relations bodies and industry associations. David Vincent analyses these organisations and looks at some of the people who work for them.

THEY'RE A STRANGE assortment of associations and 'foundations', headed by hired guns, including two former senators – one Labor, one Liberal – and a legion of public relations specialists. Their job is to protect the packaging and beverage industries from what they see as predatory bands of misinformed consumers and green fundamentalists.

The rise of these organisations demonstrates the success of environment and consumer groups in pushing waste and packaging issues onto the political agenda. It also shows how easily the message of consumers and environmentalists can be swamped by the resources of these industry organisations. They have considerable resources: apart from the staff within industry associations, most of the major members have 'environmental affairs managers', fully-paid up members of

the white-shoe brigade who work alongside the industry associations.

The introduction of container deposit legislation in South Australia in 1977 caught the vested interests unawares. But since then they've been successful in convincing state and federal governments that non-intervention in the marketplace is the way to go. They demonstrated their muscle again in 1992 with the gutting of Victoria's Resource Recovery Bill, which would have seen levies imposed on packaging materials to pay for their collection. Federal Environment Minister Kelly's National Waste Minimisation Strategy, launched in June 1992, again demonstrates the voluntary/education orientation that sits comfortably with industry interests.

Environment and consumer groups, in general, favour a legislative or regulatory approach to the reduction of

packaging and have been campaigning for the introduction of container deposit legislation and other packaging legislation. This approach is favoured because the voluntary/education approach ignores certain environmental and social costs, or externalities. But the arguments of the consumer and environment groups have been overwhelmed by the packaging lobby.

Just who are these powerful organisations who have taken control of public policy and whose interests do they represent?

Association of Liquidpaperboard Carton Manufacturers (ALC)

Possibly the hardest-working of all the lobbies, ALC represents the manufacturers of drink cartons. It has ten sponsors in Australia – Gadsden Rheem, Tetra Pak, Enzo, Weyerhaeuser, Westvaco, Billerud, International Paper, Champion and Potlatch. It seems that only Tetra Pak and Gadsden Rheem have major interests in drink cartons in Australia. They produce the two types of cartons that ALC seems to spend most of its time defending.

The first is the type typically used for milk cartons, a laminate of plastic and high-quality paper. The second is aseptic packaging, or what the Americans call 'juice boxes'. It's the type of package in which fruit juice ('poppers'), soy

milk and UHT milk are available. Gadsden Rheem markets them as 'Combi Blocs' and Tetra Pak pushes theirs as 'Tetra Briks'. Again they're a laminate of materials, this time three layers of plastic and one each of aluminium and high-quality paper.

Friends of the Earth (FOE) and ALC and its members have been involved in something of a battle due to FOE's campaigns to have these cartons banned (as has been done in the US State of Maine) and ALC's tendency to not let the facts get in the way of a good PR campaign. ALC recently instructed its solicitors to seek a retraction from FOE (Maitland) about claims a group member made about the containers. Since then FOE (Sydney) has received a letter from Tetra Pak threatening legal action if the group's statements damage the company's reputation.

Meanwhile, the products ALC represents are among those most at threat from government regulation and consumer boycott. Brisbane City Council recently sought long-term commitments and a guaranteed floor price from manufacturers of the main packaging materials collected by the Council, but ALC was unwilling to enter into such an agreement. This suggests that the economics of collection are so poor that ALC has no alternative but to set up collection depots, as it has done at Food Plus stores in NSW. This will lead to a level of returns much lower than that achieved by house-to-house collection, which in turn achieves a much lower return rate than a deposit system.

If the juice boxes were to bear the full costs of collection and reprocessing/disposal, they would be unlikely to be able to compete with other containers and would disappear from the market. This, of course, is what Friends of the Earth would like to see.

Litter Research and Recycling Association (LRRRA)

Formerly the Litter Research Association, now the Litter Research and Recycling Association just to show that they really are cool and hip and know



The Association of Liquidpaper Carton Manufacturers produces media releases, advertisements and a newsletter on perceived benefits of cartons.

what this recycling thing is about. Yep, it comes right after litter research.

This association represents a range of interests who believe, rightly or wrongly, that they will be the losers if container deposit legislation is introduced. Its 23 sponsors have interests in beverages (beer and soft drink) and packaging.¹

The NSW Litter Research Association was formed in 1978, around the time that the then Environment Minister visited Oregon, the first state in the US to introduce container deposit legislation. The industry interests were alarmed when the Minister returned impressed by the Oregon system and favouring its introduction in our most populous state.

The LRA put up an alternative – it would fund an anti-litter campaign to be housed within the NSW State Pollution Control Commission. But there was a catch: the funding was conditional on the non-introduction of container deposit legislation.

This agreement has continued through to the present day. Former

NSW Environment Minister Tim Moore, perhaps mindful of the potential of the agreement to rebound on the government, indicated the condition will be dropped. But NSW LRRRA President Ron Werner in mid 1992 indicated to *Chain Reaction* that his association still regards the funding as conditional.

There are LRRAs in Western Australia, Queensland, Tasmania, Victoria and NSW. All are affiliated except the Queensland branch (where they've stuck with the old LRA tag). They have traditionally put most of their resources into NSW and Victoria as these are the states where there has been the most pressure for the introduction of container deposit legislation. The election of the Queensland Labor government and the Labor-Green Independent alliance in Tasmania produced a flurry of LRRRA activity in those states. But a timely injection of funds and whispers in the right ears soon silenced any talk about container deposit legislation.

The LRRRA played a part in the infamous Business Regulation Review Unit (BRRU) report on container

ACF arm-in-arm with Plastics Industry Association

Australian Conservation Foundation Councillor and Melbourne weather presenter Rob Gell launched the PIA's 'Plastics Recycling Register' at the Recyclex 91 conference in Melbourne. 'This is without doubt a major step forward for the image of the plastics industry', Gell told conference participants. 'The ACF will continue to applaud industry initiatives for recycling' he said. (Plastics Industry Association, 'Plastic Recycling Register "a major step forward"', *Looking Ahead*, Newsletter, September 1991)

Reading the register makes it clear what the PIA wants to promote. Under the heading 'market constraints and opportunities' the PIA explains.

Not all plastics can be refilled or recycled for the same purpose because of health regulations ... Plastics can be recycled again and again, with gradual reductions in the properties of the plastics at each stage. In this process, called a cascade, plastics are initially used, for instance, in medicine or as food containers. Later the plastic is recycled into uses such as bumper bars, power tool housings and materials handling products. The plastic can then be recycled into building materials, sound barriers and fence posts ... At the bottom of the cascade is the potential to use pyrolysis to recover hydrocarbons or the plastics could be burnt to recover their energy content.' (Plastics Industry Association, *Plastics Recycling Register*, booklet, 1991, p. 4)

It is clear that the PIA is not following the course advocated by informed environmentalists, that of reduced use of plastic and at the very minimum, closed-loop recycling. Indeed, what the PIA is advocating is merely reprocessing plastics into lower quality applications or burning it.

In endorsing the register, the ACF has shown disappointingly shallow analysis, and a lack of vision.

deposit legislation, published in 1989.² The LRRRA funded a consultancy to conduct much of the research and the organisation appointed a steering committee from Amatil, Smorgons and Containers Packaging to assist in the report's preparation. The Steering Committee, according to BRRU Director Alan Moran, provided guidance, contacts and vital information.³ And, most importantly, it provided the report the vested interests wanted.

Packaging Environment Foundation of Australia (PEFA)

The oxymoronic Packaging Environment Foundation of Australia was established in October 1990 and launched late that year on the same day Ros Kelly held an industry roundtable meeting on recycling in Canberra. It is headed by Chris Puplick, former Liberal Senator and Shadow Minister for the Environment (some say this ap-

pointment shows that he was only ever a shadow of an environmentalist) before he was bumped off the NSW Senate ticket by Liberal bully girl Senator Bronwyn Bishop prior to the 1990 election.

The generous sponsors of PEFA include Alcoa, ACI, Coca-Cola, Coles-Myer, Containers Packaging, Du Pont, Gadsden Rheem, Smorgons and Woolworths.⁴

Puplick is trying to direct the policy debate into areas that suit his sponsors' interests. The PEFA, in launching *Completely Wrapped*⁵, a report that set out its agenda, indicates the priority it gives to incineration of waste.

Most other developed countries ... are implementing strategies which recognise the need for increased use of waste to energy plants as a disposal option. Getting 'state of the art' incineration into the public policy debate is the first step before objective analysis can be carried out.⁶

Among PEFA's other aims are the displacement of regulation by the use of economic measures; shifting the spotlight off packaging and onto other parts of the waste stream and implementation of national (read weak) solutions to the waste problem.

Plastics Industry Association (PIA)

Looking Ahead is the PIA's public relations campaign on behalf of plastics. Launched in February 1990 as a 3-year program, it is sponsored by many of Australia's biggest chemical and packaging companies, including ACI, BF Goodrich, Chemplex, Containers Packaging, Dow, Gadsden Rheem, Hoechst, ICI, Pacific Dunlop, Polarcup and Shell.

The PIA's public face is Susan Ryan, former Senator and the nation's first female Cabinet Minister, as Education Minister and Minister assisting the Prime Minister on the Status of Women in the first Hawke government.

Ryan's role was made clear on the day of the launch.

The plastics industry has been subjected to much unwarranted and uninformed criticism and I see my role and the role of the PIA to put the record straight and to provide the support and advocacy for this valuable sector of Australian manufacturing.⁷

Packaging is a major concern for the PIA. It is the largest single sector of the industry, accounting for around a quarter of plastic consumption. It is also very vulnerable because the vast majority of plastic packaging is used once, then discarded. Packaging, along with PVC, is the plastic industry's most vulnerable area.

Ryan and the PIA walk a difficult tightrope. Because of the vulnerability of packaging, Ryan and the PIA have directed much of their attention to this part of their industry. But the problem for the PIA is that none of the soft options can provide a solution. Recycling of post-consumer-plastics is expensive enough to make it largely non-viable. It's much cheaper to make plastic from

fresh inputs and a whole lot easier. But at the same time recycling is the only 'positive' option the PIA can provide without putting a big hole in the future of the industry.

The attractive thing for the plastic industry is that it can open up new markets with 'recycled plastic' while new plastic production steams along happily - the 'have your cake and eat it too' option. Indeed, one of the stated aims of the *Looking Ahead* campaign is the 'opening up of new commercial opportunities for the plastics industry'.⁸

But, since the poor economics of plastics collection and reprocessing operates against it, recycling can't provide the solution. Enter the next stage - incineration for the plastics that can't be recycled. After all, plastics are derived from oil and thus have a high calorific content that can be released when burnt. In her speech to the Australian Polymer Symposium in February this year, Susan Ryan advocated incineration, with energy recovery, of post-consumer plastics that are unsuitable for material recovery. She noted that the PIA is planning a trial with the State Electricity Commission of Victoria.⁹

The others

Some other organisations promote themselves as community organisations while also having close ties to the packaging and beverage interests. Two such organisations are Clean Up Australia (CUA) and Keep Australia Beautiful Council (KABC).

Clean Up Australia has made a great contribution to our understanding of what is found in litter. The 1991 clean-up found that 94 per cent of the items collected were packaging or packaging-related. But despite compiling this useful database, CUA has been captured by industry interests. The PIA, whose product is the main item collected on CUA Day, is a major sponsor of the Day. Ian Kiernan, Chair of CUA, is now patron of Recycle NSW, an EPA/LRRRA sponsored recycling program driven by the desire of the beverage and packaging industries to avoid container deposit legislation.

Kiernan is now a cohort of the bevy of beverage and packaging interests, a group he cutely calls 'the garbage club'.¹⁰

KABC has offices in most states. Its structure and orientation varies between states, but in Victoria and NSW it is clearly captive to the packaging industry. The BRRU report stated that in NSW the KABC was receiving \$250,000 a year for its campaigns from the LRRRA in 1989 and around \$40,000 from other contributors.¹¹ Oddly enough, despite its access to funds from industry and its lack of recognition from genuine environment groups, KABC groups around Australia continue to receive annual grants from the Federal Government National Voluntary Conservation Organisations funding program.

References:

1. K. Hides-Pearson, 'The Recycle NSW Program', *Towards Total Waste Management* conference papers, 24 July 1992.
2. Business Regulation Review Unit, *Container deposit legislation and the control of litter and waste*, BRRU, Canberra, 1989.
3. *ibid.*, foreword.
4. C. Puplick and B. Nicholls, *Completely Wrapped: packaging waste management and the Australian environment*, PEFA, Sydney, 1992, pp 255-263.
5. *ibid.*
6. PEFA, 'Waste management policies need redefining', Media Release, 31 January 1992.
7. Plastics Industry Association, 'Susan Ryan takes up the challenge', Media Release, 22 February 1992.
8. PIA, 'Environmental commitment by plastic industry', Media Release, 22 February 1990.
9. S. Ryan, 'Greening the Polymer Industry', Speech to the Royal Australian Chemical Institute, 19th Australian Polymer Symposium, 5 February 1992.
10. Ian Kiernan, Chair, Clean Up Australia, comments made while presenting Recycling Awards, *Recycling in the 90s*, conference, Macquarie University, 24 July 1992.
11. BRRU, *Container deposit legislation and the control of litter and waste*, BRRU, Canberra, 1989, p.33.

David Vincent is national spokesperson for Friends of the Earth on waste minimisation.

Backstage

This issue has been produced in Adelaide and Canberra, the next will be produced in Canberra and Wollongong, and future issues will be based in Canberra, where the editors are currently located.

Although that has interesting ramifications for the magazine, we won't dwell on it, but will instead extend thank-yous to the Adelaide people who have assisted with *Chain Reaction* in the past and, in many cases, will continue to assist.

In no particular order, thanks must go to: Jonathon Goodfield, a former editor who has always been ready to assist with layout and production on short notice; Andrew McHugh for design, reprographics and printing; David Pope for assistance with graphics; Margaret Dingle for typing and editing; the people at Cadillac Color Web, who do a great job quickly using better-for-the-environment materials; Kenton Penley, for producing the wonderful 'Hello Flower' series; the various members of the sweatshop crew who help do mailouts; Darcy, for accepting that *Chain Reaction* is inevitably part of his life, too; and to any others we have not mentioned.

We are also grateful to the environmental organisations in Adelaide such as the Wilderness Society, the Australian Conservation Foundation, and particularly our fellow researchers at Greenpeace Adelaide, who were all always willing to assist with the production of the magazine, while understanding that we sometimes publish material critical of their organisations. If all the national organisations had the attitudes of their Adelaide offices, there would be a far higher level of environmental debate in Australia.

Please keep sending mail to *Chain Reaction* in Adelaide.

- Larry O'Loughlin, Clare Henderson

Forging Australia's nuclear chain

The nuclear industry is moving to make Australia a long term storage site for highly radioactive waste from all over the world according to Maggie Hine.



A NUMBER OF RECENT developments have brought Australia a few steps nearer to realising the ambitions of those who see its future as an international nuclear waste dump.

Firstly, the Federal Government is searching for a national nuclear dump site. So keen is it to establish a national dump, that it has publicly stated it is prepared to seize land to do so, if the States fail to cooperate in locating a site.¹ The Federal Government has commissioned a site selection study, to be completed by November 1992 and a concern is that the national dump could be expanded to accommodate international nuclear waste.

Secondly, a Code of Practice and Guidelines for the Disposal of Radioactive Wastes has been drawn up by the National Health and Medical Research Council. These documents, which have been the subject of much criticism, will set down the operating terms and conditions of any dump site.

Thirdly, the development and proposed commercialisation of a technology called Synroc (synthetic rock), will go towards servicing an international nuclear waste industry in Australia. Synroc, an Australian invention, is being developed to treat the high level liquid waste that results from reprocessing spent nuclear fuel (see box page 22). The backer of the technology, the Synroc Study Group (SSG), has publicly stated that one of the preferred options for commercialising

the technology is to establish an international nuclear waste industry in Australia to service Synroc.²

Fourthly, legislation has been passed to allow the import of nuclear waste into Australia.

Taken together these issues mean that the Australian Science and Technology Organisation (ANSTO) could ultimately operate a national nuclear waste dump, import low, intermediate and high level waste; transport it throughout Australia – all with immunity from State, Territory and local government laws and by-laws.

Australia is on the road to becoming the nuclear dustbin of the world.

That these developments are occurring at the same time is not a coincidence, but a clear indication that certain interests are exerting their power over the political process to ensure that Australia develops a nuclear waste industry.

ANSTO Act amended

In the late hours of 18 June 1992 the Federal Senate hurriedly passed the *ANSTO Amendment Act*. This Act gives ANSTO legislative powers to store, manage and process radioactive waste as a commercial venture with immunity from State, Territory and local government laws and by-laws. Any venture in which ANSTO has a controlling interest will be immune from such laws. This means that if ANSTO has the controlling interest in a commercial nuclear

waste dump, the site will not be subject to State and Territory environmental laws. The legislation also begins to clear the way for ANSTO to import nuclear waste into Australia. ANSTO will have the legislative power to transport nuclear waste throughout Australia.

The amendments to the existing ANSTO Act were put forward by the Labor Government, and supported by the Liberal and National Parties, with the stated rationale that

the Act does not take proper account of a number of national interest requirements, or of the government's commercialisation objectives for ANSTO³

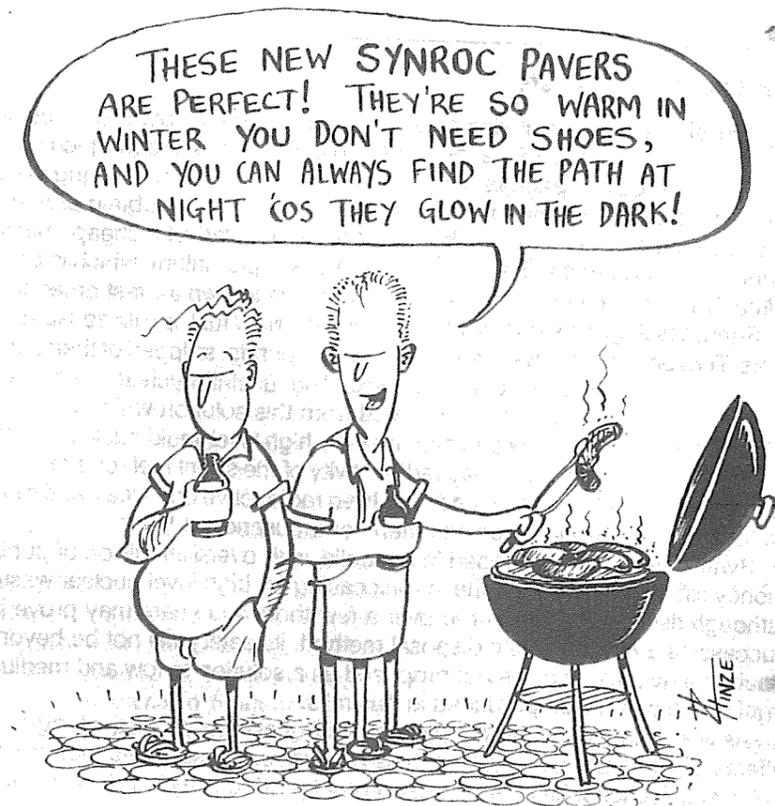
ANSTO is the operator of the Lucas Heights nuclear research reactor and plays a crucial role in nuclear research and development in Australia. In essence it is Australia's nuclear industry. The Labor Government, through the *ANSTO Amendment Act*, has enabled ANSTO to conduct its activities on a more commercial basis. At the same time ANSTO has been given the type of legislative protection that is indicative of governments seeking to establish a nuclear industry – such as an industry utilising the Synroc technology.

The nuclear dump

In February 1992 the NSW Environment and Land Court ruled that ANSTO, as a Commonwealth entity, had breached NSW planning laws.

The *ANSTO Amendment Act* has given ANSTO immunity from State and Territory laws. This provision in the ANSTO Amendment Act has been seen as a direct consequence of the Court's findings that ANSTO had acted illegally in allowing 10,000 drums of radioactive waste from Victoria to be moved to Lucas Heights for storage.

However, the true purpose of the decision could well be that the Court's findings gave added impetus to the Federal Government's efforts to establish a national nuclear waste dump. The Federal Government was actively looking for a national nuclear dump prior to the court case. It served the Government's purpose to have the



Court rule that Lucas Heights could not act as a *de facto* dumping ground. By cutting Lucas Heights out of consideration for a nuclear dump site the search for an alternative site has intensified.

A Working Committee of the NHMRC released a draft Code of Practice and Guidelines in April 1992 that set down the terms and conditions under which a national nuclear waste dump will operate. Its preferred option is to dump the low and intermediate level radioactive wastes in a shallow land fill in a semi arid area.

To dump the waste in 'out of sight out of mind' shallow land fills does not encourage industry to minimise waste creation. Waste creators must be encouraged to adopt the 'precautionary principle' in managing their operations. The principle places the onus on the waste creator to seek alternative methods of production that minimise waste creation. The dumping option does nothing to encourage this. Nor is the method of disposal – shallow land fill – acceptable. This method has been strongly criticised in a number of countries. The most environmentally sound option is the above ground dry

storage of waste, so that it can be monitored and retrieved if necessary.⁴

The Code and Guidelines were originally developed for a dump accepting Australia's low and intermediate waste. However in the second second round of public comment on the documents the NHMRC simply removed any reference to low and intermediate level waste in the text and title.

The second set of documents also allowed for higher levels of radioactivity in the waste to be disposed of and loosened the categorisation of wastes. In the first paper there was a limit on the amount of tritium that can be dumped. In the second set of documents there is no defined limit on the amount of disposable tritium. Tritium is produced in nuclear reactors and can be used in nuclear weapons production. Since Australia has only a small nuclear facility at Lucas Heights producing such fissionable products, the question must be asked, for whom and for what is the dump being designed? Is it Australia's domestically generated radioactive wastes as the NHMRC claims, or an international nuclear

Reprocessing waste

High level liquid nuclear waste, of the sort for which Synroc is being developed, is a product of the reprocessing of nuclear fuel rods which have been used in nuclear reactors. This spent fuel is the world's most dangerous known waste product. Although reprocessing fuel rods to obtain uranium is uneconomic, because of the availability of relatively cheap mined uranium, it is conducted because it also releases plutonium, which is used primarily in nuclear weapons and also in reactors known as 'fast breeders'.

Reprocessing is the chemical separation of spent fuel into its constituent parts. The rods are removed from their storage ponds, stripped of their outer metal casing and dissolved in nitric acid. The 'useful' nuclear materials – uranium and plutonium – are separated from this solution which contains other radioactive materials and becomes the high level liquid nuclear waste.

About 97 per cent of the total radioactivity of the spent fuel rods remains in this waste. It includes short and long-lived radioactive chemicals and must be kept separate from the environment for thousands of years.

Synroc has been developed in Australia, with over \$25 million of public money since 1978, as a synthetic rock casing for high level nuclear waste. Although field testing of Synroc over a few thousand years may prove its success as a nuclear waste disposal method, its safety will not be beyond doubt in advance, and it is not proposed as a solution to low and medium level waste of the type produced in Australia.

As well as facing unanswerable technical questions about the long-term effects of high radioactivity, Synroc is challenged by some economic and political objections. Since Australia does not produce any high level nuclear waste, its backers have stated that, to commercialise Synroc, waste should be imported, sealed in Synroc and dumped in a deep underground waste site in Australia. There also remain strong community objections to the transport and storage of nuclear waste, and the main question remains – why produce it in the first place?

waste dump as wanted by ANSTO and the Synroc Study Group.

ANSTO and Synroc

In 1991 the Synroc Study Group (SSG), of which ANSTO is a member, released a report detailing recommendations for the commercialisation of the Synroc technology. These include the establishment of a pilot plant and associated waste dump in Australia to test Synroc, and the import of the required high level liquid waste for processing. The *ANSTO Amendment Act* bestows powers on ANSTO that allow it and the SSG to realise these ambitions, and the door is being opened for Australia to become an international nuclear waste dump.

A closer look at the parties backing Synroc clearly shows their vested interest in promoting a nuclear waste industry.

The Synroc Study group, along with ANSTO, consists of the Australian National University (through its inventor Professor Ted Ringwood), BHP, Energy Resources of Australia (owners of Ranger uranium mine and Jabiluka uranium deposit in the Northern Territory), Western Mining Corporation (joint owners of Roxby Downs uranium mine in SA, and the Yeelerie uranium deposit in WA) and CRA (owners of the Kintyre uranium deposit in WA).

The uranium mining companies' involvement in the SSG could be seen as part of their long term strategy to market uranium with a promise to take the resultant reprocessed nuclear wastes back to Australia for dumping and treatment with Synroc. In the present depressed world market for uranium, this additional selling point for Australian uranium producers would put them in good stead for securing contracts with uranium buyers.

No country in the world with a nuclear industry has been able to establish a safe and permanent dump site for its waste.

The 'out of sight out of mind' option of dumping in the vast semi-arid areas of Australia no doubt provides an attractive alternative to going through the agonising task of locating a domestic site. This is especially true in the Asian region, where countries such as Japan and South Korea, who presently purchase Australian uranium, would certainly favour sending their nuclear waste offshore, so avoiding strong and often violent domestic opposition to nuclear waste dumps.

That such a path is the intention of Synroc's backers was evinced in the Adelaide *Sunday Mail* in 1989.

Uranium industry bosses have had secret talks with SA government officials about turning the Olympic Dam uranium mine, at Roxby Downs, into a nuclear dump for the world's radioactive waste. A government source confirmed last night that the talks involved Roxby's operators, Western Mining Corporation. According to the source, mine officials estimated the plan was worth billions of dollars in dumping payments and industrial trade offs ... Western Mining has suggested enclosing the world's deadly nuclear waste in Synroc. Mr Goldsworthy [then deputy leader of the SA Liberal Party] says the Synroc process is superior to any nuclear waste disposal known.⁶

Present ALP policy prevents the importation of nuclear waste, yet the Labor Government has played an instrumental role in promoting a nuclear waste industry in Australia. The SSG was

formed to give effect to the Federal Government's request to ANSTO to secure Australian industry participation in the commercialisation of Synroc⁷

The Government has now sponsored legislation that favours the SSG option to import nuclear waste for the piloting of Synroc.

That there are those interested concerns that actively seek Australia's status as a nuclear nation is nothing new. Nor is the Federal ALP reneging on party policy a new occurrence. What is new is that Australia now has legislation in place that will facilitate this advancement. No matter how much the present Federal Government bleats that party policy prevents the import of waste, they fail to acknowledge the indisputable fact that the present Government has put in place a piece of legislation that any future pro-nuclear government can use to its great advantage. All that stands in the way of ANSTO and the SSG fulfilling their ambitions is ALP policy, not a good insurance policy if past experience is anything to go by. What is more, in the course of the Senate 'debate' on the *ANSTO Amendment Act* the Minister for Industry, Technology and Commerce, Senator John Button, would give no guarantees that 'spent source material' i.e. spent nuclear fuel, would not be imported. When pressed on this issue by the leader of the Australian Democrats, John Coulter, the Minister gave the following response.

I have nothing to add to what I have already said, except that this Bill is very wide in its ramifications and there may be circumstances where fuel rods have been sent overseas for reprocessing and, as I understand it, we may have to take back small quantities of waste to ANSTO from these rods. There is a possibility, not a likelihood, that that could be required of us.⁸

Consequently, the Government, with the support of the Coalition, rejected an amendment put up by the Australian Democrat Karin Sowada, which proposed that the Bill be amended to ensure that ANSTO 'must not import or export radioactive waste'.⁹

According to the Minister for Science and Technology, Mr Ross Free, the Act has to allow the import of radioactive waste so as to permit countries to send back radioactive waste that has resulted from the use of pharmaceutical isotopes that ANSTO may export. If this were true, then the

Act could have been amended to include a definitive statement allowing the import and export of pharmaceutical related radioactive material, but banning the import of waste from the nuclear fuel cycle.

Why didn't this happen? Well, it would seem all roads lead to Synroc, and ANSTO's vested interest in the commercialisation of the technology in Australia.

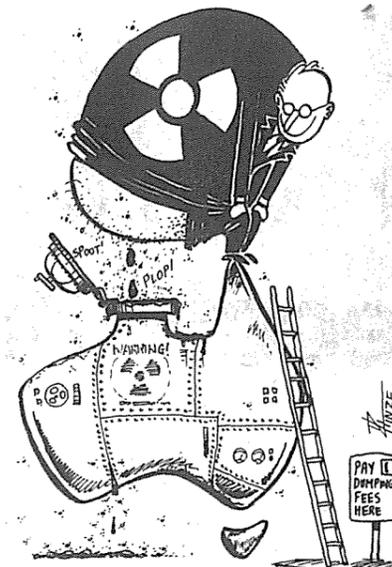
ANSTO is presently storing 1,500 spent nuclear fuel rods stored at the Lucas Heights nuclear reactor site in Sydney. The spent fuel is from the research reactors located on site. Some spent fuel rods have already been sent overseas for reprocessing. Some countries that have reprocessing facilities require that nuclear waste generated from reprocessing of spent fuel is returned to the country of origin. This is the scenario Senator Button referred to during the Senate debate on the Bill. Therefore if Australia sends it spent fuel rods abroad for reprocessing it may be obliged to receive back the waste. Again, this is a situation that ANSTO and the SSG would not be adverse to, because Synroc is being developed to deal specifically with high level liquid waste produced from the reprocessing of spent nuclear fuel.

That Synroc can treat all types of nuclear waste is a myth. It can only be used to immobilise the high level liquid waste that arises from reprocessing spent nuclear fuel. It cannot deal with any of the low and intermediate level radioactive wastes currently being created in Australia.

Conclusion

The writing is on the wall. The push to find a dump is on – a push that is politically and commercially motivated. Once a dump is established under suitably vague Codes and Guidelines, with ANSTO as operators, immune from State and Territory laws, the national dump could easily be expanded to accommodate foreign low level, intermediate level and ultimately high level nuclear waste.

The *ANSTO Amendment Act* is clearly meant to remove any obstacles



that stand in the way of ANSTO and the Synroc Study Group achieving their ambitions in the international nuclear waste industry. The next step along this path will see the ANSTO and Synroc public relations machines moving up a gear to ensure that public 'misunderstanding' and 'hysteria' about nuclear waste is abated. The choice is ours, we either act now to halt Australia becoming an international nuclear dump, or we let it happen. What will it be?

References

1. J. Cribb, 'Land may be seized for waste', *Australian* 2 June 1992.
2. Synroc Study Group, 'Synroc Study Continuing', Media Release, 3 Sept. 1992.
3. House of Representatives, *ANSTO Amendment Bill 1992*, Second reading speech by the Minister Industry, Technology and Commerce.
4. Greenpeace Australia, FOE Fitzroy and FOE Sydney have made extensive comment on the Draft Codes and Guidelines. Copies available upon request.
5. Synroc Study Group Progress Report
6. 'Libs back Roxby nuclear waste dump move' *Sunday Mail*, 9 October 1989.
7. Synroc Study Group, 'Synroc Study Continuing', Media Release, 3 Sept. 1992.
8. Senate Hansard: *ANSTO Amendment Bill* 18 June 1992, page 4025.
9. *ibid.*

Maggie Hine has been involved with nuclear issues since she was rained on in England's Lakes District shortly after the Chernobyl reactor made its place in history.

From centre to margin in ecofeminist thought

Ecofeminism is developing says Ariel Salleh and there has been change in the substantive issues addressed as ecofeminist books by women from outside the 'metropolitan' centres have been published.

THE ECOFEMINIST movement originated in the late 1960s and early 1970s with actions such as women's legal challenges to giant nuclear corporations in the United States and tree-hugging protests against loggers in northern India. Both actions expressed a local stand grounded in working women's commonsense understanding of everyday life needs. Both reflected the intuition that somehow the struggle for 'a feminine voice' to be heard was connected with struggle for a nurturant, protective attitude toward our living environment. The term 'ecofeminism' spontaneously appeared across several continents during the 1970s, reflecting this double-edged political perspective. At the same time, an ecofeminist literature began to emerge.

It is not easy to give adequate documentation to this new literature, because for politico-economic reasons ecofeminists working from more visible niches in the dominant English-speaking culture have tended to get their views broadcast first – even feminism is touched by its imperialist context. Thus, the classic ecofeminist statements came to be recognised as Rosemary Radford Ruether's *New Woman, New Earth* (New York: Seabury Press, 1975), Elizabeth Dodson Gray's *Green Paradise Lost* (Wellesley, MA: Roundtable, 1979) and Carolyn Merchant's *The Death of Nature* (San

Francisco: Harper, 1981). The lonely appearance in Paris of Françoise d'Eaubonne's *Le féminisme ou la mort* (Paris: Pierre Horay, 1974) is an exception whose lack of an English translation some fifteen years later, more or less proves the rule.

Nevertheless, as the 1980s unfolded, ecofeminist voices from 'the periphery' began to be noticed. Zed Press was a major catalyst, bringing out an English version of German *in vitro* activist Maria Mies's *Patriarchy and Accumulation* (London: Zed, 1986), Indian physicist Vandana Shiva's *Staying Alive: Women, Ecology and Development* (London: Zed, 1989) and Finnish United Nations worker Hilikka Pietla's account of women in development agencies *Making Women Matter* (London: Zed, 1990).

Applying the sociology of knowledge to ecofeminism, it is perhaps not surprising to find that the shift 'center' to 'margin' brings with itself a shift in substantive concerns. Symptomatically, given our imperialist context, it is a move from 'ideas' to 'material' questions. Earlier analyses of 'the women-nature link' concentrated on abstract ideas, ideology, the superstructure of daily existence. Hence, the excellent exposés of the Judeo-Christian tradition in Ruether, or the rise of Baconian science in Merchant. It could be argued that this focus on ideology was simply a manifestation of our

academia. In a society, such as the United States, where an entrenched class division between mental and manual labour exists and where labour issues are either suppressed or mystified by racism, experience, perception and theory are inevitably constrained in important ways. As Shiva puts it, liberation should 'begin from the colonised and end with the coloniser' (p. 53).

Two recent North American anthologies lend support to this observation. Both Plant's *Healing the Wounds* (Philadelphia and Santa Cruz: New Society, 1989) and Diamond and Orenstein's *Reweaving the World* (1990) are, with the exception of one or two essays, largely preoccupied with ethics, life-style, self-realization, cultural ritual and art – this while 456 million people starve today, and one more species will have died out by midnight. Again, consistent with a prevailing climate of bourgeois pluralism, the books come across as a 'supermarket' of ecofeminist standpoints. What is missing is an explicit and concerted challenge to the multi-national structure of economic oppression: a global economy in which a so-called 'advanced' world is utterly dependent for its daily survival on the labour resources of an 'un-developed' Two Thirds World. Thankfully, this challenge is what Vandana Shiva's *Staying Alive* brings to ecofeminism. As far as anthologies go, the UK published collection by Leonie Caldecott and Stephanie Leland, *Reclaim the Earth* (London: Women's Press, 1983) remains the best. It is politically grounded and internationally balanced.

Like Mies's book before it, Shiva's *Staying Alive* arrives as an urgent complement to the export dominant 'culturalist' tendency in ecofeminist literature. Director of the New Delhi based Research Foundation for Science, Technology and Natural Resources Policy, Shiva is herself a member of a privileged group. Even so, she has an intimate practical knowledge of the many dimensions of her subject. Her text weaves its way comfortably through geology, plant physiology, economics, mythology, epistemology. The book's basic thesis is that while Western 'development' was supposed



Women and nature

Ecofeminism has drawn attention to the use of language to feminise nature, and Felicity Ruby looks at some of its implications and meanings.

THE CONNECTION BETWEEN the oppression of women and the destruction of nature is a concept radical feminists have been discussing for some time. Recently ecofeminism has appeared as a discourse unto itself, to cries of both joy and dismay. For me it is inspiring because it is not a monolithic homogeneous ideology but makes radical political connections to formulate a vision; it also places hope on the agenda in a seemingly hopeless world.

Both feminism and ecology call for and attempt to understand the implications of change and formulate a vision for that change, both personal and structural. Ynestra King, in *Reweaving the World* writes: 'There is no point in liberating people if the planet cannot sustain their liberated lives.' It is increasingly obvious that women's liberation cannot be separated from the liberation of all. We need a venue. Ecology demands that we respect the relationship between humanity and the ecos with similar sentiments to those we would expect in a caring human relationship. Ecofeminism says we need to work on both *now*.

Some ecofeminists are inspired by nature on a political level, as it provides metaphors and symbols for peaceful co-existence in a world without hierarchies. The idea that the natural world is a kingdom with a definite hierarchy, a cruel place in which only the fittest survive, is a masculinist imposition. What actually occurs in nature is anarchy, and the anarchist analysis of power relations is becoming increasingly attractive to feminists.

Note, it tends to be males who equate nature with women. They talk of virgin land, rape of the land: men who want to be possessive of nature and women. Some women have equated environmental destruction with rape, and while there is a parallel in that the violence is similar and it essentially comes from the same source, the two acts are not the same. It may be a useful association as it illustrates the atrocity of destroying nature and the acts committed against nature are justified by the

same platform as is the rape of women – patriarchy. However, the atrocity of rape is committed against women. My oppression as a woman is psychological terror drawn out over a long time. It is a complicated social process involving the attempted corruption of my whole being on a psychological as well as physical level. Rape denotes a specific act of sexual violation and until it is treated seriously, it is unsatisfactory for the green movement to appropriate the term.

As a white, first world feminist in the patriarchal cesspool of Australia, I am not from a culture that embraces any idea of female divinity or respect for the earth as life giving. As such, calling the earth 'mother' (as lifted out of a spiritual sense from other cultures) is essentially devoid of any meaning in this culture. It seems to be another infuriating example of men conveniently appropriating the 'feminine' as metaphor. The earth should not be subject to personification. It is what it is – a planet. It sustains life, meaning that it has both male and female essences, but essentially has no gender. We are contributing to the patriarchal mentality when we call the earth 'mother'.

Language is the cultural production of meaning and it has been controlled by men. Codes of meanings and representations are cultural practices which arise out of assumptions about the national character. Kay Schaffer in *Women and the Bush* notes that women have been considered absent in the bush and the nationalistic tradition, yet are constantly represented through metaphors of landscape. The land in the Australian tradition is: 'the dark spiritual emanation of the external female, she is primevally cruel and unable to nourish properly.' The earth is simultaneously adored 'I love a sunburnt country' and hated as a harsh un-giving bitch. It sounds familiar considering the extreme problems men have with their mothers under patriarchy. This point is emphasised as it is inextricably tied to the meaning 'mother' earth has when appropriated by white male idiots.

Women's oppression and nature's oppression are connected but not directly equated. Both are endorsed and carried out by the political system of patriarchy. To overthrow this system will require vast amounts of energy and attacks on many levels. Like most ideas, ecofeminism has its radical and more moderate followers. It is, however, a scathing attack on the dominant paradigm and as such demands direct action of a radical nature.

Excerpted from 'A great and difficult idea' by Felicity Ruby (1992, n.p.).

to be a 'post-colonial' project, it has merely carried colonization forward into a new phase. Its apparent 'progress without subjugation' takes the form of a pact between Western and elite local men, leading to the exclusion of women from participation as partners in shaping social life. More than that, she finds indigenous women pick up the costs of 'development' without seeing any benefits. Further again, the more burdens they carry, the more women are 'victimized' and characterized as 'burdens' on society – something which applies equally in a 'developed West' as the feminization of poverty intensifies.

Shiva offers a paradigmatic analysis of the plight of Third World women everywhere. The erosion of traditional land-use rights by the introduction of cash-cropping, strips them of economic and personal autonomy as controllers of their means of production. For centuries, women have engaged hands-on with their habitat while labouring to provide daily sustenance and shelter. But 'development' ruptures the 'productive' woman-nature nexus, leaving starvation and ecological destruction in its place. Shiva writes:

It is in managing the integrity of ecological cycles in forestry and agriculture that women's productivity has been most developed and evolved. Women transfer fertility ... they transfer animal waste as fertilizer for crops and crop by-products to animals as fodder. They work with the forest to bring water to their fields and families. This partnership between women's and nature's work ensures the sustainability of sustenance ... (p. 45)

In its arrogance, the patriarchal 'reason' of Western science and economics imposes a linear, reductionist, managerial logic against the cyclic flows of ecology. The forest is separated from the river, the field from the forest, the animals from the crops. Each is then separately developed and the delicate balance which ensures sustainability and equity is destroyed. The visibility of dramatic breaks and ruptures is posited as 'progress'. Marginalized women are either dis-

pensed with or colonized. Needs go unfulfilled, nature is crippled (p. 45).

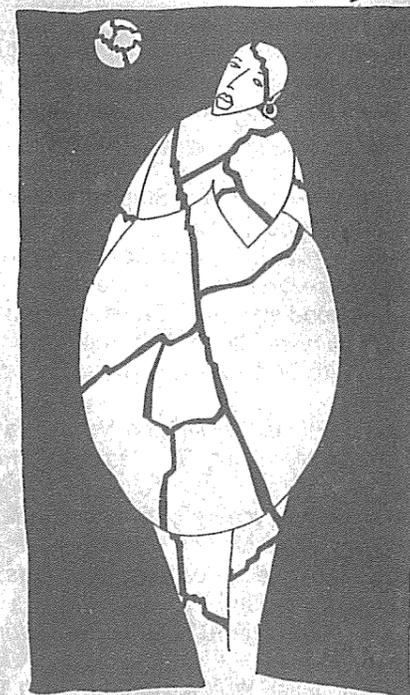
The role of women

The patriarchal response to this crisis is yet a further assault on life – and on women's being – the call for 'population control'. Just as earlier ecofeminists have pointed out that science is not 'neutral', so Shiva argues that there exists a sort of 'elective affinity' between science with its commercialized technologies on the one hand, and masculine self-aggrandizement, on the other. This is the real meaning of 'development'.

I once shared a taxi to the airport in Nairobi with a Dutch engineer who had been giving workshops on irrigation to the locals. Mindful of the fact that African women cultivate 80 per cent of the continent's food, I asked him: 'And how many women in your workshops?' 'Only men,' came the reply. Apparently, Kenyan authorities are fraternally anxious to be seen playing by white brother's rules. This was their masculine ego-investment. But Dutch aid programmers are not without their own status needs. So the knowledge was lost: although given Shiva's tales of the effects of India's Green Revolution, this was probably a blessing in disguise.

Ecofeminists see ecological sustainability and social justice as clearly interlinked. The dismissal of women's expertise 'developed' over thousands of years is the key contributor to both ecological breakdown and rural impoverishment. Making her case in terms the colonizer can understand, or more significantly will accept as valid, Shiva tables an array of indicators on: the nutritional status of male versus female children; soil loss with monoculture; fertilizer application by sex; corporate funding of biotech research; salinity following irrigation; male versus female shares of agricultural work. She notes that:

The dispossession of the poorer sections of rural society through the green revolution strategy and their reduced access to food resources is, in part, responsible for the appearance of surpluses at the macro-level. The



surplus ... is created by lack of purchasing power ... If one also includes the costs to the farm ecosystem in terms of soil degradation, waterlogging, salinity and desertification, the green revolution has actually reduced productivity ... (p. 129).

Shiva goes on to address the epidemic of violence on women which has ensued from the frustration of men's failure in the green revolution districts.

Science and technology

Like all good ecofeminist accounts, *Staying Alive* ties together the analysis of race, class, gender and speciesism. The author reminds us that modern chemical pesticides are an adaptation of war technologies such as nerve gas, and she contrasts their use with women's uniquely non-violent skill in pest control by nurturing resistance within plants rather than attacking pest species from the outside. She describes the sell-out of academic scientists to the corporate sector as a privatization of our 'intellectual commons'. It is made necessary because patriarchal science has become dependent on expensive hi-tech methods. But this new laboratory-based research, which shuf-

An ecofeminist bibliography

The following is a list of some of the main ecofeminist texts, including all the works referred to in the accompanying articles.

- Leonie Caldecott and Stephanie Leland, eds. *Reclaim the Earth*, Women's Press, London, 1983.
- Andre Collard, *Rape of the Wild*, Indianapolis University Press.
- Francoise D'Eaubonne, *Le feminisme ou la mort*, Pierre Horay, Paris, 1974.
- I. Diamond and G. F. Orenstein, *Reweaving the World: the emergence of ecofeminism*, Sierra Club Books, San Francisco, 1990.
- Elizabeth Dodson-Gray, *Green Paradise Lost*, Roundtable, Wellesley, MA, 1979.
- Susan Griffin, *Women and Nature: the roaring inside her*, Kingfisher.
- Carolyn Merchant, *The Death of Nature*, Harper and Row, San Francisco, 1980.
- Maria Mies, *Patriarchy and Accumulation*, Zed Press, London, 1986.
- Hilkka Pietila, *Making women matter*, Zed Press, London, 1990.
- Judith Plant, ed., *Healing the Wounds*, New Society Press, Philadelphia and Santa Cruz, 1989.
- Rosemary Radford Reuther, *New Woman, new earth*, Seabury Press, New York, 1975.
- Kay Schaffer, *Women and the Bush*, Cambridge University Press, 1989.
- Vandana Shiva, *Staying Alive: Women, Ecology and Development*, Zed Press, London, 1989.
- Monica Sjoo and Barbara Mor, *The Great Cosmic Mother*, Harper, San Francisco, 1987.
- Merlin Stone, *When God Was A Woman*, Harvest Books, 1978.

humble work, either by including it in labour statistics or according it the status of scientific observation, governing male élites in South America, Africa, India, publish annual trajectories of 'manpower' needs – engineers, accountants, sanitary chemists, biologists, electricians, and so on. In the drive for 'masculinization' they forget or 'deny' that:

the 'Dusty Bowl' technology for the manufacture of deserts from fertile soils was first mastered in the colonization of native Indian lands in North America ... western patriarchy's highly energy-intensive, chemical intensive, water-intensive and capital-intensive agricultural techniques for creating deserts out of fertile soils in less than one or two decades has spread rapidly across the Third World ... financed by international development and aid agencies (p.152-3).

Identifying the modern environment movement as fellow-travellers with developmentalists and we might add, many environmental ethicists too – Shiva points to the underlying Cartesian paradigm they all share. 'Deep' ecologists do make an attempt to escape this instrumentalism, albeit with mixed results, though Shiva appears not to be aware of this ideological grouping among Greens. Using a vocabulary of alienation, commodification, homogenization, to describe the impact of industrial practices, her perception, again unselfconsciously, converges with the bio-regionalist sensibility.

Culturally perceived poverty need not be real material poverty: subsistence economies which satisfy basic needs through self-provisioning are not poor in the sense of being deprived ... millets are nutritionally far superior to processed foods, houses built with local materials are ... better adapted to the local climate ... (p. 10).

Unlike some Western decentralists however, Shiva's valorization of 'place' never loses sight of the wider multi-national economic order and its insidious impacts – technology, for one. Shiva's renaming of 'poverty' throws down a material challenge which many Green activists and feminists are yet to hear. Ultimately, if we are to arrive at global justice and sustainability, the West will have to review its thirst for hi-tech consumption in favour of the gentler, egalitarian alternative by which the Two Thirds World provisions itself.

As Shanti George says: 'The trouble is when dairy planners look at the cow, they just see her udder' (1968). The same engineering mindset has now brought women into a world where they are being manipulated as reproductive resources. Our bodies have become an urban dust bowl. Our voices are parched echoes in concrete valleys. Recovery of the feminine breath in social life – politics and science, economics and agriculture – is urgent this time. But what is meant by 'the feminine'? It was at this level of inquiry that I anticipated Shiva might get into difficulty. Trained as a physicist rather than philosopher, I expected her to be awkward in her formulation of cultural processes. Even Rajni Kothari's forward suggested that readers might find a certain literalism in Shiva's text. But this is misleading. The author of *Staying Alive* is no naive existentialist, as feminists like to call theorists who would use commonsense understandings of sexual difference; though I think it would be fair to say that Shiva is unacquainted with the prodigious debate over essentialism in the West.

The notion of Prakriti

Drawing on Indian mythology, Shiva introduces the notion of 'Prakriti' as feminine principle or life force. This is distinct from Western-gendered concepts of 'the feminine' which work in a politically oppressive way by equating the feminine with passivity, then attaching women's work roles and personas to this false objectification. Prakriti, she claims, is transgendered, an active creative force. Men too can live through

The notion of Prakriti

Drawing on Indian mythology, Shiva introduces the notion of 'Prakriti' as feminine principle or life force. This is distinct from Western-gendered concepts of 'the feminine' which work in a politically oppressive way by equating the feminine with passivity, then attaching women's work roles and personas to this false objectification. Prakriti, she claims, is transgendered, an active creative force. Men too can live through Prakriti, but when men's energy is 'gendered' the principle of activity is conflated with dominating, even destructive behaviour, such that creativity is again lost. Prakriti is proposed by Shiva as an alternative 'universal' basis for gender liberation. It will serve as a corrective to the deformed, socially homogenizing and fragmenting 'universal' principles of the Western bourgeois liberal order.

A convergence of this analysis with the 'culturalist' tendency in ecofeminism is thus quite clear. The modernist 'catching-up' orientation of Liberal and Marxist feminisms based on 'masculine' universals is obsolete. A revisioning of the earth goddess, Gaia, is called for. The pitfall in all this is that while Prakriti may in principle be transgendered, the efforts of living men and women to realise it are hampered by a language and social institutions that are gendered. Hence the ready re-absorption of cultural feminist ritual by a commercially oriented *status quo* and the ready adoption of Gaia imagery by environmentalist men, including deep ecologists, who have their commonsense assumptions about sexual differences massaged by such a notion. Shiva laments that, like Gaia, Pratriki has been reduced, mineralized, turned from Mater to matter or resource. In fact, the rape of the mother is a deep structural image that can gratify men in a patriarchal era: at an ego level, it affirms their role as protector, and at a libidinous level, it satisfies pornographically. Nevertheless, the use of Prakriti as an oppositional term in a process of ideological deconstruction is better than nothing at all. More importantly, focused as she is on the



materiality of daily life, Shiva's approach does not stop at this point. There is not the simple assumption so often found among US radicals, from Greens to poststructuralists, that to change our discourse or how we think is equivalent to making political change. In Shiva's India, the link between women and nature is not only symbolic, but has at least three sites where it is active and creative. The first is in reproduction or birthing; the second is in production or farming; and the third is in the provision of nurture or caring. In each labor form, women 'mediate nature and humanity' – to inject a dualism which is not characteristic of Shiva's writing, but is

meaningful to Western readers. Through a complex of labours then, women are 'organically' implicated in life-affirming processes and women's knowledge is empirically grounded in this organic relation.

A majority of women in the world literally embody Prakriti, although those who regard them with gendered eyes will not see that active force at work. Such blindness is often found among emancipated urban professional women, whose technologically mediated consumer life-style removes them from the reality of engagement with nature. Shiva acknowledges these socio-historical differences among women, her argument being not about

some universally determined 'feminine essence' but about 'experiences' most commonly shared among working women. Along the same lines, Shiva borrows Mies's observation from *Patriarchy and Accumulation* about men's most common labor forms. Given the gendered deformation of the life force, men tend to feel themselves 'productive' only when they objectify external reality and control it. Hence, the massive appeal of the Western development project.

But this discussion begs a question which Shiva's book raises and does not answer. If Prakriti precedes the gendered construction of society, then it must be Western colonialism that is responsible for men's violence on women. In fact, as the institution of *suttee* demonstrates, patriarchal oppression in India has its own history. Why does the author evade this problem? Is it a tactical desire not to offend Third World brothers in the struggle against neocolonialism? If so, it is understandable, but it neglects women's interests in the longer run.

Shiva's treatment of Prakriti as transgendered is too elliptical to be helpful. For instance, creative fertility is traditionally ascribed to Indian temple goddesses in the form of a life-giving mother. Sexual reproduction may be pre-gendered—in principle—but, as we know, women who labour to give birth generally become mothers who labour to give care. Similarly, anthropological studies reveal how the Indian cultural identification of women with water prescribes their daily routine of water-carrying. Prakriti does not seem to be as gender pure as Shiva would have us believe.

Some criticisms

Shiva's writing is cryptic in some other areas as well. She says: 'Patriarchal categories which understand destruction as 'production' and regeneration of life as 'passivity' have created a crisis of survival' (p. 3). This could allow an unsympathetic reader to charge that hers is an idealist argument, whereas we know that the body of her book involves a constant interplay between ideas,

labor, nature, relationships. Another vulnerable piece of writing occurs with:

The economic system based on the patriarchal concept of productivity was created for the very specific historical and political phenomenon of colonialism (p. 11).

Idealism again: does she really believe that ideas alone shape institutions? No, I think not, as illustrated by her consistently dialectical methodology. But which patriarchal 'concept of productivity' does Shiva have in mind? Since she implies elsewhere that India has been free of this tendency prior to imperialism, it must be Western patriarchy. But this oversimplifies. As we have already noted, the Indian tradition has its own variety of patriarchalism—something substantiated by Shiva's thesis on the pact between local élite men and colonizers. When Shiva refers to the 'economic system', she presumably means the system of men's appropriation of nature and women's labor, but plainly this was not only created for purposes of imperial conquest. The same pattern is manifest within the domestic economy of the dominant Western system. Perhaps she regards men's treatment of women in the West as a form of colonization as well? Some feminists do argue this way. Rather, I believe, Shiva's 'skid talk' here ties in with her activist prioritization of the colonial moment. In any event, it does little justice to her analysis as a whole. More careful editorial scrutiny should have saved her from lapses of this kind.

Finally, I am uneasy with Shiva's superficial reading of Marcuse. She cites a sample of his work as gendered dualism. But this is to remove it from the context of a Frankfurt School theory, whose collective critique of instrumental rationality spanning several decades arrived at a sociological analysis very close to her own ecofeminism. To quote Marcuse:

Technological man [becomes] a uniform measure of the worth of classes, cultures and genders. Dominant modes of perception based on reductionism, duality and

linearity are unable to cope with equality in diversity ...

Critical theory called for the voice of 'the other' to be heard long before Parisian postmoderns thought of it. Like Shiva's, though unlike the structuralists, the Frankfurt case for 'difference' was thoroughly embedded in a passion for social justice and practical renewal of human identity with nature. Horkheimer, Adorno, Marcuse, each believed that in unravelling the contradiction inherent to women's gender 'mutilation', we would find a way back to what has been lost. This thesis prefigures the transitional voice known as ecofeminism.

Shiva, I feel, does not unravel these contradictions patiently enough. We especially need close attention to the interplay between Western and other patriarchal systems, particularly in the face of an emergent masculinist backlash—from Left and Right—which seeks to prove that the pervasiveness of men's domination across cultures is a figment of Western feminist imagination. Hopefully, Shiva and her Third World sisters will take up this theme before too long.

The strengths of Shiva's contribution are clearly apparent. Her factual synthesis of geology, plant physiology, economics, and so on, is magnificent. Shiva's sensitive exposition of Indian women's systematic approach to ecological labor is a gift to ecofeminism. Phrases such as 'women transfer fertility' or 'this partnership between women's work and nature's work' convey a dialectical epistemology; one that implicitly discredits the Cartesian split between human labor on the one hand, and nature, on the other. Empirical knowledge conceived in daily labor sustains the ecofeminist voice that Shiva translates for us in *Staying Alive*. That in itself is sufficient validation for our political perspective. In my view, Prakriti might just as well have been left to sleep in a footnote.

Ariel Salleh writes about feminism, socialism and green politics.

Managing the Reef

The Great Barrier Reef is the largest marine coral ecosystem in the world, and is an area of enormous diversity, great beauty, and scientific interest. It is also highly vulnerable to human interference. Denise Russell looks at the current 'management philosophy' of the Park and argues that it does not provide enough protection for the Reef ecosystem.

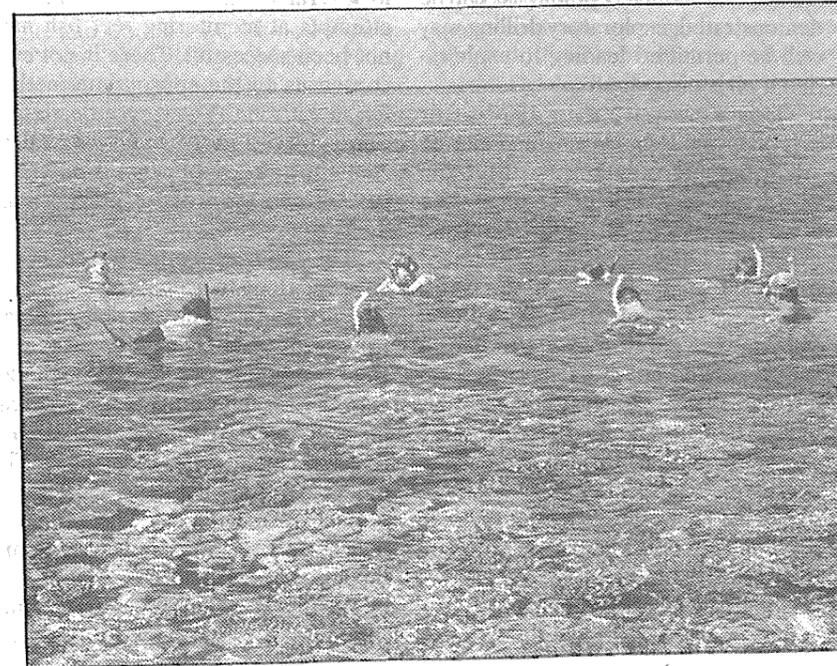
THE SETTING UP OF THE Great Barrier Reef Marine Park in 1975 and the establishment of Great Barrier Reef Marine Park Authority (GBRMPA) to manage the Park were significant advances in the preservation of the Reef. There are, however, some flaws in key philosophical principles which form the basis of the Authority's management.

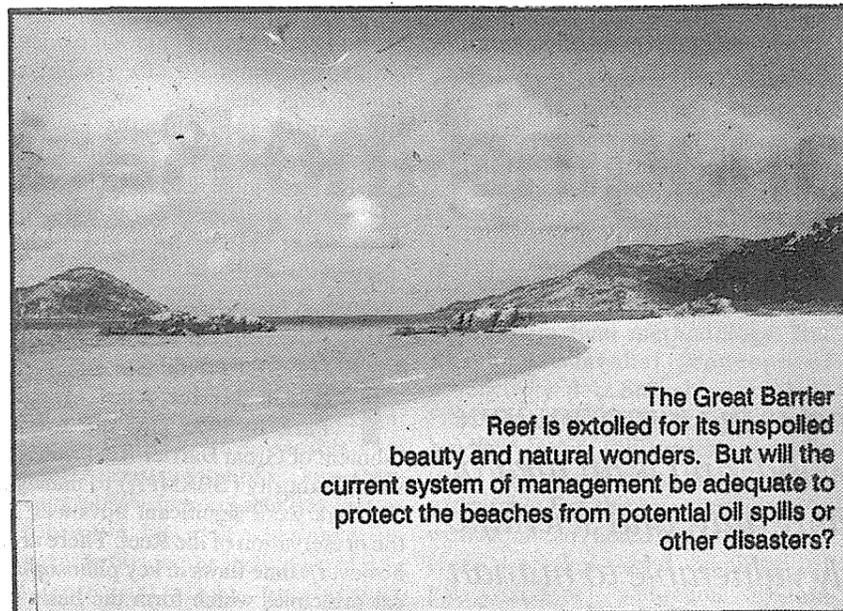
Current management philosophy seeks to achieve conservation with the minimum of regulation. It aims to ensure a high level of usage while maintaining the ecological system and being acceptable to society. The management philosophy states that:

An understanding of the Reef and the processes which maintain it is necessary before sensible decisions can be made about competing uses, and before limitations can be placed on potentially destructive uses.

(Kelleher and Kenchington, my emphasis)

Zoning plans have been developed in line with these management principles but most of the Park is zoned for general use which restricts mining and spear-fishing only. Less than 10 per cent in the Cairns section is zoned Marine National Park and even this area has various sub-zones. The largest has only fairly light restrictions on some fishing and collecting. These 'A' zones are adjoined to buffer zones where trolling for pelagic fish is allowed but no other fishing. Buffer zones adjoin reefs where fishing is prohibited. Very small areas are zoned for Scientific Research and Preservation. The Authority claims that 'the provisions of the Marine National Park Zones are similar in





The Great Barrier Reef is extolled for its unspoiled beauty and natural wonders. But will the current system of management be adequate to protect the beaches from potential oil spills or other disasters?

concept to those of national parks on land'.

Problems with the management philosophy

The aim to support a high level of use and a diversity of human activities in a fragile environment runs counter to the aim of conservation. The marlin fishing sport provides a good example of weaknesses in the management philosophy. Fishing competitions were widely promoted in Cairns as recently as early 1992 and Lizard Island hosted a Marlin Classic where marlin weighing hundreds of kilos were hauled onto the beach. This is a barbarous sport, no different from big-game hunting. An alarming report published by the previous Director of the Lizard Island Research Station stated that the big game fishing boats frequently call into the Cod Hole (which is a Preservation Zone because it houses sixteen or so large potato cod). To entertain their clients when the marlin aren't biting, the crew dangle a tail roped tuna from the back of the boat and the cod fight for the bait. In the process the fish inflict wounds on each other. The cod who gets the bait incurs mouth and body damage in the resulting tug of war. This activity is not illegal as it doesn't count as fishing. The line has no hook. That

this is permissible in an area of the tightest zoning – Preservation Zone – should lead us to reflect on the philosophy behind the zoning.

Another weakness in the philosophy is contained in the clause quoted above. It is the idea that if you can't prove that an activity is hazardous then it should be allowed to go ahead. One member of the GBRMPA, Baker, even followed this philosophy through to oil drilling on the Reef when he says 'if no research is done or if no unacceptable risk can be demonstrated, exploratory drilling may well be permitted leading to exploitation if oil is discovered'.

This was written in 1977 after several oil spills had devastated marine environments in other parts of the world, and very close to the time when other dangers in oil exploration and drilling had been brought to the attention of the public.

Overseas witnesses to the *Royal Commission on Petroleum Drilling in the Great Barrier Reef Waters* in 1974 testified that an offshore oil industry once established could do more lasting damage to marine life through small but continuous spills, detergent treatments, discharge of water and mud used in drilling and other kinds of pollution than even single large spectacular oil accidents would do. Yet Baker's comments assumed that unacceptable risk

had yet been demonstrated. If that is the view of the body set up to conserve the Reef what hope is there to reject the recent government initiatives to allow oil exploration adjacent to the Reef?

Perhaps Baker's view is not widely shared in the Authority but the philosophical stand behind it is constantly stated. When we are dealing with an area of such profound importance and fragility it is far preferable to take the stand that we should prohibit or restrict activities unless we have good reasons for thinking they are harmless. This should apply to all activities in the Park, not just oil exploration or drilling.

Two other activities that need desperately to be further restricted are fishing and tourism. The harm being done to the Reef by tourists and tourist development is abundantly clear to the casual observer. Yet tourism in the Cairns area is increasing at a rate of roughly 30 per cent per annum and GBRMPA gives permission for development which could be predicted to be destructive. One example of this is the development on Magnetic Island which will severely affect up to 50 per cent of the coral reef in Nelly Bay.

The harm done by depletion of fish stocks may not be realized until it is too late. There is very little research into the long-term viability of Reef fishing and attempts at monitoring reef fish have not been successful. There is not even consensus on the appropriate method for monitoring. Yet very little restriction is placed on what fish are taken. Again the philosophy that is operating is: wait and see if these practices are dangerous.

The sad truth is that we might not have very long to wait.

Further flaws in the philosophical base of the management practices stem from acceptance of a land based model, with the assumption that the area can be divided into reasonably distinct regions, albeit with buffer zones. This model is questionable on land and is nonsense in the sea. The larvae of marine plants and animals are sometimes dispersed hundreds of kilometres in the plankton. In an extensive study done in the mid-80s by Gordon Bull,

larval drift was recorded up to 728 kilometres though some, perhaps most, larvae settle in three days, 3-8 nautical miles away from the spawning area. The conclusions from this study relate to about one third of the corals on the reef and they establish the interconnectedness of different reef regions.

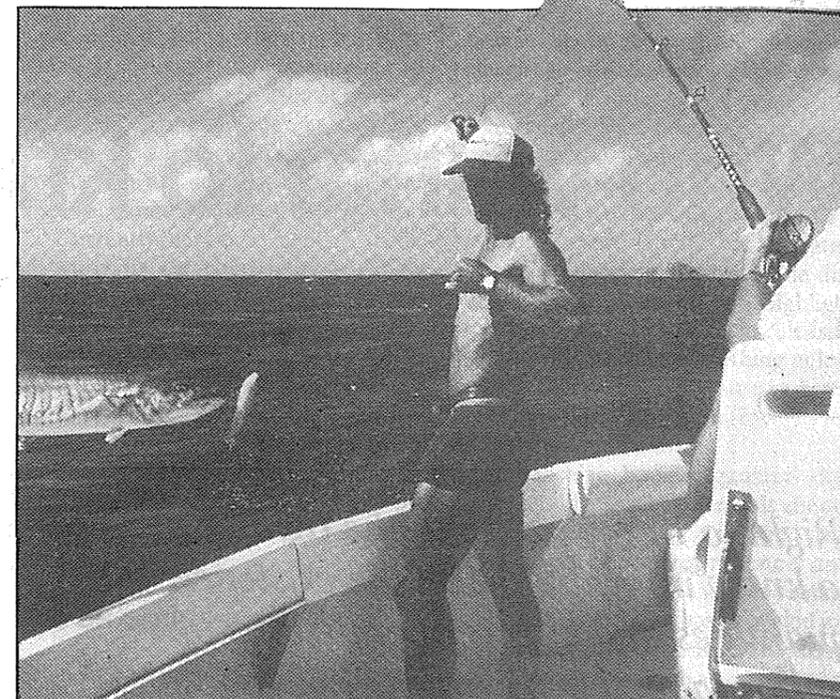
Other examples throw a shadow over zoning: the cod in the Cod Hole do not always stay in their small Preservation Zone. They may stray into the nearby zone where trolling is legal. The scientist working in the Scientific Zone on Lizard Island may be frustrated to find his subjects killed in legal fishing a few hundred metres from the shore.

There are threats to the Reef from activities in areas adjacent to the Park, in particular from land run off and proposed oil exploration/drilling. A philosophy which accepts the zoning model within the Park makes it easy to look upon the Great Barrier Reef as a unit separate from the adjacent land and sea. It makes it difficult for the Authority to act as a political force countering the threats from adjacent areas. If the notion of interconnectedness of regions within the Park is accepted then it would be easier to see the interconnection between the Reef and non-Reef areas. This philosophical stance would not, of course, solve problems arising from the meeting of State and Commonwealth jurisdiction.

There are also problems arising from the use of the Reef channel for shipping. There has been an average of one oil spill a year from ships since 1970 but there has been a sharp increase over the last year. Often spills are deliberate and large fines are not effective in stopping them, and existing measures for handling oil spills are hopelessly inadequate. It is difficult for GBRMPA to do anything about shipping. Even the hands of the Federal Government are tied to some extent because of international laws relating to the free passage of shipping, yet it is an area where urgent action is desperately needed.

An alternative philosophy

The current philosophical stand – that limitations should be placed on poten-



Fishing off Lizard Island near the 'Cod Hole' where the protected giant Potatoe Cod are sometimes encouraged to fight for anglers' entertainment.

tially destructive uses of the Reef only when research shows their destructiveness – should be overturned. Given that we know about the accelerating extinction of species in other places in the world, the policy of 'wait and see' in an area of such profound biological diversity is very dangerous indeed. Instead a more cautious approach should be adopted. If we know that an activity is harmful to the Reef or if we are unsure of its effects then we should prohibit, restrict, or encourage against it. That should be the basic philosophical standpoint. Yet given the very uneven effectiveness of the exercise of power from above, the principle should ideally lead to self-policing.

This would, however, be a mammoth problem with commercial shipping and fishing which are areas requiring tighter government intervention. This could include, for example, extension of the pilot scheme for ships passing through the Reef, banning of shipping during coral spawning and putting more resources into 'Reefplan' – an oil spill contingency plan which is currently inadequate to handle large spills.

Self-policing works well with smaller scale activities. The tour boat operators in Hervey Bay exemplify this. There is a good sense of community and recognition that the regulations regarding whale watching are worth keeping to protect the industry.

An alternative philosophy of Reef management should also take more account of the interconnections not only between different parts of the Park but also between the Park and its land and sea edges. The imposition of zones masks this reality. Obviously some local regulation is required, for example spear-fishing of the cod in the Cod Hole has to be illegal, but local regulation could take place within an overall perspective of interconnectedness. The danger with zoning is that it gives a license to harmful activities within certain areas and orients people's thinking away from the whole.

It is only by keeping the whole in mind that we will have a chance of preserving the Reef.

Dr Denise Russell is Head of the Department of General Philosophy at the University of Sydney.

Who wants to know?

'Right to Know' refers to the right of people to know information on the existence, quantities and effects of emissions of industrial activity. Larry O'Loughlin and Clare Henderson look at different forms of Right to Know and at some problems that need to be addressed.

A NUMBER OF serious accidents and releases of chemicals in recent years has led to an increase in the calls for the 'Right to Know' about the types of chemicals used, the quantities involved and their hazards.

Right to Know has existed as a legislated right in some parts of Europe and a number of States in the United States for some years. The concept of Right to Know received a filip after the Bhopal disaster in India. This was the world's largest industrial accident in which 2500 people were killed immediately or within a few weeks of the release of methyl iso-cyanate (MIC), a substance related to but more deadly than World War I poison gases, from the Union Carbide plant. It was later revealed that MIC was also being produced in the US in a community unaware of its production or effects.

Although 31 States already had some form of Right to Know legislation, the US Federal legislature passed the Emergency Planning and Community Right to Know Law in 1986. This law did a number of things, including the establishment of a toxic release inventory, a company prepared listing of the emissions from their industrial operations which was made available to the government and the public. The law also provided for the establishment of Local Emergency Planning Committees with representation from state and local government, firefighters, industry, media and community groups.

The fire at the Coode Island terminal in inner Melbourne in August 1991 has been a major boost to increased awareness of the potential hazards from the use, storage and transport of chemicals in Australian communities.

There have been calls for Australian Right to Know legislation from a variety of groups.

- Community groups such as the Hazardous Materials Action Group, the Public Interest Advocacy Group, and the Environmental Defenders Office have seen the need for Right to Know legislation.
- The issue has been raised for discussion in papers outlining the development of Environment Protection Authorities.
- Australian Council of Trade Unions policy calls for recognition of the right of workers to know about the chemicals in their workplaces.
- The Australian Chemical Industry Council has also called on its members to adopt the Responsible care program which includes a Right to Know component.
- Firefighters and emergency planners are also calling for their need to know to be recognised.

Differences and problems

There are, however, different forms of Right to Know, and the concept can be broken into three parts.

Firstly, there is the right of workers to know the hazards which they face in the workplace. Some occupational health and safety legislation requires that employers and chemical suppliers must provide information to workers about the products they are handling. This is supposed to be done through labelling of containers and the

provision of Material Safety Data Sheets (MSDSs) and training of workers. Worksafe Australia, the national occupational health and safety policy organisation, has developed model regulations, for adoption by State authorities, which incorporate a form of worker's Right to Know. As far as we understand, although they have been recommended or are under consideration in most states and territories, no-one has actually implemented these model regulations, and there is no other legislation guaranteeing worker's Right to Know in Australia.

This form of Right to Know relies on the various parties – employers, suppliers and workers – being actively involved in the process, and it falls down when for example there are no available MSDSs for combinations of chemicals, or when workers are exposed to a range of chemicals outside their immediate work area. The MSDS also does not necessarily provide information on the potential danger facing humans. Most importantly, workers Right to Know does not provide information for the community around the workplace.

The second form of Right to Know is that of emergency workers, particularly firefighters, to have information about the chemicals at the site of an emergency. They need to know the hazards faced as they dash into a blazing warehouse or attend a spill on a highway. They also need to be aware of the potential environmental damage caused by water containing chemicals running off into storm-water drains.

Work has been done to label industrial premises with details of the class of chemicals they contain and Worksafe's model regulations call for the provision and maintenance of emergency manifests of all hazardous chemicals on site, their location and quantities.

The large number and quantities of chemicals in use makes the preparation and maintenance of a system of manifests very complex, and again, the Right to Know for emergency workers does not necessarily lead to an informed community.

The third main form of Right to Know is the right of communities to know. This assumes that local government, government agencies and the public have a Right to Know about the production, use, storage, discharge and disposal of chemicals and their effects.

Currently there is no legal provision in Australia for community Right to Know, however, the final report of the Coode Island Review Panel did recommend that the Government agree in principle to a legislated Community Right to Know. Independent Victorian Senator Janet Powell has prepared a draft of a form of Federal Right to Know legislation which may be presented to the Senate by the end of 1992.

The US experience

Right to Know legislation could be expected to reveal all necessary information to any member of the public wishing to know the environmental and public health effects of a particular industry or industrial process.

The US legislation has shown that it has particular limitations which should be taken into account when Australian legislation is prepared. In the US, only a limited range of facilities are required to report their toxic releases, and polluting exempt facilities include storage facilities, sewage treatment plants, power plants, solid and hazardous waste incinerators, federal facilities, dry cleaning businesses and mining operations. US Right to Know legislation also includes only 320 chemicals on which reports must be submitted, out of the more than 60,000 chemicals currently in use in the US. The scheme relies on self-reporting – that is, the companies report their own emissions – and the figures may not always be reliable. The maximum amounts which can be used or emitted from a facility before a report is required can be quite high.

The Local Emergency Planning Committees have potential to make changes, however, they are not funded even though they are required under the law, and they often become bogged

down in emergency response planning rather than addressing public information needs.

Suggestions are now emerging from activists in the United States that, in addition to amending Right to Know legislation to close some of the loopholes, there should be legislated toxic use reduction measures. The disclosure of information can highlight high volume sources of toxic releases, but this will not change anything unless there is also political pressure or some legal requirement that industries reduce their emissions.

It has also been suggested that demonstrably unsafe chemicals should be banned or phased out, and knowledge of their presence and volume does not make them any safer.

The US legislation has provided experience to show that: Right to Know legislation must include a wide range of chemicals and processes, that all emissions should be covered by Right to Know; that it should not just apply to manufacturing processes, but storage, disposal and processes where the use of chemicals is secondary; the Right to Know should be tied to the need to reduce emissions, and the move towards cleaner production techniques.

Conclusion

Community Right to Know legislation is on the way in Australia, there remains the question of how soon and effective it will be. It also needs a greater campaign by environment groups, not just on its own, but included into other campaigns.

Overseas experience, particularly in the US, has shown loopholes which should be avoided, and that Right to Know needs to be backed up by other legislation, and an active populace ready and able to use the available information to bring about improvements to the environment.

Larry O'Loughlin and Clare Henderson are the editors of Chain Reaction and thought it was your right to know that.

The massacre of the whales

In recent times the sighting of whales in coastal waters have been a rare but welcome events attracting thousands of sightseers and much publicity. Yet, not so long ago, these deep sea animals regularly frequented the Australian shoreline. William Lines describes earlier attitudes to whales – which sharply contrast with current perceptions of whale sightings.

IN DECEMBER 1791, Governor Phillip wrote to Banks [the official botanist on the voyage by Captain Cook which visited Australia] about the vast number of whales to be seen about the coast; he predicted prosperity for a future whaling industry. The first English whalers intending plunder arrived in the ships of the Third Convict Fleet in 1791. The convoy's master reported shoals of sperm whales off the coast of New South Wales, from noon to sunset, as far around the horizon as could be seen from the mast. After disposing of its human cargo the Third Fleet immediately returned to sea. One ship killed seven whales in less than two hours, but foul weather forced the abandonment of the hunt. In any case the pressing needs of a barely functioning, starving settlement postponed a more systematic exploitation of the colony's marine fauna.

Mariners in the southern seas in those days travelled through an abundance of marine life unimaginable to Australians today. Indeed the southern oceans then served as a vast undisturbed sanctuary for the sperm whale (*Physeter macrocephalus*) and the right whale (*Balaena australis*). Every season, in their tens of thousands, right whales swam north from Antarctica to mate and calve in the bays and estuaries along the coasts of New Zealand, Van Diemen's Land and southern Australia.

News of the living bounty in the 'southern fisheries' reached the north-

ern hemisphere at a time – the late eighteenth century – of diminishing catches of whales. Revivified fleets set sale at once from Le Havre in France, Hull in England and from New Bedford and Nantucket in America, for the new southerly riches. Likely profits more than compensated for the long voyages.

Soon after reports of the extravagance of life in the oceans to the south of Australia reached Britain, whaling firms began to pressure the government to lift the pre-emptive rights of the British East India Company over all the produce and trade in the southern hemisphere. Besides Governor King, who consistently sought a lifting of the restrictions on whaling (which prohibited Australian based traders from exporting whale or seal products direct to London), the whaling companies found an ally in Joseph Banks. In 1806 Banks wrote to Lord Liverpool protesting the East India monopoly and added: 'the Americans will most Certainly catch the Seals in Van Diemen's Land if the Colonists do not and there cannot be any reason why they should not catch the Whales in their own Seas.'

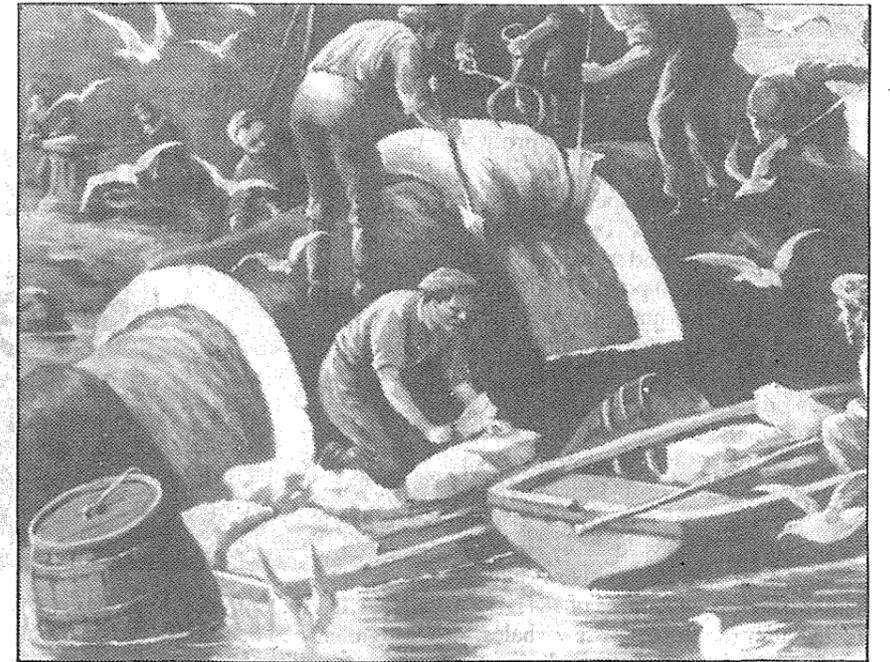
As early as 1801, despite the legal monopoly of the East India Company, independent whalers began to frequent New Zealand waters, where the seas abounded in sperm whales. The first regular visits of Europeans to New Zealand, in fact, were entirely due to those islands' lavish biological display: whales spouted in the bays, seals basked on the shores and fine timber grew in the forests. Forty years of untrammelled and unsupervised private exploitation followed, until the British government formally annexed New Zealand in 1840.

In New South Wales whalers enjoyed official patronage. In 1803 the British whaler *Albion* sailed from Sydney in the company of the Van Diemen's Land founding party and on the way caught three sperm whales. During the first winter and spring, the Derwent estuary, the site of the new settlement of Hobart, swarmed with right whales, mostly pregnant females seeking refuge in the sheltered waters to give birth. Sometimes 50 to 60 might be seen in the shallow parts of the river.

Day after day the diary of the Reverend Robert Knopwood records whales. On 1 July 1804, 'At 1/2-past 10 Lt. Johnston and self went to Risdon, by order of the Lt. Governor Collins, and performed divine service there. We passed so many whales that it was dangerous for the boat to go up the river, unless you kept near the shore.'

The whales did not enjoy their tranquillity for much longer; the Van Diemen's Land invaders quickly realised the commercial possibilities of their congregation. Later in the month of Knopwood's diary entry, Lieutenant Governor Collins wrote enthusiastically to Banks about whaling and noted that in the Derwent 'three or four ships might have lain at anchor and with ease filled all their casks'. But the first Van Diemen's Land whalers did not even need ships; they simply set up a shore factory in a bay where the animals were known to gather and attacked them from small boats. Although the new colony suffered terribly from starvation - by the end of 1805 the convicts were rationed to 1.2 kilograms of salt pork and 1.8 kilograms of bread a week, normally a two day ration - the whalers were not distracted, nor the whales ignored. In 1806, mobile whalers began frequenting the Derwent, filling their ships with the oil procured from the whales in the river and adjacent bays and William Collins (no relation to the Lieutenant-Governor) established what was probably the first Van Diemen's Land whaling station at Ralph Bay, on the east side of the Derwent. Bay whaling stations quickly spread to other suitable coastal indentations.

Ships from America, Britain, France and Sydney joined the slaughter, set up shore stations and made temporary land bases in safe inlets everywhere along the southern coasts. In the first two decades of the nineteenth century American whalers took over 150,000 southern right whales just from South Australian waters. The opportunity had to be quickly seized. By 1841 there were 35 bay whaling stations on Van Diemen's Land alone but decline set in rapidly. After 1845 the right whale ceased to come to the



slaughter. The species never recovered. A 1978 Australian government inquiry into whales concluded the numbers of right whales were so few and their prospects so uncertain that counting was not possible.

The global context

From the time the American fleets invaded the southern Pacific at the close of the eighteenth century, the business of sperm whaling fluctuated according to political events in the northern hemisphere. At first the Napoleonic Wars depressed European interest, then the British-American war of 1812-14, and subsequent trade embargoes effectively closed all British ports to American vessels until 1830. In any case, Australian ports were ill-equipped to service the whalers, and no more than half a dozen American whalers called at Sydney in the three years before 1812. Scores of American and other ships, however, hunted whales in the surrounding seas. The ubiquitous presence of foreign whalers prompted one patriot in 1827 to deplore the failure of the colonials to take advantage of the 'lucrative prospect [of] the whale fisheries ... We see the London and American ships congregating at our doors, as it were, by dozens, and

carrying off yearly thousands upon thousands of the rich harvest which the bounty of Providence has placed within our grasp.'

Not all the colonials felt inhibited, however, and some of those who had profited from sealing invested in the new business of deep sea whaling. Sydney merchants sent two ships after sperm whales in 1823, and employed 26 in the business by 1830. The next year, Archibald Mosman, a merchant and ship owner, erected wharves in a cove of Sydney Harbour for the equipment of vessels occupied in the whale fishery. By the early 1830s, with the Americans back in port, both Sydney and Hobart offered whalers a full range of repair and supply facilities; for a brief while Hobart became one of the great whaling ports of the world. American whalers preferred to operate in the northern Pacific or along the equator, but with falling catches they sought new killing grounds and soon established a regular commerce with Australian ports. While welcome, their presence continued to remind the colonials of their inadequacies.

In 1837 the first recorded American whaler appeared off the south west coast of Australia and the *Perth Gazetteer and West Australian Journal* editorialised: 'We welcome any and

every stranger to our coasts, but it is painful for us to see strangers sweeping from us one of our riches harvests — the whale fishery — while we are indolent spectators.' The possibility of profit induced two local companies to commence whaling operations out of Swan River in 1837-38. In their first year they exported oil and whalebone to the value of over 3,000 pounds. Competing American ships, however, secured oil and whalebone ten times in value. Three years later a visitor to Perth counted thirteen American whalers at anchor in the harbour and he regretted the colonists' abandonment of this department of industry. South of Perth, at Port Leschenault, the government resident reported visits from 24 whaling ships, most of them from New England, in the first three months of 1841.

They probably found few whales, for the Australian catch was in decline and most whalers had moved their operations to New Zealand. In 1831 Sydney merchant Robert Campbell established the first successful bay whaling station in the South Island. But the number of years which sufficed to break up the great schools of whales visiting the New Zealand coast was small. In 1836, 186 whaling ships visited the Bay of Islands, in the North Island, and the peak of bay whaling in New Zealand waters occurred two years later. The catch thereafter fell into spectacular decline and only deep sea whaling offered any return.

By 1846 the American whaling fleet comprised a navy of over 900 vessels, most of them engaged in the Pacific, and the hunting of the sperm whales reached its height and then rapidly declined. In a little more than fifty years — 1790s to late 1840s — when every creature within reach of clubs, guns, lances and harpoons was regarded as prey, the whalers and sealers had combed the vast southern oceans so thoroughly that large marine animals were no longer to be easily found there.

Excerpted from William Lines Taming the Great South Land Allen and Unwin, 1991, with permission. Recommended retail price \$34.95 hardback, \$19.95 softback, 337 pages.

Regulating the slaughter?

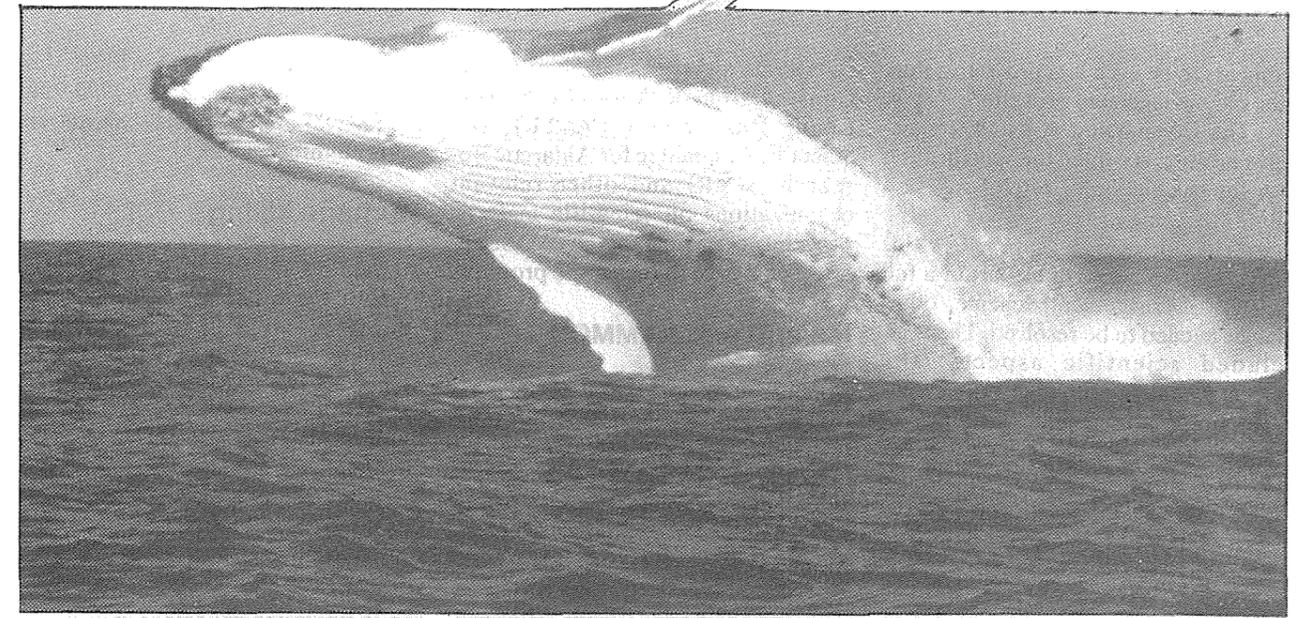
Whaling in the twentieth century has gradually been restricted because of reduced numbers of whales following the wholesale slaughter of the nineteenth century. Larry O'Loughlin compiled this summary of attempts to regulate whaling since the second world war, and the most recent decisions of the international regulatory body.

In 1946, the major whaling nations signed the International Convention for the Regulation of Whaling (ICRW); three years later, the International Whaling Commission (IWC) met for the first time. The stated aim of the ICRW, and thus the IWC, was to 'prevent the depletion of whale stocks and thus make possible the orderly development of the whaling industry.' However, throughout much of its history, the IWC has largely failed in this aim and has presided for more than thirty years over the wholesale destruction of population after population, species after species of whales.

The slow reproduction rate of whales meant that it actually made economic sense to over-exploit whale stocks. Mindful of this, the rest of the world began to express concern for the fate of the whales.

In 1960 the IWC appointed a committee to obtain better data for deciding appropriate catch limits. Subsequently it increasingly based catch limits on the estimated maximum sustained yield.

The 1972 Stockholm United Nations Conference on the Human Environment called for a ten-year moratorium on commercial whaling. Similar resolutions at the IWC weren't passed, but in 1974 the IWC adopted the New Management Procedure (NMP), intended to use the best scientific advice to prevent further declines in whale stocks. But the NMP, like previous



management attempts, was a failure: it worked well in protecting already-depleted stocks, but was unable to prevent previously healthy populations from being pushed into decline.

By the end of the 1970s, it was becoming clear that only one management regime was likely to work: a total ban on commercial whaling. From 1979, the IWC — expanded in size as a reflection of growing world concern over whaling — adopted a series of protective measures: a Sanctuary in the Indian Ocean; a ban on factory-ship whaling except for Antarctic minke; and a total ban on killing sperm whales.

Then, in 1982, the Commission voted for a global moratorium on commercial whaling which was meant to last for an indefinite period and to take effect from the 1985 coastal, and 1985-86 pelagic (oceanic), whaling seasons.

Over 14,000 whales have been killed for commercial purposes in the six years since the moratorium was intended to come into effect. These whales were killed under objection to the moratorium decision (IWC rules allow a country to exempt itself from a decision if it lodges an official objection within 90 days); and under the guise of 'scientific research'.

'Scientific killing' has been the most flagrant abuse of the moratorium. Article VIII of the ICRW states that any IWC Member State may 'kill, take or treat whales for purposes of scientific

research', and with the arrival of the moratorium a number of whaling nations took a sudden interest in furthering their scientific understanding of whales. The first, in 1985, were Iceland and the Republic of Korea. The Korean program ended after less than one season; Iceland stopped scientific whaling in 1990. Japan began conducting lethal whaling in the 1988-89 Antarctic season; every year since then, the Japanese fleet has killed approximately 300 minke whales in the Southern Ocean.

Two proposed permits were considered by the IWC in 1992. Norway applied to take 110 minke whales in the northeastern Atlantic in 1992, 136 in 1994 and 136 in 1995; and Japan sought to kill 300 minke whales (plus or minus 10 per cent) in the Antarctic in 1992-93 as part of a continuing program.

The Commission requested Norway to reconsider the proposed take of minke whales and also invited Japan to continue to reconsider and improve its research under special permit.

The IWC's Scientific Committee has consistently criticised these research whaling programs as being scientifically flawed, and of no relevance to the present scientific studies of whale populations. The meat from these 'scientifically sampled' whales is sold, primarily in Japan, and scientific whaling is regarded widely as commercial whaling under another name.

Ever since the moratorium decision, whaling nations have been pressing for a return to commercial whaling, requesting 'interim quotas', attempting to have some of their whaling activities re-defined as 'small-type coastal whaling' or 'aboriginal/subsistence', and thus exempt from the moratorium. These pressures have been resisted.

Revised Management

The IWC now has before it a proposed Revised Management Procedure (RMP) which could in theory re-open the door to large-scale commercial whaling.

Before the IWC can consider lifting the ban on commercial whaling, it must adopt the RMP by three-quarters majority vote. It was initiated at the 1984 IWC meeting and was intended to include various safeguards to take into account scientific uncertainties and to decrease significantly the likelihood of extinction of whale stocks as a result of commercial hunting.

Some rules were adopted in principle in 1991. However, there is growing concern that political considerations are taking priority over scientific ones, and that the desire of whaling nations for commercial whaling to resume as soon as possible is forcing the RMP through the IWC before it is ready.

The RMP as presently constituted has fundamental flaws: in some ways, it

appears to be even less protective than the old management procedure.

The Commission at its 1992 Glasgow meeting accepted the specification for the calculation of catch limits in a RMP for baleen whales. However, the Commission agreed that before this could be implemented as part of a full Revised Management Scheme, other issues needed to be resolved. These included scientific aspects (the development of minimum data standards; the development of guidelines for conducting surveys and analyzing the results; the documentation of the relevant computer programs) and the development of a fully effective inspection and observation scheme.

Whale sanctuaries

The IWC agreed by consensus at its 1992 meeting to continue the Indian Ocean Sanctuary (originally established in 1979) for a further ten years.

The Commission received a French proposal to establish a whale sanctuary in the southern hemisphere to cover the main feeding grounds of the sperm whale and all the baleen whale species except the tropical Bryde's whale.

The proposal aims to help protect all southern hemisphere species throughout their migratory grounds and life cycles, and help restore the Antarctic marine ecosystem.

Japan and Iceland wrote to the IWC as soon as the French proposal was announced arguing that it was 'inappropriate'. The whaling nations have argued that the Sanctuary would be incompatible with the RMP.

In fact, the Sanctuary proposal is intended to supplement the RMP, not replace it. It is meant to act as insurance against possible failures in the RMP and dangers which may be posed to whale populations should commercial whaling resume on a large scale. Precedent suggests this is a wise course. The NMP, introduced in 1975, was heralded as being the device which would prevent further over-exploitation of whale stocks. But the NMP failed, and whale stocks continued to crash.

France deferred the proposal to the 1993 meeting, and the IWC decided to

co-operate with the Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR), the Scientific Committee for Antarctic Research (SCAR) and other relevant organizations on scientific matters, providing extra time for the IWC Scientific Committee to review the proposal.

Iceland and NAMMCO

Iceland announced that it would leave the IWC on 30 June 1992 after its demand for a quota of 92 fin and 170 minke whales was rejected at the 1991 IWC meeting. Iceland has recently formed the North Atlantic Maritime Mammal Commission (NAMMCO); other members being Norway, Greenland and the Faroe Islands. However, with just two full Member States (Greenland and the Faroes are Danish territories), its influence will be limited.

In addition, any attempt to use NAMMCO to circumvent the IWC's decisions would be contrary to the United Nations Convention on the Law of the Sea (UNCLOS), which is explicit that countries should co-operate through existing international bodies for the protection of whales. This was upheld at the United Nations Conference on Environment and Development (UNCED) in June 1992.

Subsistence whaling

Aboriginal subsistence whaling catch limits are set under IWC regulations:

- Bering-Chukchi-Beaufort Seas stock of bowhead whales taken by Alaskan Eskimos - Total strikes for the years 1992-1994 inclusive shall not exceed 141 (with a provision for a carry over). In any one year no more than 54 whales shall be struck and no more than 41 landed.
- Eastern North Pacific gray whales taken by Soviet Eskimos - For 1992-94 not more than 169 taken per year.
- West Greenland fin whales taken by Greenlanders - Total strikes 1992-94 shall not exceed 315, with a maximum of 115 in any year.
- East Greenland minke whales taken by Greenlanders - For 1993 and 1994 the limit is 12 minke whales.

- Humpback whales taken by St. Vincent & The Grenadines - 1990-91 to 1992-93 annual catch shall not exceed three whales.

Humane killing

At the 1991 IWC meeting in Reykjavik, Iceland, the UK sought a workshop to review present and potential methods of killing whales, in particular the efficacy of the explosive (penthrite) harpoon in killing whales. In 1983, the IWC banned the use of the 'cold' or non-explosive harpoon because it was particularly inhumane. British minister John Gummer has often opposed any resumption of commercial whaling on humane grounds.

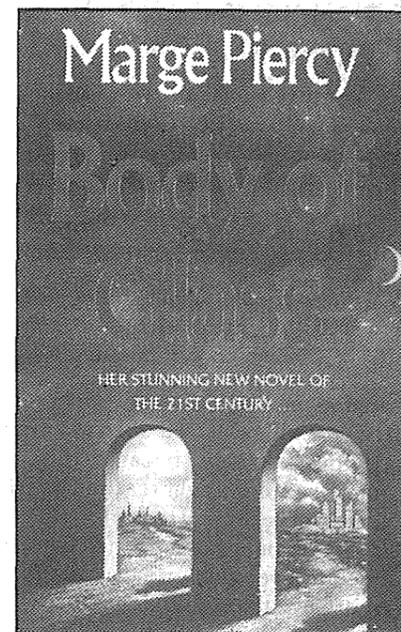
A three-day workshop held immediately before the 1992 annual meeting led to an IWC consensus resolution, urging that members continue to promote development of humane killing methods and accepting an 11-point action plan as the basis of advice to its members. This included advice and further work on equipment and methods, indication of insensibility and death, assessment of cause of death in relation to observed time to death, collection and provision of information on time to death and assessment of the physiological status of the hunted animals.

Environmental change

The IWC agreed by consensus that the Scientific Committee should contact CCAMLR, SCAR and other relevant organizations to exchange information on the effects of global environmental change in the Antarctic region which may be of relevance to whale stocks.

Sources: International Whaling Commission media release; Greenpeace International background paper; John Gulland 'The End of Whaling' *New Scientist* 29 October 1988; Andrew Dodd, 'Whale Warning' *Modern Times* August 1992.

Larry O'Loughlin is an editor with *Chain Reaction*.



Body of glass

by Marge Piercy, Michael Joseph, London, 1992, 406 pp, \$35 (hardback) \$12.95 (paperback)

Reviewed by Phil Shannon

With a few more farcical, platitudinous circuses like the Earth Summit at Rio, we'll be well on the way to the year 2050 of Marge Piercy's latest novel *Body of Glass*. 2050 is a Greenhouse world where the 'rice and breadbaskets of the delta countries' have been flooded, and farms have turned to dust. Famine reaps the results whilst 'new viral scourges' from the tropics spread their wares without favour for skin colour or 'development' status.

Outside the few cities protected from cyclones and UV by huge domes or wraps - out in 'the raw' - vultures and

rats thrived, 'not people. Not songbirds, all dead, so the insects flourished and moved in waves over the land, eating the hills to desert'.

The rich, the rulers of the 23 global 'multis' which own the world, can buy an artificially-created environment. The rest aren't so fortunate, whether in 'the stripped countries, the places where the 'multis' cut down the rain forest, deep and strip mined, drove the peasants off the land and raised cash crops till the soil gave out', or the poor in the developed world who are shunted off to 'the Glop', the 'crowded, violent, festering warren' where people survived, died or 'rotted under the poisonous sky, ruled by feuding gangs and overlords', eating 'vat food, made of algae and yeasts' whilst being culturally doped by 'stimmies', electronic Bread and Circuses where they plug into 'some twit's tears and orgasms' and forget the world and their cares.

But Piercy, every bit as good a writer, and better (she's a feminist), than the Orwells and Huxleys who described dystopias, avoids their pessimism of despair. Piercy's future has 'free towns' composed of libertarian socialists, anarcho-feminists and 'greeners', towns 'without class distinctions, where women are liberated, trees planted, the few cars public and electric, with nuclear fusion providing the energy (seems to me the 'greeners' must have lost that debate in the 'Town Council')'. Information pirates liberate information for the oppressed. This knowledge becomes power when the Glop, 'in spite of drugs and the mandated ignorance', rises in a general strike of the 'multis' day labour force. 'Everything is in flux', Piercy's narrative concludes.

Reviews

This is a book for reading on the barricades - Piercy's parallel story to the resistance in 2050 is the resistance of the Jews in 1600 Prague where they fight off an anti-semitic mob. The novel, however, is less focussed on the drama of action than the philosophy of social action and personal responsibility. The Free Town of Tikva builds a Cyborg - Yod - 'a mix of biological and machine components', a superhero to defend the town. 'He' is eventually dismantled after serving the purpose of illustrating Piercy's message that no one but ourselves can save the world, that new men and women have to be made but that the raw material is only ourselves.

And we are a difficult material to work with - social and selfish, argumentative and supportive, noble and petty; Piercy's account of the political process of Tikva will bring a knowing smile to those who, like Piercy, have attended one or a thousand left, feminist or environmental meetings. Tikva citizens like nothing better than a 'good political fight about principles or ecological correctness'. During a 'wonderfully polemical discussion of Yod's status, which promised to pull in everybody to one or another faction', speakers 'had quoted the Mishnah, Marx and the Marx Brothers, Freud, Robert Burns, Schopenhauer, Plato, Gertrude Stein and Crazy Kat' in an 'acrimonious and delicious' discussion that left everybody utterly fatigued, frustrated yet satisfied with the 'gabby, long-winded' democratic process.

All 'greeners' who like a romping good read that will amuse, inspire and spark reflection, could do worse than read *Body of Glass*.

Phil Shannon reads books in Canberra.

Reviews

The Greening of the Red: Sustainability, Socialism and the Environmental Crisis

by Graham Dunkley, Pluto Press (Australia) in association with the Australian Fabian Society and Socialist Forum, Leichhardt, NSW, 1992, 139 pp, \$14.95

Reviewed by Phil Shannon

Red and Green are somewhat like Fred and Ginger – not bad on their own but unsurpassable together. At least this would be the view of Graham Dunkley in *The Greening of the Red*, where he argues that Greens must accept the continuing relevance of socialism if their goal of achieving a sustainable society is to be achieved and if an environmentally sane world is also to be socially just. Conversely, Dunkley argues that socialists must take on board the insights and values of environmentalists if their aim of a democratic socialism is not to wither on a vine polluted from an overdose of industrialism.

According to Dunkley, most of the world's major problems are 'due fundamentally to the socially and ecologically unsustainable nature of industrial capitalism'. He says 'Both capitalism and industrialism must change'. The reaction of much of the Left to environmentalism, he argues, is at heart either hostile or sceptical, preferring to finger capitalism rather than industrialism as the root cause of ecological problems.

Dunkley, however, believes that this view is based on ecological ignorance.

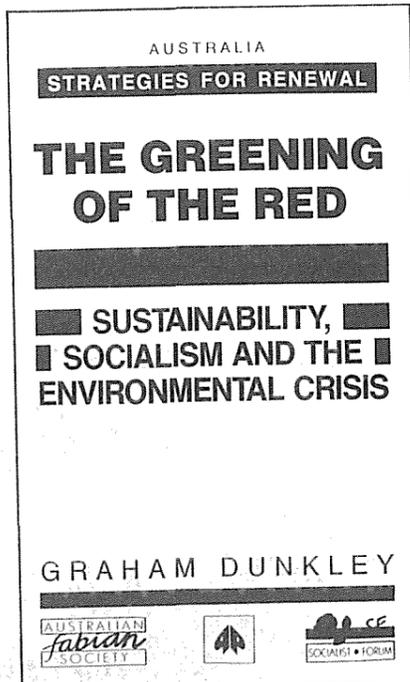
He has sifted the recent research on 'the Earth's capacity to provide resources and absorb wastes' and concludes that the evidence for the limits to growth of human activity are real and closer than many think. Right or Left wing 'expansionists' who believe in 'technological panaceas' as a solution are engaged in an act of 'faith based merely on the probability of breakthroughs', many of which involve 'vicious circles of escalating problems and unknown impacts' as in pesticides and biotechnology.

Whilst the Left comes in for some deserved stick for its anthropocentrism and its scientism, Dunkley also takes the long handle to the Greens for too often being middle class, politically naive, over-concerned with Nature as against the urban environment, fuzzy about power in society, and disdainful of the power struggle needed to put (Green and other) decision-making on a truly democratic basis – with the mass of people and not just the moneyed few.

Dunkley wants Reds to recognise limits to growth, accept the urgency of the environmental crisis, and concede that some environmental problems need solving this side of the Revolution. He wants Greens to 'seek the ultimate abandonment of capitalism as we know it.'

Dunkley believes that Red and Green can go hand-in-hand towards social and natural harmony. I worry, however, about the particular path Dunkley would have us tango. The early part of his book buzzes with bee-like vigour with talk of 'drastic changes' to 'entire systems' but he stings, alas, like a butterfly. His reformist mix of market liberalism and judicious state intervention will ensure that basic causes are not challenged and that politics will remain the preserve of a minority. Legislative and bureaucratic strategies such as 'policy integration systems' do rather dampen the ardour.

For Dunkley is not a (Red or Green) revolutionary but a Fabian. Fabians are ten-degrees-to-the-left-of-centre technocratic and managerial thinkers. They seek to persuade the state to implement reforms which, however, won't scare those actually in power because they



are too mild (a national EPA), because the cost will be passed on to us anyhow (pollution taxes), because they are sometimes downright reactionary (students will be thrilled to learn that HECS is to stay), or because they fail to recognise the revolutionary means necessary to achieve them (radio and TV 'to be run by co-ops or community groups, rather than by business people, on a non-profit basis').

Dunkley's reforms are not to be won by mobilising people in struggle for them but by persuading government. People power is for Romantic dreamers. 'Community consultation' is as close as Dunkley allows the rascal multitude to running society.

On a final negative note, Dunkley's requirement for 'spirituality', 'religiosity' and 'other visions of reality' to be foundations of his 'green-red model' is ambivalent and troubling. It is not clear whether he is advocating anti-scientific New Age fruitcake and its apolitical values of other-worldliness and quietism or a much-needed secular, emotional and sublime experience of our unity with Nature. We need the sublime but not the irrational. Bad science won't enhance our knowledge of ecology.

Dunkley's is a frustrating book. What his ingredients of 'light green, deep green and red traditions' produce is a soft pink and capitalist grey disappointment. Nevertheless, before the practical Fabian takes over, there is a useful review of the limits to growth debate and a provocative critique of the political limits of environmentalism and the green limits of traditional socialism. Dunkley asks the right questions and points us in the right direction of a red-green fusion but don't expect too much of a guide from his answers.

Phil Shannon reads books on cold Canberra nights and writes about them.

Waste Not, Want Not: the Production and Dumping of Toxic Waste

by Robert Allen, Earthscan Publications, London, 1992, 235 pages, \$29.95 (paperback).

Reviewed by Ade Peace

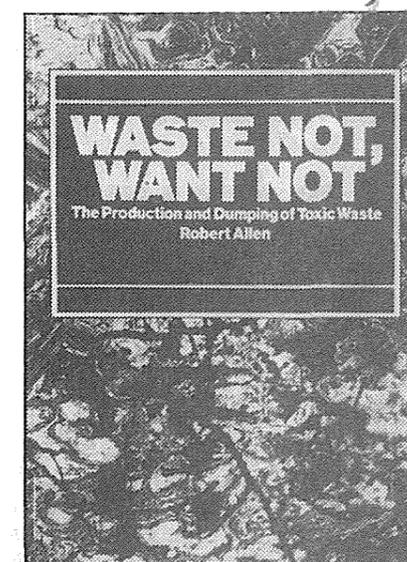
Robert Allen has written a devastating indictment of the toxic waste trade in contemporary Britain which has in recent years emerged not only as a prolific producer of waste but also as an importer and processor of other countries' industrial and commercial rubbish. Currently Britain produces considerably in excess of 2500 million tonnes of waste each year. The disposal market is estimated to be worth over £1 billion annually. A handful of giant companies vie for domination over this lucrative market but there are over 4000 companies operating in total. Most important, well over 4.5 million tonnes of this waste is (no doubt conservatively) classified as hazardous and dangerous: and to this volume is to be added substantial quantities of toxic material imported from elsewhere in northwestern Europe and as far afield as New Zealand and Australia.

The distribution of toxic waste incinerators and landfill dumps for the handling of this awesome outpouring is, of course, not random. Robert Allen's goal is thus to describe the response of specific local communities throughout

Britain to the strategies of major companies dealing in toxic waste. Essentially the story is one of widespread manipulation and collusion, management deception and administrative incompetence, and political spinelessness. The result has been widespread pollution of land and property, the frequent spread of infection amongst animals, and the production of sickness and ill-health amongst predominantly (if not exclusively) lower class populations in urban suburbs and rural localities.

This class dimension is important for as local opposition movements have attempted to specify the health effects of dioxin and furan emissions from incineration plants, it has proved consistently difficult to distinguish their specific contribution from the many other factors generating poor health. Yet communities which have progressed to that technical stage have gone a good way along the intimidating uphill track which all face. As Allen unswervingly details the tactics of Dupont to build a national incinerator in Derry (Northern Ireland), Nontox's incineration of waste near Inverness (the Scottish Highlands), ReChem's extensive pollution of the Pontypool basin (Wales), and a host of other pollution generating enterprises throughout urban England, one is not so much struck by the limited number of successes as the fact that some opposition movements succeed at all.

There are at least two points which find continuous reinforcement in the enormous wealth of detail provisioned by this excellent book. They are equally depressing. The first is that even those opposition movements which have effectively challenged toxic waste operators are nevertheless prone to political exhaustion. Whilst the pressure for corporate expansion and the drive to greater profit accumulation remain remorseless, local level leaders and core followers frequently tire out with the result that there is limited incremental or accumulative character to these processes of local level mobilization and challenge. It appears that each particular protest movement is condemned to reinventing the wheel of



political resistance: and that is a very arduous and resource-depleting exercise indeed.

The second point is that, despite the pronounced political profiles and the substantial material resources of national and international environmental organizations located in Britain, community-based resistance seems to derive remarkably little advantage from such regional bodies. Allen has clearly had close and varied relations with these environmental groups whilst writing this book. Yet he is nevertheless driven to concluding that 'Some green organizations have shown that they are politically and socially naive, unprofessional in research, confidentiality and legislation (particularly in the laws of libel), and in many ways very "green" about the ways of the capitalist world.' (p. 220-1). To which one can but add: and so say all of us.

More specifically, when such prestigious environmental organizations do become locally engaged, their contribution is so often limited to calling for 'independent' investigations, 'scientific' inquiry, 'specialist' assessment, and so forth, – as if some combination of qualified scientists and impartial bureaucrats can provide a superior and privileged corpus of knowledge to which all others must bend the knee. It is revealing that this occurs as the epistemological foundations of science are under severe attack from inside the

Reviews

scientific community, just as social scientists continue to reveal the purported impartiality of bureaucratic procedures to be no more than elaborate sham. The failure to acknowledge these developments facilitates the continuing, implicit collusion between liberal environmental organizations and institutionalized centres of conservative science. And this collusion instantly disempowers the bodies of refined and elaborate knowledge whereby local populations construct and constitute their everyday lives. The predictability of this process in no sense offsets the pessimism which it engenders. At least in *Waste Not, Want Not* it is possible to see how it unfolds. Yet there is far more in this book to be extracted by close reading and then incorporation into political practice. The empirical details may be drawn from the other side of the globe but the political knowledge distilled within it has quite as much application to contemporary Australian conditions.

Ade Peace teaches anthropology at the University of Adelaide.

Atomic Australia 1944-1990

by Alice Cawte, New South Wales University Press, Sydney, 213 pp, 1992, \$24.95 (pb).

Reviewed by George Venturini

'If I were the pleader to Osiris for the continuation of the human race, I should say: "O just and inexorable judge, the indictment of my species is all too well deserved, and never more so than in the present day."'

Thus wrote Bertrand Russell over thirty years ago in an imaginary plea before the Judge of the underworld, seeking recognition – according to the Egyptian Book of the Dead – that the extinction of his species is a matter for regret.

I could not help remembering these words while reading *Atomic Australia*, a book which grew out of work at Sydney University. Here is a microcosm of human atomic folly during the last fifty years. The treatment begins at a slow and measured pace, with Oliphant working at Birmingham University and concerned about safeguarding Australia's uranium supplies, the Manhattan Project, and the Anglo-American 1943 Quebec Agreements which were to continue treating this country as a quarry. The stage is set once again for ancient lies and renewed illusions.

Despite Evatt's protestations – perhaps because of his own juridical and liberal rationalism – 'Mother' and 'Cousins' were to behave in a condescending, distrustful and, when necessary, downright lying fashion with the Australian Governments. This mattered much to Curtin and Chifley and even more so to Evatt.

The Doc 'had been one of the first world leaders to argue publicly that atomic energy was an issue for the United Nations.' (pp. 22-23, 86) 'His very first declaration revealed what was his more fundamental preoccupation: "The efforts of scientists of the United Nations in the period between the two wars had been restricted because of the activities of international cartels and combinations. That must not be allowed to occur again."' (Evatt in *The Argus*, 13 August 1945, quoted p. 23).

The Americans thought otherwise, the British just looked askance upon the agitations of colonials. They also waited for better times to come. In December 1949 their luck and their lackey returned. Two years later Churchill 'told Menzies that Australia would be the site' for testing Britain's bomb. (p. 41) The 'lickspittle of the British' – as Justice McClelland, Royal Commissioner into the British atomic tests in Australia, would brand him – was back in service. It was the time of Joe Mc-

Carthy, and of the toad. No protest, certainly no public protest, was sent to Washington when Oliphant was denied an entry visa to attend a scientific conference. 'Our great and powerful friend' gave no reason either. Australia was in the grip of paroxysmic anti-communist fear. This was to disfigure every aspect of life, and to command the ultimate performance of the toady.

The reader will see Menzies *couchant* at his best: appointing two British Nuclear (would be) Knights – Baxter and Titterton – early in the régime; losing out to Lord Cherwell, Churchill's chief atomic adviser, and foremost double-crosser of the Americans and the Australians who were at different times promised different and incongruent deliveries (pp. 55-59); accepting uncritically former General (then President) Eisenhower's declaration that 'atomic energy is no dream ..., [it] is here – now – today [December 1953]'. That meant easy acceptance of the forerunner of the cartel: the Combined Development Trust – later embellished as Authority (CDA). It also entailed the tightening up and most severe application of legislation, the setting up of the Australian Atomic Energy Commission, the surrendering of uranium extraction to Rio Tinto Zinc, and the selling-out of Australia's industrial future – assuming that there was going to be one.

As the author concludes the first part of her book, 'The failure of [Menzies and his ministers'] schemes ensured that at least when it came to uranium in the 1950s, Australia was the "Lucky Country" after all' (p. 95). Some consolation!

Uranium was going to be the main resource, not only for defence but also for development. As another former General (and then Governor-General) Slim had warned development experts gathered at a conference in Canberra in 1954, '... if twelve hundred million pairs of [Asian] eyes looking hungrily for land see to the south of them a million square miles occupied by only 100,000 [Northern Territory] Australians, sooner or later they may not be content with looking.' Such a rhetoric was of course fuelled by an inflated notion of

fuelled by an inflated notion of vicarious imperialism. Spender self-indulged at the United Nations in 1955: 'Australia ... looks forward to the day when her atomic advancement will be such that we may be able to serve as a source of active aid and advice for our friends in the Pacific and in South and South-East Asia.' (p. 61) This was Menzies' Australia: a bastion of white British Imperialist Protestant Christianity – and racist to boot, the 'frightened country'.

In the late fifties, when the establishment of an International Atomic Energy Agency was mooted, Secretary of State John Foster Dulles invited Australia and South Africa to join the original CDA members (the United States, Great Britain and Canada). France, Belgium and Portugal joined later. (pp. 61, 92)

By then no one, probably not even Eisenhower, could believe in the possibility of a peaceful atom. Baxter certainly did not; in fact he clearly advocated military application as a way to industrial use (pp. 105, 119). A risk-happy Australian army 'even wanted to acquire stock of radioactive material to train its personnel' (p. 10), and after lying Menzies had committed Australia to aggression in Vietnam his Air Minister speculated on the possibility of 'losing the war' but gaining experience in the risk of atomic weapons use (p. 112).

A year later Menzies retired, succeeded by Holt 'all the way with LBJ'. Such a sycophancy did not drown in December 1967, Gorton 'subtle neither in his politics nor in his thinking' (p. 116) took over. Opening his election campaign in October 1969, Gorton announced the construction of an atomic plant at Jervis Bay to generate electricity 'The time for this nation to enter the atomic age has now arrived' he said (p. 128). The consultant at Jervis Bay was to be (George Shultz's) Bechtel Corporation. Allegiance had long before switched firmly to the United States.

This did not prevent Baxter from secretly colluding with the British and the Canadians in suborning the tenders by Bechtel, which – naturally enough – favoured American and German inter-

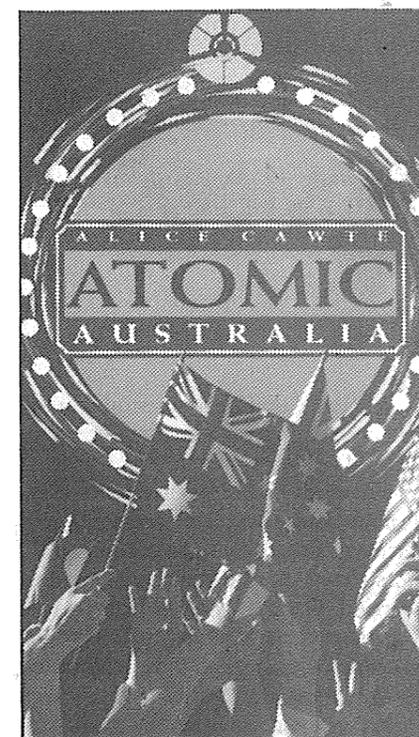
ests. By now Atomic Australia, the Gorton Government and the Jervis Bay Project had become one interwoven joke. When McMahon succeeded Gorton in early 1971 and passed the submission for the Project to Treasury, it was revealed to be a costly farce: the Australian Atomic Energy Commission had cost Australian taxpayers some \$170 million (1972 value) – 'almost twice the price of the oft-maligned Sydney Opera House.' (p. 132)

Henceforth the historian's rigorous commitment seems to wane. Is it because of the attempt to cover in the last 36 pages some very broad topics? These include the stock exchange scandals of the 1970s – Queensland Mines inflated 250 times over the ton/yield of Nabarlek (pp. 136-37) (the stench of fraudulence was in the air, really: the McMahon Government 'boasted that uranium would soon earn Australia as much as wool' (p. 140)); the McMahon Government Minister for National Development's connivance in setting up the cartel (p. 13 *passim*); the cartel and its publicly paid private servants, before the election of the Whitlam Government, burying themselves further underground – in bed with Canada, France and such stalwart champions of the free world as South Africa and a super-government as RTZ.

Should the author have given a wider treatment to R. F. X. Connor's nationalistic obsession, described in a narrative interwoven with Whitlam's attempt at meeting Koori claims to land rights and the rising concern for the environment (pp. 141-150); to the work of the Fox Ranger Uranium Environmental Inquiry (pp. 151-54, which was to survive the ambush of the Second Whitlam Government by Queen John (by the way, has anyone cared to aver the solid rumour that Mrs. Windsor – as such – is the largest individual shareholder in RTZ?))

In the last fifteen pages the story disperses into rarefied air. Perhaps that is the way Fraser's revanchist period and the Hawkeating transvestite-Labor period of Australian history should be treated.

Still, the book is engagingly well written, obviously the fruit of extensive



archival research, and is scholarly footnoted. Pity that in the view of the author the enormous contribution of Friends of the Earth merits no more than two passing references (pp. 139, 152) – and the Movement Against Uranium Mining (MAUM) even less (pp. 152, 156).

But where is the treatment of the 'national interest' in the Westinghouse case – one line in an endnote (p. 192, n. 19); where is the mention of the collusion between the Government and Her Majesty's Loyal Opposition in the rush to defend the cartel, and to enact provisions designed to deprive 'our great and powerful friends' of the evidence of a conspiracy to screw their customers; and where is the acknowledgment that such shenanigans were all in vain, because the American Congress and the cartel victims had all the elements to substantiate their case, and the power to enforce the court's judgments?

Among those documents, that the US House of Representatives ordered printed in 1977 and 1978 – and which in the book inexplicably become US Senate Documents (p. 192, n.s 20, 21, 22 and 23) – there is one, dated 14 July 1976, in which Rod Carnegie informed his trusted CRA staff, after 'lunch with

Reviews

Bob Hawke' that Bob 'stressed that the uranium issue would be a major political and union problem.' And Carnegie concluded: 'Bob's comments confirmed Paul Keating's comments that we have difficulties in the uranium business ahead.' Rod was obviously unduly worried. Continuity from Bob to Bob was assured in 1983. Gareth Evans, then Attorney-General of the Hawkeating Government (now Minister for Foreign Affairs) would maintain the posture of defender of 'free trade' in *Australian-United States' Relations, The Extraterritorial Application of United States Laws, Report from the Joint Committee on Foreign Affairs and Defiance* (Canberra 1983). Why did the author not find this source? Perhaps she did, but considered it unworthy. And why should there be no mention of the elaborate three-ring circus 'process of consultation' on uranium 'policy' before, during and after the 1988 ALP National conference?

Dr. V. G. Venturini was a Partisan in 1944, and remains one today. In 1984 he stood for the Senate on behalf of the Nuclear Disarmament Party. He continues to survive the official truth and the Unified National System.

The Gnome

by Alan Aldridge, Mandarin, 1991, 503 pages, \$19.95.

Reviewed by Daisy Gardener

The Gnome is one of the most fascinating and thrilling books I have read this year. Mr Alan Aldridge (the author) creates

the story that you *never* want to put down, even at the end.

It is environmentally aware which I think is great. 'Fungle' the gnome is a passionate, brave and wise hero who sets out on an adventure to recover a deadly crystal that may be found by humans and/or other evil forces and used to dominate the world. Fungle is similar to a gnome or fairy and the humans have ceased to believe in him, thus burning his forests, and forcing his race to be near extinct. The adventure he has is sad, heart throbbing, chilling and humorous. I would give it A⁺.

Daisy Gardener is 13 and lives in Alice Springs.

To Save an Elephant

by Allan Thornton and Dave Currey, Bantam, London, 1992, 273 pages, \$12.95.

Reviewed by Larry O'Loughlin

This book is subtitled 'The Undercover Investigation into the Illegal Ivory Trade' and it is a very readable and enthralling look at the campaign by the Environment Investigation Agency (EIA) to bring about a total ban on the trade in ivory.

The story starts with EIA, established by a group of disaffected Greenpeace members, becoming convinced of the importance of ending ivory trade as the only means of saving the African elephant from extinction. The group then sets out to bring the story to the world, particularly using television footage which they shoot themselves, and then uses the ensuing public pressure to build the momentum for a ban at meetings of the Convention on International Trade in Endangered Species (CITES). The coverage of the decision-making at the CITES meeting is enough in itself to make this book worthwhile, especially since it is written by obviously very committed people, and their stories and opinions of other environmental organisations, particularly the World Wide fund for

Nature (WWF) are very revealing of some interesting conflicts of attitudes.

Larry O'Loughlin likes to travel and meet people.

Top Guns and Toxic Whales

by Gwyn Prins and Robbie Stamp, Earthscan Publications, London, 1991, 165 pages, \$29.95.

Reviewed by Larry O'Loughlin

The threats that can be 'handled' by the 'Top Guns' in their supersonic jet fighters are not the threats faced by the endangered Beluga whales of the St. Lawrence Seaway, which are so polluted by the waters in which they swim that when they die, their carcasses are classified as toxic waste.

The basic argument of the book, sub-titled 'The Environment & Global Security', is that there is a huge array of environmental problems facing the planet for which the world's well-developed military capabilities provide no answer. The word 'security' takes on a new meaning as the cold war thaws, and military activity may be less ideologically motivated as arising from environmental necessity as nations seek to protect their access to declining natural resources such as oil and fresh water.

The book does not only look at the range of environmental problems we face, it also looks toward solutions which involve reducing the world's military forces and using the residual ones for environmental purposes such as the conversion of already-gathered operational data into research on atmospheric change.

'Top Guns and Toxic Whales' was produced as an accompaniment to a TV documentary. This could help explain the book's slightly episodic feel, but it also assists the book by providing some of its good graphic images. The book is very readable, while covering a huge range of issues with some depth.

Larry O'Loughlin enjoys reading and thinks retirement would suit him.



Ecosolutions: environmental solutions for the world and Australia

Hayden Washington, Boobook Publications, 1992, 192 pages, \$19.95.

This A4-sized book takes a comprehensive look at the world's environmental problems and suggests a number of solutions. As Robyn Williams says in his preface, there 'are a number of ideas that will infuriate', but the book presents background information and references to more detailed material to back up the arguments.

The book provides useful discussion material on a range of topics including population (which it rates as a high priority problem), wilderness, land degradation, energy, economics and 'intangible' topics such as social values. It is written in a style suitable for the general reader, and it has a streak of optimism along with a sense of urgency.

Available from: Boobook Publications, tel: 02-949 5255; ACF Enterprises, 340 Gore St, Fitzroy, Victoria, 3065, tel: 008 332 510.

Women in development: a resource handbook

Australian International Development Assistance Bureau, 1992, 38 pages, \$4.50. ISBN 0 644 24578 6

The resources listed include books, films, videos, training material and other directories and checklists. Prices of materials are listed, where appropriate, as are telephone numbers of sources, including libraries. **Available from:** AIDAB Shop, GPO Box 887, Canberra, ACT, 2601. Tel: 06-276 4707.

Greenfile: environmental information kit

Australian Conservation Foundation, 1992, 52 pages, \$12 plus \$2.50 post. (bulk discounts).

Each kit consists of 13 four page two colour leaflets on topics such as biodiversity, energy, genetic engineering, ozone depletion, rain-forests and sustainable agriculture. Each kit also contains complimentary information on the ACF.

Available from: ACF Information Service, 340 Gore St, Fitzroy, Victoria, 3065. Tel: 03-416 1455.

The GAP: the Global Action Pack

South Australian Development Education Committee, 1992, \$9.50.

The Gap is a pack made up of a 24 page student magazine produced by secondary students and a twelve page booklet for teachers containing up-to-date background information and classroom activities. There have been two issues: the Greenhouse Problem and Appropriate Technology. **Available from:** The GAP Unit, SADEC, First Floor, 155 Pirie St, Adelaide, SA, 5000, tel: 08-232 1451.

Resources

1991 Ecopolitics V Proceedings

Centre for Liberal and General Studies, University of New South Wales, 1992, 696 pages, \$40/\$45.

The Ecopolitics V proceedings, containing approximately 100 of the papers from the April 1991 conference, are now available. Some sessions are also available on video or audio tape. **Available from:** Ecopolitics V, c/- Ronnie Harding, Centre for Liberal and General Studies, University of NSW, PO Box 1, Kensington, NSW, 2033, tel: 02-697 2433.

Australia's Environment: issues and facts

Australian Bureau of Statistics, 1992, 354 pages, \$35. ABS Catalogue No. 4140.0

This interesting reference work uses diagrams, maps, tables and figures to look at Australia's environment in detail, using chapters such as 'Flora and fauna', 'Atmosphere', 'Water', 'Land and Soil' and 'Human settlements'. It also looks at future information needs in the environmental area, and who will collect that data if not the ABS. **Available from:** Greenline on 008 813 939; Reply Paid 4, Marketing, Australian Bureau of Statistics, PO Box 10, Belconnen, ACT, 2616; Australian Government bookshops.

First International Temperate Forest Conference

Towards a global temperate forest plan

16 - 17 November 1992
Deloraine, Tasmania, Australia

KEYNOTE SPEAKERS

Professor David Bellamy
The Conservation Foundation

Professor Jamie Kirkpatrick
University of Tasmania

The temperate forests of the northern and southern hemispheres are at crisis point. These forests, found mostly in the industrialised nations, have been ruthlessly exploited for centuries.

Previously, much of the world's attention on forest loss has focussed on the destruction of tropical rainforests in the developing and underdeveloped nations. This conference has been organised to foster cooperation between delegates from the many countries whose temperate forests are facing overcutting, uncontrolled clearing and environmental stress.

Running over two days, the conference will examine the threats to temperate forests and the need for an international action plan to combat the excesses of unsustainable production. Speakers will be asked to formulate options to deal with this global crisis.

Please register early as attendance is limited to 250 people.

Conference rates (includes lunches and conference papers):

Non-Government organisations	\$100
Others	\$300

Unemployed/Student/Daily rates also available

Accommodation can be arranged for participants, ranging from backpacker's style to elegant colonial.

For a registration form and conference program, please phone 003-622713 (10am-4pm) or write:
Deloraine Environment Centre, 112 Emu Bay Road, Deloraine, Tasmania, 7304



NURRUNGAR

93

**CUT THE
LEASE ON
NURRUNGAR**

**HAND BACK THE
WOOMERA
ROCKET RANGE**

**EASTER 1993
8-12 APRIL**

**NATIONAL
PEACE
DEMONSTRATION**

Organised by the PEace Action CollectivE SA (PeACe)
in coalition with the Australian Anti Bases Campaign Coalition.
PeACe, GPO Box 1025, Adelaide, SA 5001. Telephone (08) 410 1197

